

## Awakenings: The Movie      Background and Question sheet.

Watch the brief video of about dopamine in the brain

**Background:** February 12, 1991|by PAUL WILLISTEIN, The Morning Call

In 1969 Dr.Sacks presided over a group of granite like patients for whom the term grateful dead seemed all too appropriate. Sacks' experiments are the core of "Awakenings," the acclaimed hit movie starring Robert De Niro, who portrays fictional patient Leonard Lowe, and Robin Williams, who plays Lowe's neurologist Dr. Malcolm Sayer, the fictional character based on Sacks.

In 1969, Sacks administered the then experimental L-dopa to about 80 patients who had been "warehoused" at Beth Abraham Hospital, a chronic-care facility in the Bronx, N.Y. He arrived at the hospital in 1966, one year out of residency.

Sacks, 57 was hired as a technical consultant to the "Awakenings" filmmakers and stands behind the movie's accuracy, even while emphasizing in a soft voice rarely rising above a whisper that "things are somewhat condensed in time" and the patients' "awakenings" are speeded up. Patients portrayed in the movie are shown tossing a ball. While this might seem unlikely, Sacks insisted, "The ball playing is not fictional. People can't initiate movement, but they can respond."

Sacks' patients were victims of a worldwide sleeping sickness (encephalitis lethargica) epidemic which broke out after World War I. Between 1917 and 1927, an estimated 5 million people contracted the illness, and one-third died. Survivors displayed what is known as post-encephalitic Parkinson's disease. For decades, they were frozen like statues. Sacks administered L-dopa (laevodihydroxy-phenylalanine), thought to be a miracle cure for Parkinson's disease.

**Levodopa (l-Dopa) Levodopa, also called L-dopa, which is converted to dopamine in the brain,** remains the gold standard for treating Parkinson's disease.

Questions: What was it that Dr. Sayer (Sacks) saw that made him think the patients who seemed Catatonic (asleep) were perhaps alive inside?

L- dopa is converted to dopamine in the brain, what does this neurotransmitter influence? (Base your answer on observations made of patients treated with L-dopa in the movie).

Near the end of the film Dr. Sayer (Sacks) makes some comments to a group of adults regarding his experiences, what does he say is the second awakening that took place? What evidence is shown of this second awakening?