Consider covariant functors \( L: D \to C \) and \( R: C \to D \) between categories \( C \) and \( D \), objects \( X \in D \) and \( Y \in C \), and the following arrows in categories \( C \) and \( D \):

\[ \text{Ar}(C) \ni \alpha: L(X) \to Y \quad \text{and} \quad \text{Ar}(D) \ni \alpha': X \to R(Y) \]

In addition to 3 books mentioned in Part 1, we also used the following references:

- Category Theory by Steve Awodey
- Topoi: The Categorical Analysis of Logic by Robert Goldblatt
- The Theory of Mathematical Structures by Jiří Adámek
- Mathematics of the Transcendental by Alain Badiou
- Memory Evolutive Systems: Hierarchy, Emergence, Cognition by Andrée Ehresmann and Jean-Paul Vanbremeersch