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**Restriction categories II: Partial map classification.** (English) Zbl 1023.18005

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This paper is a sequel to the same authors' [*J. R. B. Cockett* and *S. Lack*, *ibid.* 270, 223-259 (2002; [Zbl 0988.18003](#))]. There they introduced restriction categories for working with abstract categories of partial maps, and showed a representation theorem justifying their regarding restriction categories as abstract categories of partial maps. This paper considers when a monad has a Kleisli category which is abstractly a classified category of partial maps. In the presence of products the question has been answered by *A. Bucalo*, *C. Führmann* and *A. Simpson* [*ibid.* 294, 31-60 (2003; [Zbl 1022.18003](#))]. Moving from the  $p$ -category setting to the restriction category setting, the authors answer the same question without assuming the presence of products.

Reviewer: [Hirokazu Nishimura \(Tsukuba\)](#)

#### MSC:

[18C20](#) Algebras and Kleisli categories associated with monads  
[68Q99](#) Theory of computing  
[18B99](#) Special categories  
[18D99](#) Categories with structure

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