# THE PERIODIC TABLE OF SEMANTIC PREDICATES


**BY**


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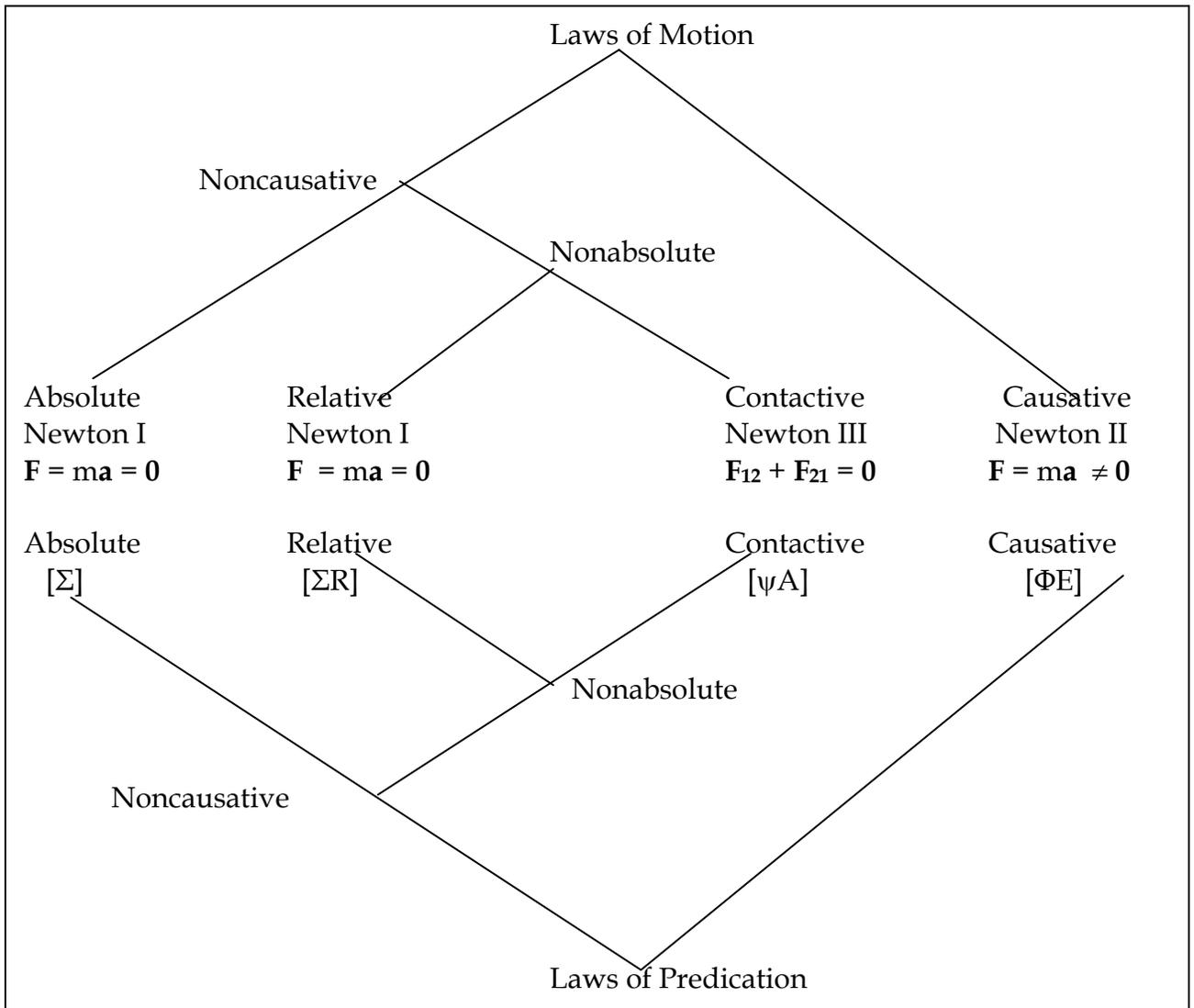**14th JANUARY 2014**

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In a previous paper[*] I enunciated the situatodomainal theory in which I claimed to solve the problem of semantic role theory: how to determine the nature and number of semantic roles. The solution was analogously and reflectively developed from Newtonian mechanics as the adjoining diagram depicts.

