In [3], given a 2-category A, under suitable hypotheses, we give the semantic factorization of a morphism \( p \) that has the codensity monad via descent. This specializes to a new connection between monadicity and descent theory, which can be seen as a counterpart account to the celebrated Bénabou-Roubaud Theorem [1]. It also leads in particular to a (formal) monadicity theorem.

The result is new even in the case of the Eilenberg-Moore factorization of a functor that has a left adjoint in \( \text{Cat} \). In this talk, we shall give a sketch of the ideas and constructions involved in this particular case. We give focus on the monadicity theorem. If time allows, we talk about applications in the context of [2, 4].

References:


