Dreams of a romantic partner in a dream series: Comparing relationship periods with periods of being separated

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Summary. TBeing in a relationship is a potent modulator of dream content. The present study analyzed a series of 521 partner dreams recorded over a period of seventeen years. Within in this period, there have been three relationship periods with the same partner. The results are mainly in line with the continuity hypothesis of dreaming, e.g., being separated within the dream was found more often in dreams stemming from the separation periods whereas doing something together occurred more often during relationship periods. The percentage of erotic dreams and the emotional tone of their interactions within the dream did not vary with waking-life relationship status; this might be explained by the effect of waking fantasies on dream content. The exploratory findings regarding composite/merging dream characters including the partner indicate that it might be very fruitful to study these types of dream elements (merges, composite characters, metamorphoses) in more detail because they might give clues to a possible function of dreaming like "weaving in" or integrating new information to adapt to existing cognitive and emotional schemata.

Keywords: Dream content; continuity hypothesis; dream series; romantic relationship

1. Introduction

Social interactions with dream characters play a prominent role in many dreams (Domhoff, 1996; Hall & Van de Castle, 1966; Schredl & Hofmann, 2003). As the continuity hypothesis of dreaming postulates a thematic continuity between waking and dreaming (Hall & Nordby, 1972), one would expect that the most important persons within the waking life of the dreamer would occur most often in his or her dreams. In a dream series of N = 525 dreams of an elderly woman (Lucille) studied by Domhoff (2003), her husband was the most prominent dream character; present in 25.5% of the dreams. Similar figures were obtained in a sample of student dreams (Schredl, 2001): Romantic partners were present in 27.8% of the dreams of students with stable partnerships as compared to 6.0% of those of single students. Even the amount of time spent with the romantic partner during waking life was correlated with the frequency of the partner dreams (r = .349, p = .002, N = 64; Schredl & Hofmann, 2003). In long dream series the romantic partner was also often present (Allen, 2004; Gerne, 1987; Schredl, 2011; Uslar, 2003). Within the longest dream series published (N = 6100 dreams reported over a time period of 53 years) the wife of the dreamer was present in 20.4% of them (Uslar, 2003). However, quantitative content analysis of partner dreams has been scarce.

The most extensively studied dream series is published in Domhoff (2003). Barb Sanders (pseudonym) provided 3,116 dreams (mostly recorded between 1980 and 2000). Even though she started regular dream recording several years after the divorce (they were married for over ten years and have three daughters), the ex-husband occurred in about 5.3% of the dreams. In Table 5.6 (p. 120), Domhoff (2003) showed that the ratio of aggressive and friendly interactions decreased over time; more aggression was found a few years after the divorce (A/C percent: 57%) then about 15 years later (34%). The dream activities were not presented in a quantitative way but Barb Sanders indicated that there were often nightmarish dreams where her ex-husband tried to initiate sexual activities but she was hesitant or repulsed; but the exact percentage of dreams with sexual content was not provided. Another very interesting topic was studied using this long dream series: character metamorphoses. Because these occur very rarely in dreams (1.2% of the Hall-Van de Castle normative samples; cited in (Domhoff, 2003)), one needs a large number of dream reports to analyze such a topic. Within the 3,116 dreams, 49 dreams with character metamorphoses were found (1.57%). Thirteen of these metamorphoses were human-to-human transformations, interestingly all male characters. A man she was in love with – but had no relationship – was merged with a former love three times, with a stranger three times, with a friend once, and with Robert Redford. However, no dream contexts where these metamorphoses took place were provided. In addition, Domhoff (2003) mentioned the occurrence of composite characters that are based on two people but explicit frequency figures were not provided and the concepts of composite characters and character metamorphosis seem to overlap. From a theoretical viewpoint, these phenomena are very interesting because they might point to "limited capabilities of the conceptual systems available during sleep (p. 131)" or "metaphorical meanings (p. 133)" (Domhoff, 2003). Hartmann (2011) suggested – by citing examples of women reporting dreams where their boyfriends/husbands merged into their father – that these dreams reflect a function of dreaming that consists in weaving new

material into old material by making new connections based on emotions. The dream depicts the similarities between the two men and/or the relationships with these men.

