Extraneous influences and biases have led to incorrect medical diagnoses, military friendly fire, and erroneous conclusions in the most reliable and well-established forensic domains and in criminal investigations. Our research has demonstrated that experts arrive at different and conflicting conclusions when, unbeknownst to them, they are presented with different extraneous contextual information and asked to redecide the same cases. The clear scientific evidence, as well as documented real criminal cases, demonstrates that context and other cognitive biases limit objective data-driven judgment and decision making by even highly skilled experts and lead to errors.