

- LAURENT DUBOIS, *LDL trans-Referential Theory And Modelization Of Russell Paradox*.

Logico-Divergence, 1, rue Belle-vue, 5580 B-Wavreille.

E-mail: chronoplanet@gmail.com.

Initially interpreted as a monster-killer of naive logical theories, Russell paradox can now be seen as an incredible chance in the evolution of science as it led to alternative theories with a strategy of avoidance of paradoxical objects as fruitful as ZFC, VBG, Type Theory, Intuitionism and theories with a strategy of integration like Paraconsistency, Dialetheism.

We suggest an alternative to these alternatives to the naive set and truth theories (non hierarchical T-schema) and develop a first-order theory with the same power as paraconsistent logics, so with a strategy of integration of some paradoxical objects, introducing non-standard objects in well-known mathematical and physical theories.

The LDL Trans-Referential Theory is a kind of dual of the dialetheist theory. The LDL Trans-Referential Project is the opposite of the logicist project : in the LDL Project, the logic is at the service of the mathematical objects.

The fundamental idea of the LDL theory consists in "cloning" universes of standard theories, like, for example, ZF set theory, or number theory, but also of the naive set theory, and in attributing a specific "label" (not a type) to each universe. This is made by way of a cloning function $f : X \rightarrow \overset{n}{X}$ and a trans-referential involution function. Then three fundamental axioms (Axiom of Mirroring $\forall x \forall x^n (x^m = x \wedge x^n = x^m = x^n)$ with $m \neq n$) determine the "trans-referential" behavior of the labeled objects, Doing it this way, we can model the Russell paradox.

[1] Dubois, L., *Aftermath Of The Nothing*, In J.-Y. Beziau, A. Costa-Leite & I. M. L. D'Ottaviano (eds.), CLE, v.81, *Aftermath of the Logical Paradise*. Rio de Janeiro, Etat de Rio de Janeiro, Bresil: pp. 93-124 (2017)