



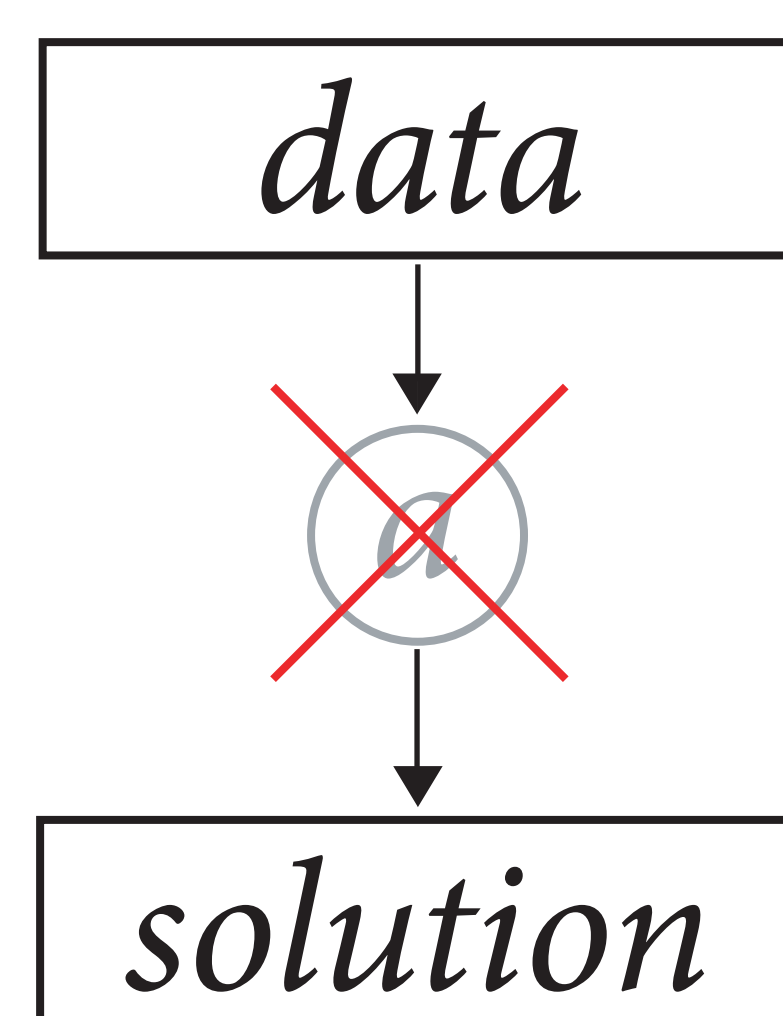
Main Goal

Can 'Translation of Data' be used to solve a problem in a different framework?

