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## **Towards Logical Analysis of Occurrence Values in Truth-Functional Independent Occurrence Logic**

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- FARSHAD BADIE & HANS GÖTZSCHE, *Towards Logical Analysis of Occurrence Values in Truth-Functional Independent Occurrence Logic*.

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The human beings never really understood how truth could be recognised as the centrepiece of philosophy. The idea of truth vs. falsity is based on the assumption that the truth-value of statements about things beyond actual settings can, indisputably, be determined (false statements about settings are just counterfactuals).

In this discussion, we will rely on our alternative kind of logic: *Occurrence Logic* (Occ Log), which is not based on truth functionality, see [1]. The Occ Log  $z \circ > y$  expression denotes the fact that  $y$  occurs in case and only in case  $z$  occurs. Note that ' $z \circ > y$ ' does not by itself express any kind of truth-value semantics. We will see that the *Occurrences* as the main building blocks of our approach are independent from truth-values, but they are strongly dependent on the occurrence values. The fact that ' $y$  would only occur [and would only have an occurrence value] in case  $z$  occurs [and has an occurrence value]', has been represented by Occ Log expression  $z \circ > y$ . We shall stress that what is in logic often called states of affairs (including events) of the real world could be called *Local Universes* that are made of Entities and Properties. Focusing on the events  $z$  and  $y$  we can justifiably say that in case, and only in case, the local universe of  $z$  differs from the local universe of  $y$  regarding at least one but not all Entities and Properties, one of them can, potentially, be said to be a change of the other.

[1] GÖTZSCHE, HANS, *Deviational Syntactic Structures. London / New Delhi / New York / Sydney: Bloomsbury Academic, 2013.*