Proof of agnosticism as a subset of atheism because both lead to non-belief

Abstract: We define belief as trust in the unseen to evaluate the belief relationship of agnosticism and atheism. Atheism asserts there is evidence not to believe God exists. Agnosticism asserts that there is no evidence neither to believe nor not to believe God exists. We simplify these definitions by removing God from the mix as the object of belief. The conjectures to test are: Does both atheism and agnosticism imply or lead to non-belief; and Does both atheism and agnosticism imply agnosticism is a subset of atheism. We prove these as theorems. The contra-arguments are found to *not* tautologous.

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). Results are a 16-valued truth table in row-major and horizontal, or repeating fragments of 128-tables for more variables.

LET q, r: belief, evidence (knowledge)
~ Not; + Or; - Not Or; > Imply, greater than; = Equivalent.

We define belief as trust in the unseen to evaluate the belief relationship of agnosticism and atheism.

Atheism asserts there is evidence *not* to believe God exists. (1.0)

Agnosticism asserts that there is no evidence neither to believe nor not to believe God exists. (2.0)

Remark: The two definitions of Eqs. 1.0 and 2.0 are simplified by removing God from the mix as the object of belief.

Atheism asserts there is evidence *not* to believe. (1.1)

r>~q ; TTTT TT**FF** TTTT TT**FF** (1.2)

Agnosticism asserts that there is no evidence neither to believe nor not to believe. (2.1)

~r>(q-~q) ; **FFFF** TTTT **FFFF** TTTT (2.2)

The conjecture to test is if atheism and agnosticism *both* imply or lead to *non-belief*. (3.0)

Eq. 3.0 is rewritten to use the if-then construct, that is, the implication operator.

If evidence, then no belief and if no evidence then neither belief nor no belief implies no belief (3.1)

((r>~q)&(~r>(q-~q)))>~q ; TTTT TTTT TTTT TTTT (3.2)

Remark: If evidence, then no belief and if no evidence then neither belief nor no belief implies belief. (4.1) ((r>~q)&(~r>(q-~q)))> q ;   TTTT **FF**TT TTTT **FF**TT   (4.2)

We ask, Does both atheism and agnosticism imply agnosticism is a subset of atheism.   (5.1)

((r>~q)&(~r>(q-~q)))>((r>~q)>(~r>(q-~q))) ;   TTTT TTTT TTTT TTTT   (5.2)

Remark: Does both atheism and agnosticism imply agnosticism is *not* a subset of atheism.   (6.1)

(((r>~q)&(~r>(q-~q)))>((r>~q)<(~r>(q-~q))) ;
TTTT **FF**TT TTTT **FF**TT   (6.2)

Eqs. 3.2 and 5.2 as rendered are tautologous, and the respective contra Eqs. 4.2 and 6.2 are *not* tautologous.

Hence the two theorems in Eqs. 3.1 and 5.2 can be restated to mean:

Both atheism and agnosticism imply *no* belief.   (3.1)

Both atheism and agnosticism imply agnosticism is a *subset* of atheism.   (5.1)