Translation of Data

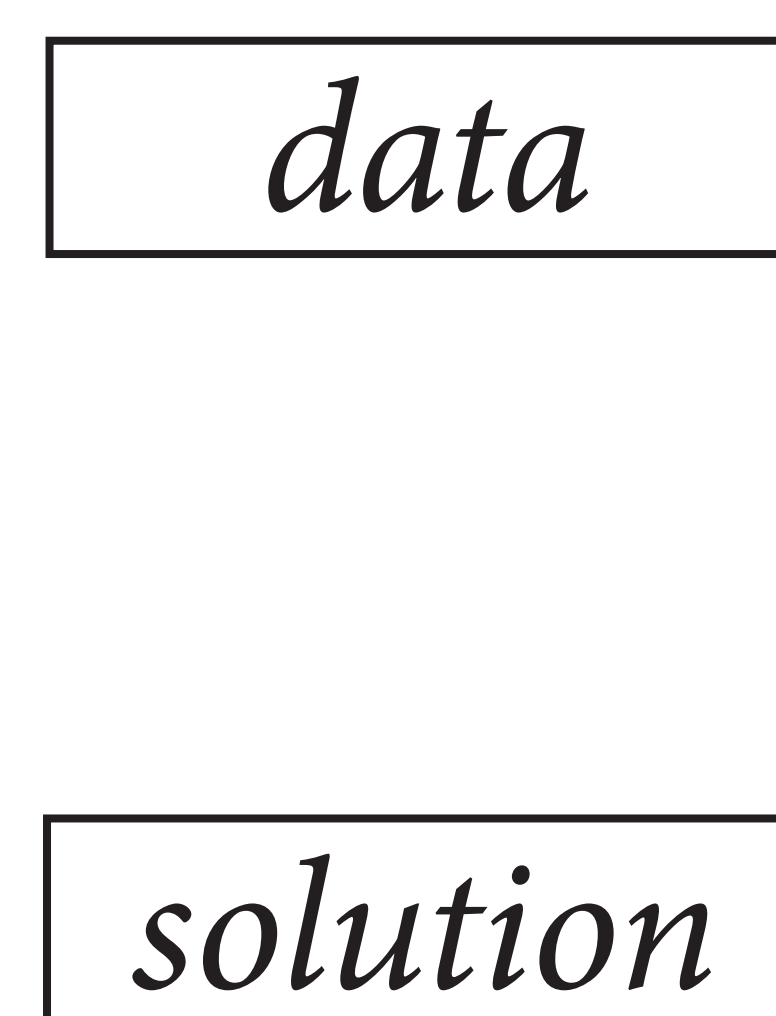
To solve a problem in some framework, we can translate it to a different framework where an existing algorithm can be used, *if* a suitable data translation is known. We study such translations.

Original Problem

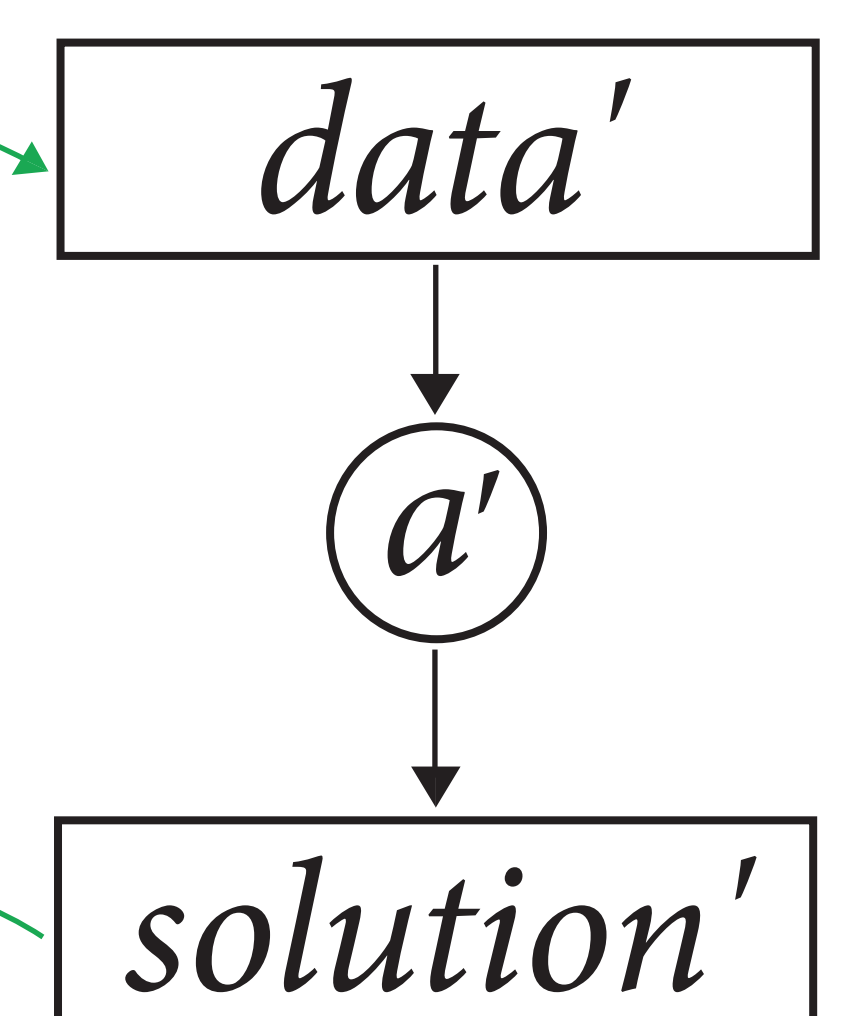


Algorithm a cannot be used.

