



Figure 2: Physiological and pathological brain states can be situated in a two-dimensional graph. Here increasing levels of behaviorally determined arousal is plotted on the x-axis and the “richness” or “representational capacity of consciousness” (Tononi 2004) is plotted on the y axis. Increasing arousal can be measured by the threshold to obtain some specific behavior (for instance, spatial orientation to a sound). Healthy subjects cycle during a 24 hour period from deep sleep with low arousal and very little conscious experience to increasing levels of arousal and conscious sensation. In REM sleep, low levels of behavioral arousal go hand-in-hand with vivid consciousness. Conversely, various pathologies are associated with little or no conscious content. Modified from Laureys (2005).