Laws of Motion

Noncausative

Nonabsolute

| Absolute | Relative | Contactive | Causative |
|----------|----------|------------|-----------|
| Newton I | Newton I | Newton III | Newton II |
| $\mathbf{F} = m\mathbf{a} = 0$ | $\mathbf{F} = m\mathbf{a} = 0$ | $\mathbf{F_{12}} + \mathbf{F_{21}} = 0$ | $\mathbf{F} = m\mathbf{a} \neq 0$ |

| Absolute | Relative | Contactive | Causative |
|----------|----------|------------|-----------|
| $[\Sigma]$ | $[\Sigma R]$ | $[\psi A]$ | $[\Phi E]$ |

Nonabsolute

Noncausative

Laws of Predication

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It will be recalled that $[\Sigma]$ = [B], [Z] where B = change bearer, Z = non-change bearer; $[\Sigma R]$ =[BR], [ZR] where R = reference; $[\psi A]$ = [NA], [TA] where N = dynamic contactor, T = static contactor, A = contactee; $[\Phi E]$ = [CE], [KE], where C = causer, K = anticauser, E = causee.

The absolute $[\Sigma]$ and relative $[\Sigma R]$ correspond to Newton I ($\mathbf{F = ma = 0}$); the contactive $[\psi A]$ corresponds to Newton III ($\mathbf{F_{12} = F_{21}}$); the causative $[\Phi E]$corresponds to Newton II ($\mathbf{F = ma \neq 0}$).

If I let $\pi$ assume the values $[\Sigma]$, $[\Sigma R]$, and $[\psi A]$, I readily derive the Periodic Table of Semantic Predicates in the two cycles of absolutization, relativization, contactivization, and causativization after which I causativize the results from the second cycle.


THE PERIODIC TABLE OF SEMANTIC PREDICATES


| | | |
|---|---|---|
| Period 1 | | $[\pi]$ |
| | 2.1 | $[\pi]\Sigma$ |
| Period 2 | 2.2 | $[\pi]R$ |
| | 2.3 | $\psi A[\pi]$ |
| | 2.4 | $\Phi E[\pi]$ |

| | Group I/II/III A | Group I/II/III B | Group I/II/III C | Group I/II/III D |
|---|---|---|---|---|
| | 3.1 $[[\pi]\Sigma]\Sigma$ | $[[\pi]\Sigma]R$ | $\psi A[[\pi]\Sigma]$ | $\Phi E[[\pi]\Sigma]$ |
| Period 3 | 3.2 $[[\pi]R]\Sigma$ | $[[\pi]R]R$ | $\psi A[[\pi]R]$ | $\Phi E[[\pi]R]$ |
| | 3.3 $[\psi A[\pi]]\Sigma$ | $[\psi A[\pi]]R$ | $\psi A[\psi A[\pi]]$ | $\Phi E[\psi A[\pi]]$ |
| | 3.4 $[\Phi E[\pi]]\Sigma$ | $[\Phi E[\pi]]R$ | $\psi A[\Phi E[\pi]]$ | $\Phi E[\Phi E[\pi]]$ |
| | 4.1 $\Phi E[[[\pi]\Sigma]\Sigma]$ | $\Phi E[[[\pi]\Sigma]R]$ | $\Phi E[\psi A[[\pi]\Sigma]]$ | $\Phi E[\Phi E[[\pi]\Sigma]]$ |
| Period 4 | 4.2 $\Phi E[[[\pi]R]\Sigma]$ | $\Phi E[[[\pi]R]R]$ | $\Phi E[\psi A[[\pi]R]]$ | $\Phi E[\Phi E[[\pi]R]]$ |
| | 4.3 $\Phi E[[\psi A[\pi]]\Sigma]$ | $\Phi E[[\psi A[\pi]]R]$ | $\Phi E[\psi A[\psi A[\pi]]]$ | $\Phi E[\Phi E[\psi A[\pi]]]$ |
| | 4.4 $\Phi E[[\Phi E[\pi]]\Sigma]$ | $\Phi E[[\Phi E[\pi]]R]$ | $\Phi E[\psi A[\Phi E[\pi]]]$ | $\Phi E[\Phi E[\Phi E[\pi]]]$ |