The present study analyzed a dream series of 6,626 dreams recorded over a period of seventeen years. Within in this period, there have been three relationship periods with the same partner. Although the study was based on the continuity hypothesis (Schredl, 2003), its main focus was more of an exploratory nature studying the interaction between the dreamer and (ex-)partner in dreams reported while living in a partnership compared to periods of separation. In addition, the metamorphosis of this partner from/ into other dream characters was studied.

2. Method

2.1. Dream diary

The participant has kept an unstructured dream diary since the age of 22, starting in September, 1984.

2.2. Participant and procedure

The male participant was 25 years old at the beginning of the studied dream series. S. (female, five years younger than the participant) approached the dreamer after a club dancing on August 5, 1988. They did not know each other beforehand. From their first date, they started a committed relationship because the mutual attraction was high. Between May 2, 1989 and October 1, 1989, S. and the dreamer were separated. After their second separation (S. and the dreamer then moved in together) they spend a one-month vacation together in Greece. The dreamer moved out in November 1989. The irregular contact ceased completely at the end of 1992. The participant started a new partnership in September 1993. After breaking up this relationship in July 2003, the participant dated S. again in November and they started their third period of a committed relationship which ended in February 2005. Within in the total time span (August 5, 1988 to February 13, 2005), the dreamer recorded 6,626 dreams (mean word count: 128.68 ± 82.38 words).

The dream reports were typed and entered into a database (Alchera 3.72, created by Harry Bosma, www.mythwell. com). This database allows the assignment of key words to the dreams, a task carried out by the dreamer himself. I.e., the presence of the partner S. was rated for all dreams. In a

second step, each partner dream (main topic) was grouped into one of the following categories: erotic activities (kissing, physical intimacy, sex), sharing activities (travelling, go to the movies, attending a party, shopping), meeting each other including talking, seeing each other without further contact, thinking about S. (includes also talking about S. with others). Furthermore, the relationship status (partnership vs. separated) was coded; only if explicitly mentioned. The emotions between the dreamer and S. were rated on a three-point scale (-1 = negative, 0 = neutral/no explicit mentioned emotions, +1 = positive emotions). Examples for situations with negative emotions are: jealousy, feeling hurt by seeing S. with a new partner, quarreling, and S. rejecting the dreamer. The following positive emotions were reported: enjoying physical intimacy, the joy of seeing S., intense conversation, and S. helping the dreamer. In addition, the occurrences of metamorphosis of S. from or into other dream characters were coded; S. being part of a composite character was also included because it was often difficult to estimate whether this composition was present during the complete dream or whether there was some kind of metamorphosis. The Alchera software also provides a word count for each dream report. The analysis unit was a single dream report. The data were entered into an Excel spreadsheet (Microsoft) and data analysis was carried out with the SAS 9.2 for Windows software package. For statistical testing, Chi-Square tests for nominal data and Mann-Whitney-U-tests for ordinal data were computed.

3. Results

The numbers of the dreams and mean dream lengths for the different intervals are depicted in Table 1. During the relationship periods, S. was present in about very fifth dream, whereas this figure was much lower in periods of separation (see Table 1).

Overall, 521 dreams with S. were recorded (mean dream length: 139.65± 87.24 words). The classification of the dream activities yielded the following distribution: erotic dreams (N = 114), sharing activities (N = 148), meeting and talking (N = 155), seeing without talking (N = 50), thinking or talking about S. (N = 54). The relationship status was explicitly mentioned in 170 dreams: being separated in 121 dreams, being in a relationship in 49 dreams. Eighty-eight dreams included negative emotions of the dreamer towards

Table 1. Dream series (N = 6,626).

Period	Status	Dreams	Mean word count	Partner dreams
5.8.1988 to 1.5.1989	First relationship phase with S.	354	136.7 ± 90.4	16.10%
2.5.1989 to 30.9.1989	First separation period	201	139.2 ± 76.6	4.98%
1.10.1989 to 31.8.1990	Second relationship phase with S.	483	133.6 ± 80.6	23.40%
1.9.1990 to 31.12.1992	Separated, irregular contact	1641	124.2 ± 78.5	8.90%
1.1.1993 to 21.11.2003	Separated, no contact	3606	127.6 ± 83.4	3.69%
22.11.2003 to 25.12.2003	Dating period	25	119.9 ± 79.2	20.00%
26.12.2003 to 13.2.2005	Third relationship phase with S.	316	141.6 ± 85.7	18.04%

Table 2. Content of partner dreams (N = 521).

