How Television Affects The Mind:

A Review Of The Tube

By Ron Kaufman

Television is not solely an American phenomenon. In the movie, The Tube, journalist Peter Entell and actor Luc Mariot travel to three continents to uncover the history of television and its effects on the human brain. Entell and Mariot's search is to find out the effect of television regardless of its content. Overall, this is an outstanding investigative movie that begins to present interesting questions about the true nature of television.

The movie starts off in Geneva, Switzerland with Mariot's young daughter, Zoe, crying because he had turned off the Pokemon cartoon. Mariot notices Zoe's fixation on the TV while she watches. He is disturbed by her unblinking gaze. He then begins to investigate on the Internet a little about the Pokemon cartoon and comes across articles describing an incident in December, 1997 when between 600 and 700 children and teenagers were hospitalized with convulsions and eye problems because of a Pokemon episode.

Mariot then travels to Tokyo, Japan to visit the hospital where many of the children were treated and the television station that broadcast the episode. At the hospital, the doctor explains that 1 in 4,000 people posses a hypersensitivity to light and therefore is "at risk" when watching TV. It makes sense that an unusually high rate of television "flicker" would affect people's minds and induce epileptic-type reactions. At TV Tokyo, the home of the Pokemon cartoon, Marriott discovers that because of outrage after this incident, the station now employs an Animation Flicker Machine which monitors each episode.

The film then travels to Schenectady, NY and visits the television research and development section of General Electric. There, the Cathode Ray Tube (CRT) and electron gun which make television work is explained. Television screens are made up of Red, Green and Blue pixels which flicker at a high rate when bombarded with fast moving electrons. This method allows the TV screen to give off colours of nearly infinite shades. Mariot asks the men working at GE why this machine seems so hypnotic and addictive? They don't have an answer.

Lunenburg, Massachusetts is the next stop for the film crew. There they visit with Dr. Thomas Mulholland whose experiments with electroencephalograms and alpha waves with children was some of the first indications of an actual physical reaction to watching TV. Alpha waves are brain activity which increases as brain work decreases: closing your eyes and relaxing produce more alpha -- looking around the room decreases alpha. Mulholland discovered that children watching TV had more alpha -- which means less brain activity.

The Tube crew then visits with Eric McLuhan at the University of Toronto who demonstrates in an experiment, that because of the nature of television (beams of light being fired at the viewer at a high rate), it gives off transmitted light. This is unlike reflected light, where light is reflected on the viewer, like in a movie theatre. McLuhan says that with transmitted light, "you are the screen." The brain responds to the medium, not the content.

Finally, Mariot tracks down former researcher Herbert Krugman of the Advertising Research Foundation. Krugman's experiments on the effects of television led him to conclude that TV induces some type of "sleeping awake" activity. Why are people so mesmerized or hypnotized by the TV. Krugman used this power of TV to help the advertising community. Krugman says that with TV, "when you lose touch with the body and the brain will play." You're not asleep and not awake. It's midnight and you are staring at the TV and can't turn it off. You sit watching commercials blankly and unthinking. You don't turn it off.

"The television is the easiest, quickest and cheapest way to distract yourself from how you already feel that's ever been invented," says one psychologist in the film.

A worker at a TV station says, she thinks "TV is like a drug. . . Sure, just try taking it away from them."

The Tube is a well done film. It presents many compelling facts and questions about an activity that most people take for granted. Unfortunately, many questions still remain unanswered as some continue to question the benefit of staring at red, green and blue flickering light.