Proponents of rational deterrence theory say it is conceptually sound, a good predictor of strategic behavior, and a successful strategy of conflict management. They are wrong on all three points.

Rational choice theories assume people maximize expected utility, but realize that in utility is calculated differently by different people. One must take into consideration whether people are loss-minimizers or gain-maximizers and whether they are risk-prone or risk-averse. To do this other theories of behavior are needed.

Theories of deterrence generally assume would-be initiators are risk-prone gain maximizers, while in fact the can be any of the other combinations as well. Some have begun putting risk-propensity into the equation, but this requires careful historical research. Further, the claim that initiators decide whether to instigate conflict based on estimated costs of war, probability of winning, and probability that the defender will retaliate is contradicted by evidence that some leaders have made these calculations, then opted for war against the results. They have done so for reasons not considered by RDTs, such as domestic political and economic pressures.

Further, RDTs do not define their scope, and therefor cannot be tested against a body of evidence. This also means that leaders cannot learn when to attempt deterrence, and when such an attempt will only provoke a vulnerable adversary. A broader theory of strategic choice might be constructed, but this would not be a deterrence theory, which only addresses credible threat.

RDTs, and rational choice in general, says nothing about preference formation, which is in fact the most important element of the equation. Key is not how a problem is addressed, but how the problem is constructed. In terms of the actual process of decision-making, one sees deviations from rational norms through misperception of the critical case and miscalculation of the results of deductive analysis, not merely uncertainty. Ultimately, this problem includes an inability to define the boundaries of rational choice, a problem endemic in rational choice theories as a whole and not merely RDTs.

The predictive capacity of deterrence theory has never been adequately tested. From the tests that have been done, deterrence seems a poor predictor. In Lebow and Stein’s tests (from earlier work, results of which are only summarized here), they looked at examples of deterrence failure, and found a number of cases in which all of the conditions of deterrence theory were met, but in which the aggressor proceeded to use force either because it made poor calculations or decided not to act according to these calculations. Both of these are damaging to RDTs. Another problem is the difficulty distinguishing the challenger from the defender. Often both sides believe that they are the defender. Finally they note that in a world where a single deterrence failure can lead to nuclear war, any failure is disturbing and should be explained in such a way that deterrence failure can be predicted.

In sum, RDTs are wrong because their four basic assumptions are wrong. These assumptions are that leaders are:

1. Instrumentally rational
2. Risk-prone gain maximizers
3. Free of domestic constraints
4. Able correctly to identify themselves as defenders or challengers.