Period	Status	Partner dreams	Erotic dreams	Sharing activities	Being sepa- rated	Emotion towards partner
5.8.1988 to 1.5.1989	First relationship phase with S.	57	21.05%	47.37%	3.51%	0.00 ± 0.60
2.5.1989 to 30.9.1989	First separation period	10	50.00%	10.00%	20.00%	-0.10 ± 0.88
1.10.1989 to 31.8.1990	Second relationship phase with S.	113	16.81%	43.36%	2.65%	0.03 ± 0.59
1.9.1990 to 31.12.1992	Separated, irregular contact	146	22.60%	23.97%	35.62%	0.03 ± 0.64
1.1.1993 to 21.11.2003	Separated, no contact	133	22.56%	10.53%	45.86%	0.17 ± 0.70
22.11.2003 to 25.12.2003	Dating period	5	40.00%	0.00%	0.00%	0.60 ± 0.55
26.12.2003 to 13.2.2005	Third relationship phase with S.	57	22.81%	38.60%	1.75%	0.14 ± 0.55

S., whereas 128 dreams included positive emotions. The other dreams did not include any reference to the emotional tone of the interaction between the dreamer and S. The mean value of the emotional tone scale was 0.08 ± 0.64. For descriptive purposes, four main characteristics are depicted in Table 2. In order to obtain sufficient sample sizes for statistical comparisons, dreams of all three relationship periods were pooled and compared with all dreams of the periods when they were separated. The dating period (N = 5 dreams) was not included.

Regarding the activities, an interesting pattern emerged: Whereas the differences regarding erotic dreams, meeting and talking to S., and thinking about S. are not significant (even though all percentages were higher in the periods of separation), a clear-cut difference was found for sharing activities with S., this category is most often coded for the dreams when the dreamer lived in a steady partnership with S. Superficial contact (seeing but no interaction) is more prominent in the dream of the separation periods. The explicit references to the relationship status also showed an interesting pattern. Being in relationship was mentioned slightly more often in the relationship dreams but the dif-

ference was not significant. On the other hand, being separated within the dream was found markedly more often in dreams from periods in which the dreamer was separated in waking life that in the relationship periods. The emotional tone between S. and the dreamer were on average comparable for the two dream samples.

The metamorphoses including S. in the partner dreams are depicted in Table 4. Forty-four metamorphoses occurred in 41 dreams (7.87% of all partner dreams). The metamorphoses were found more often in dreams of the separation periods compared to the dreams of the relationship periods (10.03% vs. 5.29%, d = -0.180, $\chi2 = 3.9$, p = .0477). The metamorphoses occurred most often in erotic dreams including female strangers, ex-girlfriends, friends, the current partner and the mother of the dreamer. Merges occurred less often in non-erotic dreams.

4. Discussion

As reported in the first analysis of this dream series (Schredl, 2011), the relationship status is clearly reflected in the percentage of partner dreams – the percentage is again about 20% in the third period which was not included in the previ-

Table 3. Comparison of partner dream themes during being in relationship vs. being separated.

Theme	Relationship (N = 227)	Separated (N = 289)	Effect size	Statistical test	p =
Erotic dreams	19.38%	23.53%	d = -0.101	$\chi^2 = 1.3$	(.2568)[1]
Sharing activities with S.	43.17%	17.30%	d = 0.576	$\chi^2 = 41.6$	(.0001)[1]
Meeting and talking to S.	25.55%	32.53%	d = -0.154	$\chi^2 = 3.0$	(.0845)[1]
Seeing S., but no contact	3.96%	14.19%	d = -0.372	$\chi^2 = 15.1$	(.0001)[1]
Thinking about S.	7.93%	12.46%	d = -0.151	$\chi^2 = 2.8$	(.0954)[1]
Separated in the dream	2.64%	39.79%	d = 1.039	$\chi^2 = 97.7$	(.0001)[1]
In relationship in the dream	10.57%	7.96%	d = 0.090	$\chi^2 = 1.0$	(.3056)[1]
Emotional towards S.	0.05 ± 0.58	0.09 ± 0.68	d = -0.063	Z = -0.8	(.4052)[2]

