

Lucid Dreams and the Arousal Continuum

R.Ogilvie,¹ H. Hunt, A. Kushniruk and J. Newman
Psychology Dept., Brock University St. Catharines, Canada

Eight lucid dreamers slept one to four nights in the sleep lab where they were awakened by REM sleep following spontaneous or cued signals (3 sets of horizontal EMs). The cue buzzer sounded after 15 min. of REM in the presence of either high or low REM activity.

Ss were to signal immediately after the cue and again about 30 sec. later if in a LD. Arousals were made 30 sec. to 1 min. after cued signals or from earlier in REM if spon-taneous signals were seen.

Table 1

	(n)	Electrophysiological Data							Dream Reports				
		Presignal state (%)			Postsignal prearousal state (%)				% Lucid	% Pre LD	% Non LD	X Cloud	X Hallucination
		REM > A	A	R-	REM > II	A	R->A	R-					
Spontaneous Signal	14	86	7	7	86	14			64	27	9	1.1	1.3
Cued hi	16	88	6	6	19	44	31	6	43	21	36	1.4	2.6
Cued low	15	100			20	27	47	6	69	12	19	1.1	1.8
Spontaneous arousal	4	100											
Unscorable	2								50		50	3.5	4.5
					Present Study Ogilvie et al. (1982)				57	21	22		
									24	28	48		

Almost all spontaneous signaling occurred in REM and the dreamer usually remained in REM until awakened. However, cued arousals often disrupted the REM state but lucid and nonlucid dreaming continued whether the subject was physiologically awake or asleep.

Cues in low α elicited high lucidity while for cued high α arousals the picture was less clear. Spontaneous signaling episodes show a lucidity and content rating pattern similar to cued low α arousals. Consistent with our previous work, high α was associated with dream bizarreness.

In contrast to our earlier studies, this experiment involved cues and signaling and newspaper—recruited high lucidity subjects (in contrast to good recallers given lucidity instructions). The effects of these changes were: (1) considerably enhanced lucidity ratings (57% versus 24%, with fewer of the prelucid episodes that were previously associated with highest and bizarreness; (2) cued as opposed to spontaneous lucidity was characterized by mixed and fragmented waking and REM indices. The broader range of

lucid-ity, like research on meditation, is a mixed or transitional state with respect to both psychological and physiological measures. One is reminded of the disassociation between polygraphic and subjective assessment of sleep and wakefulness at sleep onset.

This work descriptively locates lucidity within a broader context than has been seen in previous laboratory studies. LaBerge has shown that lucidity is an inherent potential of the REM state, while Green's accounts emphasize a more transitional, shifting state. By examining both cued and spontaneous arousals, the present study captured the natural range of the phenomenon.

¹This is an abstract of a paper to be presented at the 4th International Congress of Sleep Research, Bologna, Italy, July, 1983.

Original source: *Lucidity Letter Back Issues*, Vol. 2, No. 2, April, 1983, page 49.