such as mild burning, light pain, or fullness, associated with urination or ejaculation. It is equally possible that such afferent impulses may be of significance in relation to micturition and ejaculatory reflexes. In males, the presence of specialized receptors in the prostatic region is of considerable interest since these receptors perhaps could serve to coordinate the seminal emission and ejaculatory mechanisms. Since this would not apply in females, perhaps reflexes relating to emptying the urethral contents might be involved.

However, since the cells also resemble some long-necked "goblet" cells, it is also reasonable to regard the epithelial cells under consideration as possibly serving some effector function, such as the selective elimination of some product of nerve metabolism, the release of some secretory product, or the performance of special resorptive duties relating to the nerves. It is of some importance to speculate upon these possibilities, but the mere description of the cells and their regional location justifies only mentioning them as useful clues for further investigation.

This discussion of the possible functional significance of the described neuroepithelial cells presents numerous problems that are yet subject to further study and clarification. The newly demonstrated cells are characterized by their positive reaction for cholinesterases, their typical unicellular neuroepithelial morphology, their anatomical relations to the pelvic nerve plexus, and their internal regional localization in the urethra and urogenital junction (*12*).

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Eye Movements during Active and Passive Dreams

Abstract. Independent confirmation is offered that the amount of rapid eye movement during dreaming is associated with the dream content.

It is now recognized that there exist two different and alternating categories of sleep. One has been called "hindbrain sleep" by Jouvet (*1*) and is accompanied by a low-voltage and fairly fast electroencephalographic (EEG) pattern, relaxation of certain neck muscles in cat (*1*) and human (*2*) and, perhaps most strikingly, by bursts of conjugate, rapid eye movements with subsequent recall by the subject that he has dreamed (*3*). Dement and Wolpert (*4*) reported evidence supporting their hypothesis that these eye movements were directional responses to the events of the dream. Yet rapid eye movements persist in cats after decortication (*1*). Also the fact that characteristic saw-toothed electroencephalographic waves tend to precede each burst of rapid eye movements appeared to us to cast doubt on the hypothesis; the presence or absence of these eye movements during "hindbrain sleep" of blind men, according to the retention or absence, respectively, of visual imagery (*5*), would support the hypothesis. One of us (*6*) has criticized Dement and Wolpert's report but is now pleased to report confirmation of one of their findings, namely a relation between profuse eye activity and an active dream fantasy.

One of us (R.J.B.), for an entirely distinct purpose, awakened eight volunteers from periods of rapid eye movement on 103 occasions during 37 nights. Dream recall occurred in 89 instances and was recorded on magnetic tape. The dream reports were subsequently all presented to the other of us (I.O.), who had never been present during the nocturnal recording sessions and who had never seen the relevant electroencephalographic or eye movement records. He classified the dream reports as "active" or "passive" according to the nature of the events described, and especially if he felt such events would have been accompanied by many shifts of gaze, had they occurred in real life.

Subsequently R.J.B. assigned code numbers to each electroencephalographic and eye movement record and presented each to I.O., who was entirely ignorant of the dream to which each record was related and distinctly skeptical of the likelihood of the association eventually found. The eye movement periods were classified by I.O. as "active" or "passive" according to the frequency and size of the eye movements which occurred throughout each 10 to 20 minute period prior to the time the subjects had been awakened, although the later in the period the movements did or did not occur, the greater the weight he attached. The whole set of records was then inspected again in a different order by I.O. and classified a second time. R.J.B. then selected the records of the 22 instances where divergent judgments had been made, and I.O. made a final classification of these periods of rapid eye movement.

The code was then broken. Fifty dream reports had been classified as "active" and in 42 instances the relevant period of rapid eye movement had been judged "active." Thirty-nine reports had been classified as "passive" and in 23 instances the relevant period was judged "passive."

It is therefore confirmed that there is a significant association ($\chi^2 = 16.18$; $P < .001$) between the nature of the dream content and the amount of movement of the eyes.

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Antarctic Peninsula Traverse

A 1700-km oversnow traverse was conducted in the Antarctic area south of the Bellingshausen Sea and George VI Sound from 30 November 1961 through 5 February 1962 for the purposes of (i) investigating the surface and bedrock topography by geophysical means and (ii) performing associated geophysical, geological, and glaciological studies (*1*). The route is shown in Fig. 1. Since the area covered was about 2600 km from the main United States base at McMurdo Sound, logistic support proved very difficult, but was capably carried out by the U.S. Navy and Air Force. The party traveled in