Note. [1] Chi-Square test, [2] Mann-Whitney-U test

ous paper. The percentage of dream themes also change with the relationship status: Whereas romantic dreams and the averaged emotional tone towards the partner is stable, the "doing something together" topic is much more prominent when the dreamer was in relationship in waking-life whereas being separated in the dream is very common in the dreams of the periods where they were separated in waking life.

Before discussing the present findings in detail, the methodological limitations of this single-case study will be outlined briefly. Computing chi square tests based on the assumption of independent observations is an approximation which is supported by a time series analysis showing that the autocorrelations and partial autocorrelations between the lags (from dream to dream) were negligible (Schredl, 2000). Second, the coding was done by the dreamer himself who was not blind regarding the relationship status of the dream. In previous studies, a detailed reliability analysis of this type of coding system (coding the presence or absence of specific topics within a dream) which is less complex than the coding system of Hall and Van de Castle (1966) showed interrater reliability indices (computed as exact agreement between two independent judges) are very high – usually well above 90% (Schredl, Burchert, & Grabatin, 2004). Therefore, possible biases based on coding uncertain dream content into a specific direction of the hypothesis should be very minor. Third, one has to keep in mind that the present findings are based on a single dreamer and, therefore, should be considered as preliminary, stimulating research in larger samples. Based on the analogy to psychometric tests, Schredl (1998) estimated that – because of the variability in dream content - about 20 dreams per participant are necessary to obtain common reliability indices (above $r = 0.8$) for basic dream characteristics like bizarreness which ensure relatively low measurement error variance. For topics that occur quite rarely even more dreams per participant might be needed; a task not easily carried out in large-scaled surveys. Domhoff (2003) showed with random dream samples of different sizes that up to 125 dreams are necessary to obtain relatively stable dream content indices, for example, the number of aggressions per character. This criterion is satisfied in the present analysis: the dreamer recorded in both conditions more than 200 dreams that included his partner over a time interval of almost 17 years. Cross-sectional studies need very large sample sizes to obtain a sufficient number of partner dreams.

Table 4. Merging of S. with other dream characters (N = 41 dreams).

Dream character	Erotic dreams	Non-erotic dreams	All
Ex-girlfriend	8	4	12
Stranger	10	1	11
Mother	1	1	2
Friend	7	6	13
Current partner	2	5	7
Total	28	16	44

Note. In three dreams two characters merged with S.

The low frequency of partner dreams during periods where the dreamer and his partner were separated supports the continuity hypothesis of dreaming. Analyzing the Barb Sanders' series, Domhoff (2003) reported a similar decrease from 12.87% of the dreams featuring Derek whom she was in love with to 0.87% after they did not meet each other anymore. Overall, the frequency of erotic dreams with S. decreased as all dreams including S. decreased but the relative percentage of dreams including kissing, physical intimacy and/or sex remained quite stable at about 20% (with the exception of the short periods including only 5 and 10 dreams, respectively. This might be viewed as a contradiction to the continuity hypothesis – at least with regard to waking-life activities, but Schredl, Desch, Röming, and Spachmann (2009) showed that the frequency was not related to the frequency of sexual activities but to the amount of time spent with sexual fantasies during the day. This would also explain Domhoff's (2003) statement that Barb Sanders had quite a few sexual dreams of Derek even though they never had sexual interactions of any kind (Derek kept it on a friendship level). Very interesting within this context is the high number of merges of S. with other persons within an erotic context (for a detailed discussion see below).