Original Framework

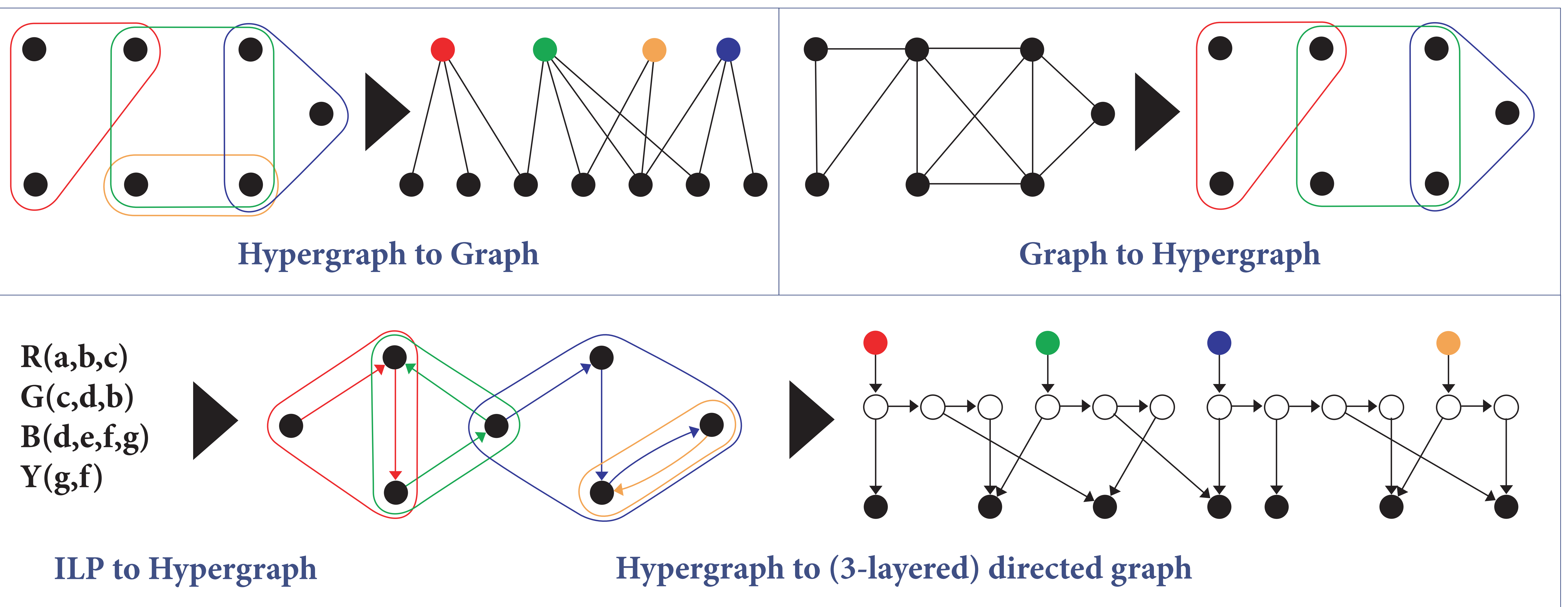


Alternative Framework



In an alternative framework we can use algorithm a'.

Data Translations



Questions:

- Can this method be used to solve problems more **efficient**?
- Will this lead to **new insights**?
- Can knowledge about one framework be **transferred** to the other?
- Can **new mining algorithms** be found using this principle?
- How can the knowledge about **refinement operators in ILP** be transferred to the context of graphs and hypergraphs?