

Report for Members of the Association for the Psychophysiological Study of Sleep, Gainesville, Florida, March 1966.

STUDY #3

### CONTENT DISCRIMINABILITY OF FOUR TYPES OF HYPNOTIC DREAMS

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Elsewhere (Tart, in press), it was reported that Ss run in the Effects of Induction experiment (Hilgard & Tart, in press) were asked to classify their responses to the Have & Dream suggestion into four major categories, viz.: (a) "in" a dream; (b) like watching a film, i.e., vivid and real but S not physically present in the dream; (c) daydreaming; and (d) just thinking about the reported topic. An "other" category was available, but seldom used by the Ss. The Ss had little trouble using these categories, thus illustrating the need for differentiating different experiences in response to the hypnotic dream suggestions. Furthermore, the manner in which the Ss classified their dream responses was significantly related to their overall suggestibility and to the degree to which they felt hypnotized. The more dreamlike responses ("in" a dream or filmlike) were associated with higher suggestibility scores and with feeling more hypnotized both before and during the dream.

Given the existence of several qualitatively different types of experiential response to the dream suggestions, then, the next step of investigation is to ascertain what, if any, sorts of content differences exist between them. As a first step in such an investigation, this paper will report data in which three judges were asked to classify hypnotic dreams into the above four categories on the basis of content alone. More elaborate content analyses using the content scoring system of Calvin Hall (Hall, 1961-1965) have been undertaken, but the sample analyzed is still too small to warrant comment at this time.

The sample for the present study consists of 26 college student Ss who participated in the Effect of Induction study in the Fall quarter of 1963 who reported some kind of content to the dream suggestion, and who had themselves classified this content at the end of each of the two experimental days according to the fourfold system above.<sup>2</sup>

1. This report has been privately circulated as Hawthorne House Research Memorandum #43, Laboratory of Hypnosis Research, Stanford University.

2. In the earlier study (HHRM #29) it was found that the Ss confused "no dream" reports with the "thinking" category, so these two categories were combined there, as well as in the present study.

The judges were two psychologists and a psychoanalyst, viz. the author, Leslie Cooper, and Josephine Hilgard. They were given the typed responses to the dream suggestion after these responses had been edited<sup>3</sup> so that no comments by the S that might give away his later classification were present. For example, if a report started, "I thought about walking over the fields....," it was edited to "...walking over the fields..."

The three judges showed a reasonable degree of consistency with each other in making their judgments. Table 1 lists the contingency coefficients for each judge pair. Note that the judges rated many dreams which turned out not to have been rated by the Ss, so the Ns are higher here than in later analyses.

Table 1

Agreement between Judges

<u>Judge Pair</u>	<u>N*</u>	<u>Contingency Coefficient</u>	<u>P</u>
A-B	74	.48	< .10
A-C	75	.66	< .001
B-C	75	.54	< .05

\*N varies from pair to pair because the judges occasionally could not rate particular dreams.

Because of the low usage by both the Ss and the judges of the "in a dream" and "filmlike" ratings, these categories were combined in assessing the degree of correspondence between each judge's classification and the Ss' classifications, thus resulting in 3x3 Chi-square tables.

Table 2 presents the value of Chi-square for degree of agreement of each judge. The data for Day 1 and Day 2 are presented separately in order to insure statistical independence. Judge A was most successful and Judge C the least. Combining the results for all three judges for each day by adding the Chi-square indicates that the judges did successfully replicate the Ss' classifications on the basis of content alone.

Table 2 on following page

3. Judy Tart carried out this editing.

Table 2

Agreement between Judges' Ratings and Ss' Ratings

<u>Judge</u>	<u>N*</u>	<u>Day 1</u>		<u>N*</u>	<u>Day 2</u>	
		<u>Contingency Coefficient</u>	<u>P</u>		<u>Contingency Coefficient</u>	<u>P</u>
A	24	.61	< .01	24	.57	< .02
B	26	.42	N.S.	21	.52	< .10
C	22	.45	N.S.	24	.37	N.S.
All Judges:		$x^2 = 25.8$ with df, P < .02		$x^2 = 23.4$ with 12 df P < .05		

\* N varies from judge to judge because the judges occasionally could not rate particular dreams.

During the one minute period allowed the S to dream after the dream suggestions had been given, the E attempted to note whether or not rapid eye movements (REMs) could be seen under the S's closed eyelids. In many instances the E was not in a good position to observe one way or another, but what data were collected are presented in Table 3 with respect to the Ss' classification of their dreams. There is a slight, but non-significant tendency for REMs to be more frequent with the more dreamlike and vivid responses, as would be predicted from recent work on REMs and imagery during stage 1 dreaming.

Table 3

Observable Rapid Eye Movements vs Dream Type

	<u>"In" a Dream</u>	<u>Watching a Film</u>	<u>Daydream</u>	<u>Thinking + No Dream</u>	<u>Total</u>
REMS Observed	5	6	5	15	31
no REMS Observed	4	4	8	33	49
	9	10	13	48	80

$x^2 = 4.04$  with 3 df, P > .20, N.S.

In conclusion, the distinctions Ss make between various responses to suggestions to dream apparently have global differences in content which are sufficient to allow judges to make similar classifications. More systematic collection of reports and associations to these various types of responses is called for in the future, together with more elaborate content analyses.

#### References

- Hall, C. Manuals for content analysis of dreams. Institute of Dream Research, Coral Gables, Florida. 1961-65.
- Hilgard, E. R. & Tart, C. T. Responsiveness to suggestions following waking and imagination instructions and following induction of hypnosis. J. abnorm. Psychol., in press.
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