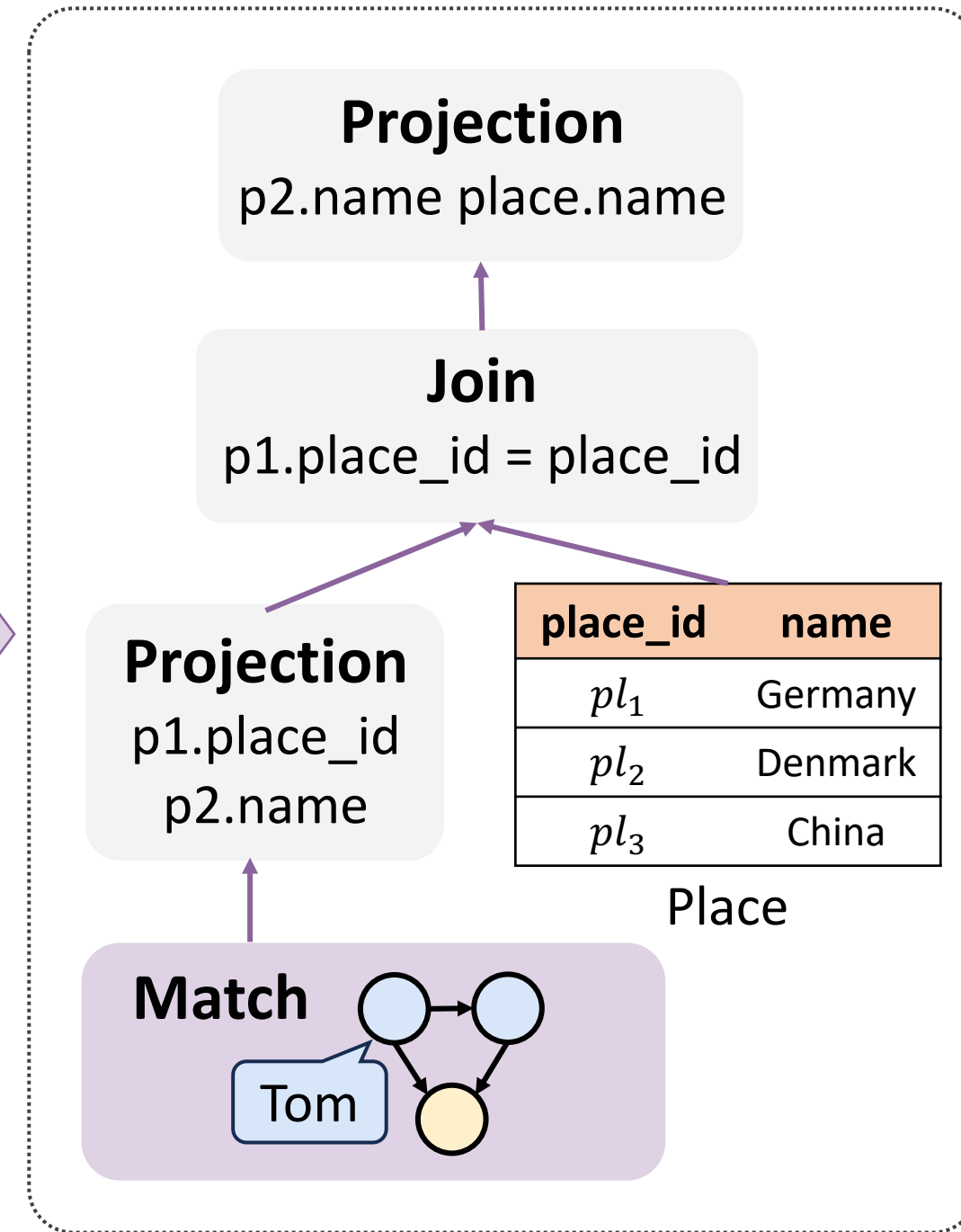
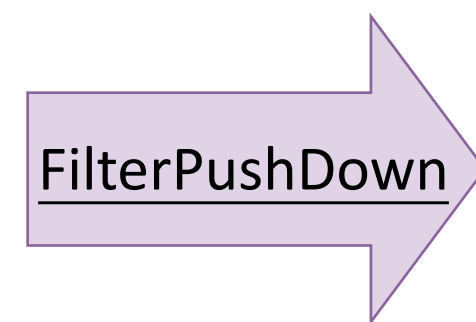
