Refutation of "Insanity is repeating the same mistakes and expecting different results"

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Abstract: We evaluate the saying "Insanity is repeating the same mistakes and expecting different results" in the conjecture "If insanity then a mistake implying a result and a repeated mistake implying a different result", as not tautologous, hence refuting the saying. These results form a non tautologous fragment of the universal logic VŁ4.

We assume the method and apparatus of Meth8/VŁ4 with Tautology as the designated proof value, F as contradiction, N as truthity (non-contingency), and C as falsity (contingency). The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

\[
\begin{align*}
\text{LET} & \quad \neg \text{ Not, } \neg ; \quad + \text{ Or, } \lor, \cup ; \quad - \text{ Not Or;} & \quad \& \text{ And, } \land, \cap, \sqcap ; \quad \diamond, \Theta ; \quad \setminus \text{ Not And}; \\
> & \quad \text{Imply, greater than, } \rightarrow, \Rightarrow, \supset, \varpropto ; \quad < \text{ Not Imply, less than, } \in, \subset, \varsubsetneq, \varsubsetneqq, \triangleleft, \trianglelefteq ; \\
= & \quad \text{Equivalent, } \equiv, \Leftrightarrow, \Leftarrow, \Rightarrow, \leftarrow, \rightarrow ; \quad @ \text{ Not Equivalent, } \neq, \oplus ; \\
% & \quad \text{possibility, for one or some, } \exists, \exists !, \Diamond, \exists M; \quad \# \text{ necessity, for every or all, } \forall, \Box, L; \\
(z=z) & \quad T \text{ as tautology, } T, \top; \quad (z@z) \quad F \text{ as contradiction, } \emptyset, \text{ Null, } \bot, \text{ zero}; \\
(%z>%z) & \quad N \text{ as non-contingency, } \Delta, \text{ ordinal } 1; \quad (%z<%z) \quad C \text{ as contingency, } \nabla, \text{ ordinal } 2; \\
\neg(y<x) & \quad (x \leq y), (x \subseteq y), (x \equiv y); \quad (A=B) (A\sim B). \\
\text{Note for clarity, we usually distribute quantifiers onto each designated variable.}
\end{align*}
\]


We have a disease: progressive, incurable and fatal. One way or another we went out and bought our destruction on the time plan! All of us, from the junkie snatching purses to the sweet little old ladies hitting two or three doctors for legal prescriptions, have one thing in common: we seek our destruction a bag at a time, a few pills at a time, or a bottle at a time until we die. This is at least part of the insanity of addiction. The price may seem higher for the addict who prostitutes for a fix than it is for the addict who merely lies to a doctor, but ultimately both pay with their lives. Insanity is repeating the same mistakes and expecting different results.

(2.0)

Remark 2.0: The last sentence above was also published in a newspaper article (1981), as attributed to Alanon but without citation. The saying is grossly attributed to Albert Einstein, as denied in: Calaprice, A. Editor. (2010). The Ultimate Quotable Einstein. Princeton University Press.

Remark 2.1: We write the sentence for clarity as the conjecture:

If insanity then a mistake implying a result and a repeated mistake implying a different result.

(2.1)

\[
\begin{align*}
\text{LET} & \quad p (~p) \quad \text{action (mistake),} \\
q (~q) & \quad \text{repeated action (repeated mistake),} \\
r (~r) & \quad \text{result (different result);} \\
s (~s) & \quad \text{sanity (insanity).} \\
\neg s & \equiv ((~p>r)\&(~q>r)); \quad \begin{array}{cccc}
& F & F & F & T \\
F & F & T & T & T \\
F & F & F & T & T \\
T & T & T & T & T \\
\end{array} \quad (2.2)
\end{align*}
\]

Remark 2.2: Eq. 2.2 as rendered is not tautologous (all \(\tau\)'s), hence refuting the conjectured saying.