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# Visual category Theory

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$\text{Part}_3 \in C^{\text{Parts}}$

Visual Category Theory Brick by Brick, Part 3: Using LEGO® to Teach Abstract Mathematics

Published by OpenTask, Republic of Ireland

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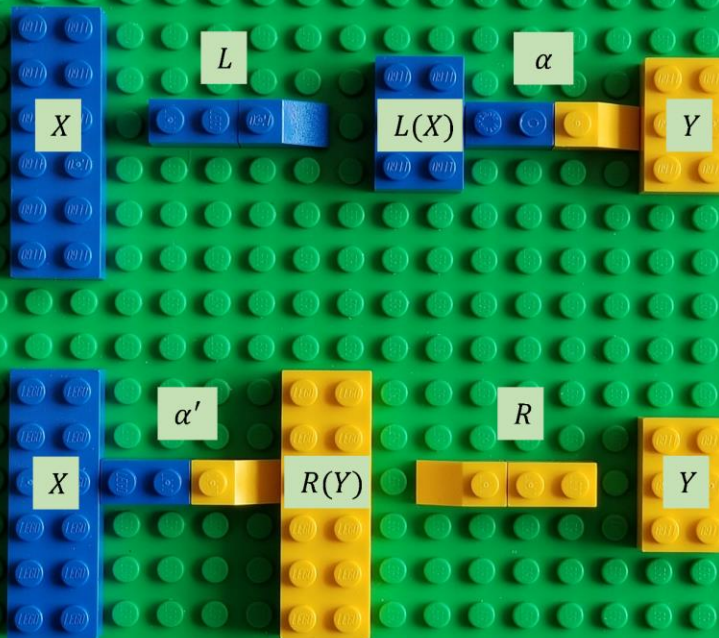
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A CIP catalog record for this book is available from the British Library.

ISBN-13: 978-1912636426 (Paperback)

Revision 1.01 (October 2022)

Consider covariant functors  $L:D \rightarrow C$  and  $R:C \rightarrow D$  between categories  $C$  and  $D$ , objects  $X \in D$  and  $Y \in C$ , and the following arrows in categories  $C$  and  $D$ :  
 $Ar(C) \ni \alpha: L(X) \rightarrow Y$  and  $Ar(D) \ni \alpha': X \rightarrow R(Y)$



In addition to 3 books mentioned in Part<sub>1</sub>, 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 vanbreemsersch