Method of reducing paradox to not contradictory and in one variable

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 fragment) is row-major and horizontal.

The first example selected is the paradox of Zhuangzi known as the butterfly dream:

en.wikipedia.org/wiki/Zhuangzi_(book)#.22The_Butterfly_Dream.22

LET p q s: sleep state, awake state; sleep;
~ Not; & And; + Or; > Imply; < Not Imply.

In the butterfly dream, Zhuangzi inadvertently invokes the implication connective for a paradox of fused terms, but which by definition are not equal.

Sleep state is not awake state, and the contrast of sleep state or awake state does not imply sleep state and awake state; but (1.1.1)
(p=~q)&((p+ q)<(p& q)) ; FTTF FTTF FTTF FTTF (1.1.2)

Sleep state is not awake state, and the contrast of sleep state or awake state does imply sleep state and awake sleep. (1.2.1)
(p=~q)&((p+ q)>(p& q)) ; FFFF FFFF FFFF FFFF (1.2.2)

Eq. 1.1.2 is *not* contradictory, but Eq. 1.2.2 is contradictory. Because *both* Eqs. 1.1.2 and 1.2.2 are *not* contradictory, this refutes the butterfly dream as a paradox.

We test the method of reducing paradox to *not* contradictory and in *one* variable.

We re-define s as sleep state and ~s as not sleep state and rewrite Eqs. 1.1.x and 1.2.x.

The contrast of sleep or no sleep does not imply sleep and no sleep; but (1.3.1)
(s+~s)<(s&~s) ; TTTT TTTT TTTT TTTT (1.3.2)

The contrast of sleep or no sleep does imply sleep and no sleep. (1.4.1)
(s+~s)>(s&~s) ; FFFF FFFF FFFF FFFF (1.4.2)

Eq. 1.3.2 is *not* contradictory, but Eq. 1.4.2 is contradictory. Because *both* Eqs. 1.3.2 and 1.4.2 are *not* contradictory, this refutes the butterfly dream as a paradox.

However, Eqs. 1.3.2 and 1.4.2 also serve as an example to confirm the method that a paradox refuted as *not* contradictory is also reducible to *one* variable.

The second example selected is the paradox of Maimonides at:

en.wikipedia.org/wiki/Argument_from_free_will

Moses Maimonides formulated an argument regarding a person's free will, in traditional terms of good and evil actions, as follows:

Does God know or does He not know that a certain individual will be good or bad? (1.1)

(p>(q>(%p>#p)))+(p>(q>(%p<#p))) ; TTTT TTTT TTTT TTTT (1.2)

If thou sayest 'He knows', then it necessarily follows that the man is compelled to act as God knew beforehand he would act, (2.1)

(p>(q>(%p>#p)))>#(q>(p>(q>(%p>#p)))) ; NNNT NNNT NNNT NNNT (2.2)

otherwise God's knowledge would be imperfect ... (3.1)

[<] p=(p@p) ; TFTF TFTF TFTF TFTF (3.2)

If Eq. 1.2, then if Eq. 2.1 then Eq. 3.1. (4.1)

(((p>(q>(%p>#p)))+(p>(q>(%p<#p))))>
((p>(q>(%p>#p)))>#(q>(p>(q>(%p>#p)))))) < (p=(p@p)) ;
FNFT FNFT FNFT FNFT (4.2)

As rendered, Eq. 1.2 is tautologous, *not* contradictory, and a theorem. Eqs. 2.2 and 3.2 are *not* tautologous and *not* contradictory. Eq. 4.2, the further embellishment of Eqs. 1.2, 2.2, and 3.2 is *not* tautologous and *not* contradictory. Therefore the paradox of Maimonides is refuted as a paradox.

We test the method of reducing paradox to *not* contradictory and in *one* variable.

We re-define (%q>#q) good, (%q<#q) bad, and imperfect (q@q), replace p for God as the tautology (q=q), and rewrite Eqs. 1.2, 2.2, 3.2, and 4.2.

((q=q)>(q>(%q>#q)))+((q=q)>(q>(%q<#q))) ; TTTT TTTT TTTT TTTT (5.2)

((q=q)>(q>(%q>#q)))>#(q>((q=q)>(q>(%q>#q)))) ;
NNTT NNTT NNTT NNTT (6.2)

[<] (q=q)=(q@q) ; FFFF FFFF FFFF FFFF (7.2)

((((q=q)>(q>(%q>#q)))+((q=q)>(q>(%q<#q))))>
(((q=q)>(q>(%q>#q)))>#(q>((q=q)>(q>(%q>#q)))))) < ((q=q)=(q@q)) ;
NNTT NNTT NNTT NNTT (8.2)

Eq. 8.2 is *not* tautologous and *not* contradictory, and also refuting the paradox of Maimonides.

However, Eq. 8.2 also serves as an example to confirm the method that a paradox refuted as *not* contradictory is also reducible to *one* variable.