Refutation of projective determinancy via the ultrapower

Abstract: We evaluate the definition of ultrapower as a convention. The two states equated to 1 as designated proof value and as ordinal value are not tautologous. This refutes the ultrapower and hence colors the subsequent exposition to deny projective determinancy. Therefore the ultrapower and projective determinancy are non tautologous fragments of the universal logic VL4.

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.)

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I. Extenders (pg 75), Convention.

Let D be a directed nonempty set of sets: if a, b ∈ D then there is a c ∈ D such that a ∪ b ⊆ c.

Suppose that Z is a set and ⟨μa | a ∈ D⟩ is such that

(1) each μa is a countably additive measure on Z = {f | f: a → Z};
(2) the μa are compatible: if a ⊆ b and μa(X) = 1, then μb ( {f | f ↑ a ∈ X}) = 1. (75.2.1)

We wish to define the ultrapower (of the universe V) by ⟨μa | a ∈ D⟩. (This will really be a direct limit of ultrapowers rather than an ultrapower proper, but calling it an "ultrapower" is by now standard.)

Remark 75: We build the conjecture for ultrapower as Eqs. 75.1 implies 75.2. There are two states with 1 as T as tautology (the designated proof value)
LET  p, q, r, s, u, X:
    a, b, D, f, μ, X;

((p<r)(u&p)>(~(q<p)&(((u&p)&x)=(p=p))))>((u&q)&((s<(p<x))>s)=(p=p)) ;
   TFFT  TTTT  TFFT  TTTT(2) ,  TTTT  TTTT  TTTT  TTTT(2) ,
   TFFT  TTTT  TTTT  TTTT(2) ,  TFFT  TFFT  TFFT  TFFT(2) x 4  (75.3.1.2)

or 1 as ordinal one.  (75.3.2.1)

Eqs. 75.3.1.2 and 3.2.2 as rendered are not tautologous. This refutes Eq. 75.1.1 \( \langle \mu_a \mid a \in D \rangle \) as defining the ultrapower. What follows is the coloring and denial of the subsequent exposition.

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