Boolean Atoms and natural incarnations of XOR
Moreno Mitrovic
(Jesus Col.)

The spirit of this talk is strongly decompositional and its aim to meditate on the idea that natural language conjunction and disjunction markers do not incarnate Boolean terms like "∧" and "∨", respectively. Drawing from a rich collection of (mostly dead) languages (Ancient Anatolian, Homeric Greek, Tocharian, Slavonic, North-East Caucasian), I will examine the morphosemantics of XOR (exclusive/strong disjunction of the "either…or"-kind) and demonstrate that the morphology of the XOR marker does only contain the disjunction marker (I will call it κ), as one would expect on the null (Boolean hypothesis), but that the XOR-expression also contains the conjunction marker (I will call it μ). The exotic nature of the problem should now be clear since this, simply, does not make sense. After I make the case for a fine-structure of the Junction Phrase (JP), a common structural denominator for con- and dis-junction, I will propose a new syntax for XOR constructions involving five functional heads (two pairs of κ and μ markers, forming the XOR-word and combining with the resp. coordinand, and a J-head joing the pair of coordinands). I then move on to semantically compose the syntactically decomposed structure by providing a compositional account obtaining the exclusive component. To do so, I will heavily rely on Chierchia's (2013) exhaustification-based system of 'grammaticised implicatures' in assuming silent exhaustification operators in the narrow syntax. If time remains, we will try to carry over the analysis to a broader sprectrum of κ- and μ-markered constructions.