Refutation of the postulate of contradiction

We assume the method and apparatus of Meth8/VŁ4 with `T`autology as the designated *proof* value, `F` as contradiction, `N` as truthity (non-contingency), and `C` as falsity (contingency). Results are a 16-valued truth table in row-major and horizontal, or in repeating fragments from 128-tables for more variables.

LET p, q, r, s: s_1, s_2, K, S;
~ Not; & And; > Imply; @ Not Equivalent; (p@p) `F` contraction.

From: Arenhart, J.R.B; Krause, D. (2014). Contradiction, quantum mechanics, and the square of opposition. arxiv.org/pdf/1406.1836.pdf jonasbecker2@gmail.com, deciokrause@gmail.com

> Considering a system S which is in a superposition of states $s1$ and $s2$, the authors introduce a predicate symbol $K(S, s1)$ to represent the predicate that "S has the superposition predicate associated with $s1$". The same reading holds with obvious adaptation for $K(S, s2)$ and for $\neg K(S, s1)$ and $\neg K(S, s2)$.
>
> To account for a contradiction, a *Postulate of Contradiction* is introduced:
>
> when S is in a superposition of $s1$ and $s2$, we have
>
> $K(S, s1) \wedge \neg K(S, s1) \wedge K(S, s2) \wedge \neg K(S, s2)$. [1.1]
>
> "This means that superposition implies contradiction"... . [2.1]

((r&(s&p))&(~r&(s&p)))&((r&(s&q))&(~r&(s&q))) ; `FFFF FFFF FFFF FFFF` (1.2)

((r&(s&(p&q)))>(((r&(s&p))&(~r&(s&p)))&((r&(s&q))&(~r&(s&q)))))>(p@p) ;
`FFFF FFFF FFFF FFF`**`T`** (2.2)

Eq. 1.2 as rendered is contradictory as intended. However Eq. 2.2 is *not* contradictory and differs by one value in **bold**. This refutes the postulate of contradiction.

What follows is that the uncorrected Square of Opposition, or derivative polygons as such, cannot map quantum logic as a probabilistic vector space.

However, the corrected, bivalent Modern Square of Opposition can map quantum logic, as shown elsewhere, to show it is *not* tautologous and hence untenable.