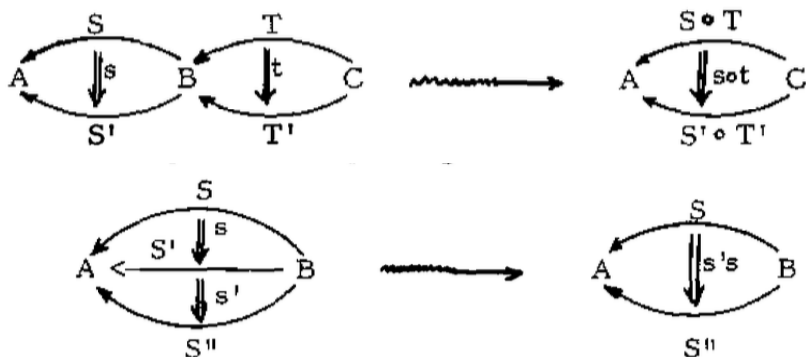


1967

INTRODUCTION TO BICATEGORIES

Jean Bénabou

(1.1) Local definition. A bicategory \underline{S} is determined by the following



(5.5.1) Definition. Let \overline{S} be a bicategory. A polyad in \overline{S} (or \overline{S} -polyad) is a morphism of bicategories $\Phi = (F, \varphi): \underline{S} \longrightarrow \overline{S}$ where \underline{S} is locally punctual. The set $\text{Ob } \underline{S}$ is called set of objects or indices of the polyad. (The monads are obtained when $\text{Ob } \underline{S} = \underline{1}$, hence the name of polyad.)

If in the data of \underline{S} all the $\underline{S}(A, B)$ are partially ordered sets, identified to categories, the coherence conditions are automatically satisfied,