A Theory of Scientific Terminlogy

The theory consists of concepts (basic and defined), postulates, formation and transformation rules, principles and a bridging rule.

a) Basic concepts: concept, expression

b) Postulate 1: Q, L, M, C, T, K, A, W, B, F, Z, H, R, X, N, P, S are conceptual periods.

Postulate 2: h, j, d, v, g, s, e, m, x, y, z, t, w, l, u, k, i, q, a, c, f, p, n are conceptual bonds.

Postulate 3: h, o, j, d, v, r, g, s, e, m, x, y, z, t, w, l, u, k, I, q, a, b, c, f, p, n are conceptual groups.

c) Formation rule: If o_1 and o_2 are conceptual periods and Ω is a conceptual bond, then o_1 Ω o_2 is a well-formed formula.

d) Transformation rules (TR1-4)

TR1: o_1 Ω $o_2 = o_1 \text{Ø}_1 + o_2 \text{Ø}_2$

TR2: o_1 Ω $o_2 = o_1[o_2 \text{Ø}_2] \text{Ø}_1$

o_1 Ω $o_2 = o_2 (o_1 \text{Ø}_1)$ Ø_2

where Ø_1 and Ø_2 are conceptual groups.

TR3: o_1 Ω o_2 is replaceable with C, Q or o, where o is co-periodic with either o_1 or o_2. Symbolically,

[o_1 Ω o_2] ϑ [C d Q] d o

TR4: [o_1 Ω o_2] ϑ o h Q

e) Defined concepts: o Ø is a conceptual element. o_1 [o_2 Ø_2] Ø_1 and o_2 [o_1 Ø_1] Ø_2 are conceptual molecules.

f) Principle 1: A conceptual equation is set up in accordance with the conceptual order of the union.

Principle 2: In a conceptual union, all concepts are conserved.

Principle 3: All scientific concepts are formalised in the conceptual calculus based on (a)-(e).

g) Bridging rule: An expression qualifies for term status if and only if it accords with the Pegitosca Criterion, i.e.

ω (P, E, G, I, T, O, S, C) + Ψ (A) = ι