Another stable dream characteristic which might be an idiosyncrasy of this dreamer or of the relationship between the dreamer and S. was the emotional tone of their interaction within dreams; the ratio of positive and negative emotions were almost balanced (with the exception of the brief dating period), whether they were together or separated. This might be explained by quarrels and problems that they had during their relationship periods which culminated in the three break-ups but also a lot of positive emotions while being separated which eventually led to the two reunions. It would be very interesting to study whether the quality of a relationship is related to the emotions towards the partner within dreams. The finding of Selterman & Drigotas (2009) showing that anxious and avoidant attachment styles are related to anxiety and jealousy in dreams of the romantic partner support this line of thinking. The high aggression per character index of the dreams of her ex-husband clearly reflect what Barb Sanders reported about the quality of the relationship and her waking-life emotions about him after the separation (Domhoff, 2003).

Overall, sharing activities together like travelling, attending a festivity and so on was the most prominent dream theme, especially during the relationship periods. This seems plausible in the context of the continuity hypothesis because doing something together was important for S. and the dreamer. It would be very interesting to study other series of partner dreams to evaluate whether these ratios of dreams activities with the partner can also found in other persons. The second significant difference is also self-explaining. The dreamer sees S. but did not have contact with her; something that happened in waking-life during parts of the separation periods because they attended the same clubs.

The relationship status is explicitly mentioned in one third of the dreams, being in a relationship much less often than being separated. Whereas the effect of the waking-life relationship status on 'being together in the dream' was small but in the expected direction, the difference for the 'being separated' variable was large; clearly indicating that the partner dreams reflect the current waking life situation of the dreamer – even though he is in relationship with S. in about 8% of the dreams during the separation periods. This

might also – as for the erotic dreams with S. – reflect his preoccupation during waking-life with S.

The percentage of dreams with merging or composite characters in these partner dreams was larger than for the Hall and Van de Castle norms (present data set: 7.9% vs. HVC norms: 1.2%; Hall & Van de Castle, 1966). The first hypothesis is that the closeness between the dream character and the dreamer in waking life plays a role in the frequency of these specific dreams. This would fit with Cartwright's (Cartwright, 2010) theory that integrating emotionally salient new experiences into the existing cognitive and emotional schemas is very important – serving the goals of health and happiness. Interestingly, the amount of waking-life interaction seems also to play a role because merging dreams were more often found in the separation periods. I.e., seeing the partner every day decreases the probability of composite characters with this person; a finding that should be followed-up with other dream series.

The most interesting finding regarding these merging dreams is the high prevalence of merging within the context of eroticism – about two thirds of the partner dreams. The merging between S. and ex-girlfriends or the current partner can be easily understood; the dreamer had sexual experiences with both women in real life and, thus, the current experience is blended into previous experiences; a kind of sexual interactions concept. Schweickert and Xi (2010) reported that dream characters tend to be transformed into entities nearby but also that perceptual nearness seemed more important than conceptual nearness. The present findings would be support the idea of conceptual nearness – as the women did not look the same. The merges with strangers within erotic dreams might be explained as reflecting the sexual drive of the dreamer. If the need for physical intimacy emerges within the dreamer then older memories of being together with S. will be reactivated in the dream. Domhoff (2003) reported similar findings within the Barb Sanders dream series: Derek (a man she was in love with) was merged/was a composite character three times with her first love Darryl and also three times with an unfamiliar man whereas merges with other men (friend, celebrity) occurred only twice. On the other hand, in our study there were also merges with women the dreamer never had sex with, friends and his mother. The percentage of erotic content within these dreams is about 50%, much lower compared to ex-girlfriends and strangers (about 80%). Again, the level of familiarity and the kind of relationship the dreamer has with this person in waking life modulates the frequency of merges. One might speculate about metaphoric meanings but more detailed studies in various dream series are necessary in order to gather convincing evidence regarding the meaning of these unusual dream elements (cf. Domhoff, 2003).

To summarize, the analysis of the partner dreams within a long dream series clearly showed that the waking-life relationship status modulates content of these partner dreams; mainly in line with the continuity hypothesis of dreaming. The dreams do not only incorporate memories of the "good times" but also reflect the process of dealing with being separated. The findings of the exploratory analysis of composite/merging dream characters, including the partner, indicate that it might be very fruitful to study these types of dream elements (merges, composite characters, metamorphoses) in more detail because they might give clues to a possible function of dreaming like "weaving in" (Hartmann,

2011) or integrating new information to adapt existing cognitive and emotional schemata (Cartwright, 2010).

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