It should be noted that methods from the problem transformation category are algorithm independent. This is due to the fact that after transformation, any single-label learning algorithm can be used as a base-algorithm.

Generally, *problem transformation* methods may not capture the dependence relationships among the class variables or learn the dependence relationships in an indirect way. They also may or may not include label dependencies: for example, the *BR+* method proposed by Cherman et. al. (2011) consists of exploring label dependency by only using the binary classifiers to discover and accurately predict label combinations; *PPT* focuses on capturing relationships between labels, while pruning and reducing over-fitting and this way reducing much of the computation complexity (Read 2008). Besides, solving many single-label tasks may be resource-consuming and cumbersome. Therefore, adaptation methods that adapt the algorithm to directly perform multi-label classification are often preferred in supervised learning.