Taking $[\pi]$ as Period 1, Period 2 results from the first cycle. Period 3 results from the second cycle. Finally, Period 4 is the consequence of causativizing Period 3. One could object to the coded or cryptic form of the Period Table, for the full Table would exhibit 111 predicate slots (bearing in mind that $\pi$ = $[\Sigma],[\Sigma R], [\psi A]$). But consideration of the sheer graphical extent of the explicit form of the Table leads to the conclusion that the coded form is preferably handier. Compare

| 109 |
|---|
| Mt |

, the slot for meitnerium in the Periodic Table of Chemical Elements, with

the catenated ΦE[ΦE[ΦE[Σ]]], ΦE[ΦE[ΦE[ΣR]]] and ΦE[ΦE[ΦE[ψA]]] in the explicit Periodic Table of Semantic Predicates.

I now conclude this short paper by formalizing and slotting a limited sample of Luganda verbal predicates. I proceed by glossing a given predicate, specifying the value of $\pi$, formalizing and slotting the predicate.

(1) **- sumulukuk-** "to open" $\pi = [\Sigma]$    $[\Sigma]$    I/1

(2) **- sumulul-** "to open" $\pi = [\Sigma]$    ΦE[Σ]    I/2.4

(3) **– sumuluz-** "to open with" $\pi = [\Sigma]$    ΦE[ΦE[Σ]]    1D/3.4

(4) **–sumululil-** "to open for" $\pi = [\Sigma]$    [ΦE[Σ]]R    1/B/3.4

(5) **–sul-** "to live, dwell" $\pi = [\Sigma R]$    [ΣR]    II/1

(6) **–suz-** "to put up" $\pi = [\Sigma R]$    ΦE[ΣR]    II/2.4

(7) **–tomel-** "to bump into" $\pi = [\psi A]$    [ψA]    III/1

(8) **– tomez-** "to cause to bump into" $\pi = [\psi A]$    ΦE[ψA]    III/2.4

(9) **–tomelagany-** "to cause to bump into one another" $\pi = [\psi A]$    ΦE[[ψA]R]    IIID/3.2

(10) **–tt-** "to kill" $\pi = [\Sigma]$    ΦE[Σ]    I/2.4

(11) **–ttik-** "to be killable" $\pi = [\Sigma]$    [ΦE[Σ]]Σ    IA/3.4

(12) **–ttil-** "to kill for/at/…" $\pi = [\Sigma]$    [ΦE[Σ]]R    1B/3.4

(13) **–tandik- - wandiik-** " to start to write" $\pi = [\Sigma]$    ψA[ΦE[Σ]]    1C/3.4

(14) **–lindiliz-** " to cause to wait for /in/at/…" $\pi = [\Sigma R]$    ΦE[[[ΣR]R]R]    IIB/4.2

(15) **–labikil-** " to be seen /appear at/in..." $\pi = [\psi A]$    [[ψA]Σ]R    IIIB/3.1

(16) **–labis-** " to show" $\pi = [\psi A]$    ΦE[[ψA]Σ]    IIID/3.1

(17) **–julil-** " to refer to" $\pi = [\Sigma R]$    [ΣR]    II/1

(18) **–jjukiz-** " to remind" $\pi = [\psi A]$    ΦE[ψA]    III/2.4

Now that the Periodic Table of Semantic Predicates is in place, cross-linguistic data should be collected and analyzed in order to corroborate, modify, or refute the theoretical Table. Should it be entertained and retained, its promising fundamentality to the discipline of linguistics is due to be assessed.