

Denial of A.V. Shevenyonov's proof for the ABC conjecture

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Abstract: The six seminal equations evaluated are *not* tautologous, refuting the subsequent claimed proof of the ABC conjecture, and forming a *non* tautologous fragment of the universal logic VL4.

We assume the method and apparatus of Meth8/VL4 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.)

LET ~ Not, ¬; + Or, ∨, ∪, ⊔; - Not Or; & And, ∧, ∩, ⊓, ; \ Not And;
 > Imply, greater than, →, ⇒, ⇨, >, ▷, »; < Not Imply, less than, ∈, <, ⊂, ⊆, ≠, ≠, ≠, ≤;
 = Equivalent, ≡, :=, ⇔, ↔, ≐, ≈, ≃; @ Not Equivalent, ≠;
 % possibility, for one or some, ∃, ∅, M; # necessity, for every or all, ∀, □, L;
 (z=z) **T** as tautology, **T**, ordinal 3; (z@z) **F** as contradiction, **Ø**, Null, ⊥, zero;
 (%z>#z) **N** as non-contingency, Δ, ordinal 1; (%z<#z) **C** as contingency, ∇, ordinal 2;
 ~(y < x) (x ≤ y), (x ⊆ y), (x ⊆ y); (A=B) (A~B).

Note for clarity, we usually distribute quantifiers onto each designated variable.

From: Shevenyonov, A.V. (2017). Taken ABaCk by conjecturing out-of-Box.
vixra.org/pdf/1712.0669v1.pdf

Remark 0: We present only script mappings with table value results, as keyed to the text, because the author has no published email address, and we decline to correspond via the Disqus forum.

Sketching the grand problem—or Is it but a very special case?

LET p, q, r: a, b, rad

$$((1.1.1.1)=(1.1.2.1))=(1.1.3.1) \tag{1.1.4.1}$$

$$((r\&((p\&q)\&(p+q)))=((r\&(p\&q))\&(r\&(p+q))))=(((r\&p)\&(r\&q))\&(r\&(p+q))) ;$$

FFFF FFF T FFFF FFF T (1.1.4.2)

Remark 1.1: What the author means to say when invoking "[b]y straightforward induction" is the equation:

$$(((1.1.1.1)=(1.1.2.1)) \text{ and } ((1.1.2.1)=(1.1.3.1))) \text{ and } ((1.1.1.1)=(1.1.3.1)). \tag{1.1.5.1}$$

Heuristic Support: The above result could be seconded from a number of alternative standpoints. First, the ABC conjecture appears to pass the dimensionality check: $(a+b) \geq \text{rad}(ab[a+b])$.

$$(1.2.1)$$

$$\sim((r\&((p\&q)\&(p+q)))>(p+q)) = (p=p) ;$$

FFFF FFFF FFFF FFFF (1.2.2)

Remark 1.2: The inequality of Eq. 1.2.1 is *not* tautologous, contradictory, and refutes the claim.

Twin & twixt multiplicity versus additivity: 2.1.1, 2.2.1, 2.3.1

$$(((p-(\%s>\#s))\backslash(q-(\%s>\#s)))\&((r\&q)=((q-p)\backslash(q-(\%s>\#s))))))=(r\&p) ;$$

TTTT T**FF**T TTTT T**FF**T TTTT

(2.1.2)

$$(r\&(p+q))=(((p\backslash(p-(\%s>\#s)))\&((r\&p)-(\%s>\#s)))+(r\&s)) ;$$

NNNN N**FC**F NNNN FTTT

(2.2.2)

$$(((r\&(p+q))-(r\&p)) \backslash ((r\&(p+q))-(r\&q)))=(q\backslash p) ;$$

F**FF**T FTT**F** F**FF**T FTT**F**

(2.3.2)

$$(r\&(s@s))=(((\%s>\#s)\backslash(\%s<\#s))\&((r\&(\%s>\#s))+(r\&\sim(\%s>\#s)))) ;$$

TTTT F**FFF** TTTT F**FFF**

(2.10.2)

Remark 2: The four Eqs. 2.1.2, 2.2.2, 2.3.2, and 2.10.2 are not tautologous and hence not "consistent with orduale residuality as well as the *inherently Diophantine* nature of primes".

Six seminal equations are *not* tautologous, refuting the subsequent claimed proof of the ABC conjecture.