

## KING CANUTE AND THE UNIVERSAL LAWS OF PHYSICS, CHEMISTRY, AND BIOLOGY

King Canute was a Danish king of England who died November 12, 1035. “. . . *Canute’s courtiers flattered him into believing that his word was so powerful that even the tide would recede at his command*” (Ward’s Book of Days 2006). The tide did not recede — King Canute had encountered one of the universal laws of physics before the laws were well understood, but, even then, individuals should have known that many natural processes are beyond humankind’s dominance.

In the comparatively enlightened 21<sup>st</sup> century, ridiculing King Canute’s naiveté is tempting, but humanity is still trying to circumvent the universal laws. For example, “*The state [of North Carolina] General Assembly’s Replacement House Bill 819 would rule that scientists are not allowed to accurately predict sea-level rise*” (Zimmerman 2012). In addition, “. . . *North Carolina legislators are now tossing around bills that not only protect themselves from concepts that make them uncomfortable, they’re DETERMINING HOW WE MEASURE REALITY*” (Huller 2012).

“*Denial is probably one of the best known defense mechanisms, used often to describe situations in which people seem unable to face reality or admit an obvious truth (i.e., “He’s in denial.”). Denial is an outright refusal to admit or recognize that something has occurred or is currently occurring. Drug addicts or alcoholics often deny that they have a problem, while victims of traumatic events may deny that the event ever occurred*” (Cherry, undated).

The denial of sea-level rise would be distressing even if only the legislature of North Carolina was taking actions, but “*Like-minded legislators and state officials in Texas, Virginia . . . [have made it] illegal for state planners and zoning officials to refer to nettlesome scientific findings that might hurt coastal property values*” (Grimm 2012). The inland states have similar concerns about global climate change.

Denial is not all bad. “*The closer you look, the more clearly you see that denial is part of the uneasy bargain we strike to be social creatures*” (Michael McCullough as quoted in Cary 2007). Still, a high price will be paid for denying global warming and other types of climate change. One might also question the value of denying the Apollo man landings (Launius, undated) and other well documented events.

King Canute’s naiveté a thousand years ago is unbelievable, but, in an age of robust science, humanity is still attempting to ignore or control the universal laws of physics, chemistry, and biology. Scientists in the United States are being accused of perpetuating a hoax and engaging in a conspiracy about global warming. However, no hoaxers have been named and no conspirators have been charged. Scientists are not responsible for the consequences of the universal laws — they just provide evidence on how they function.

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