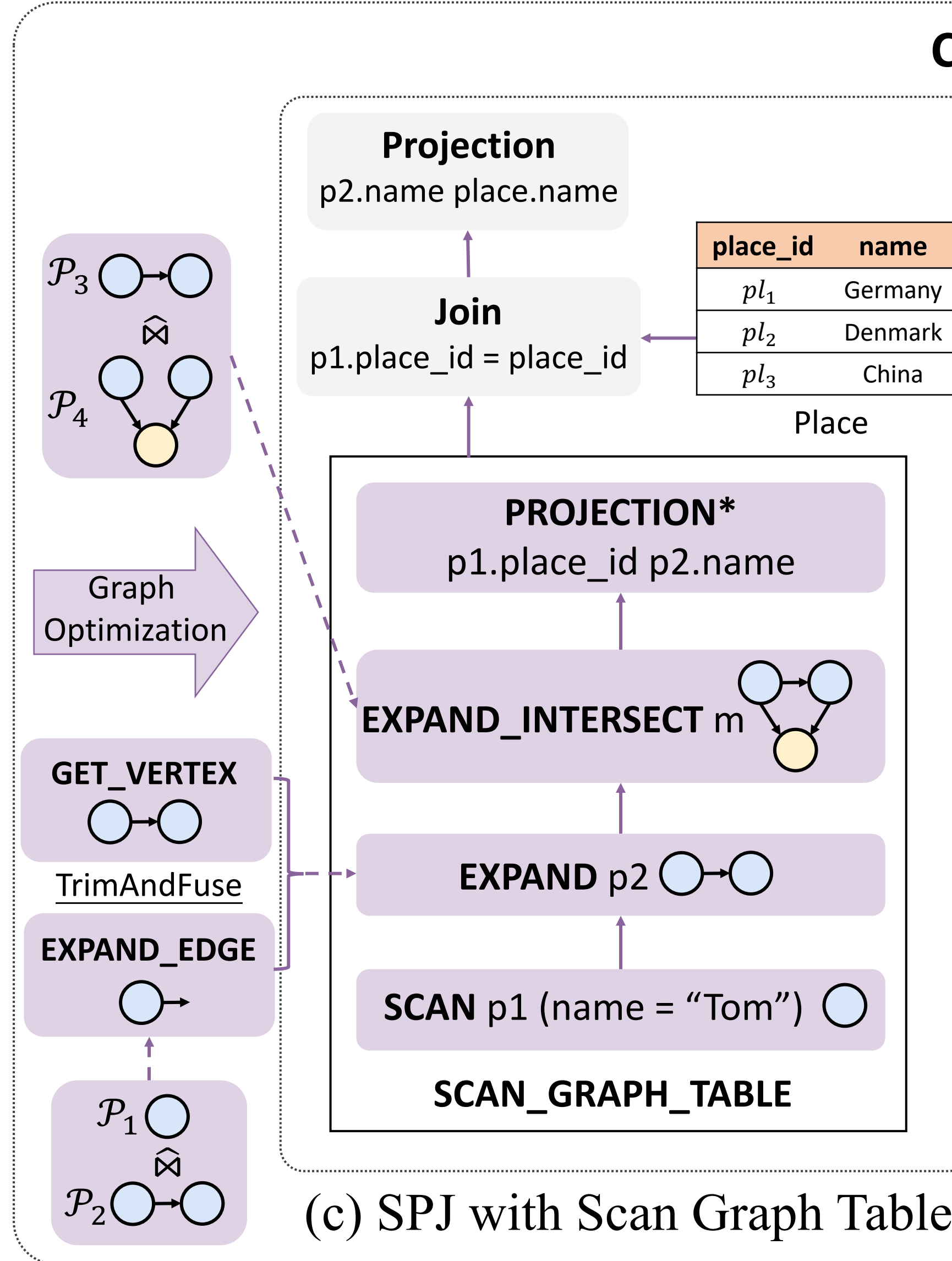


(a) SPJM

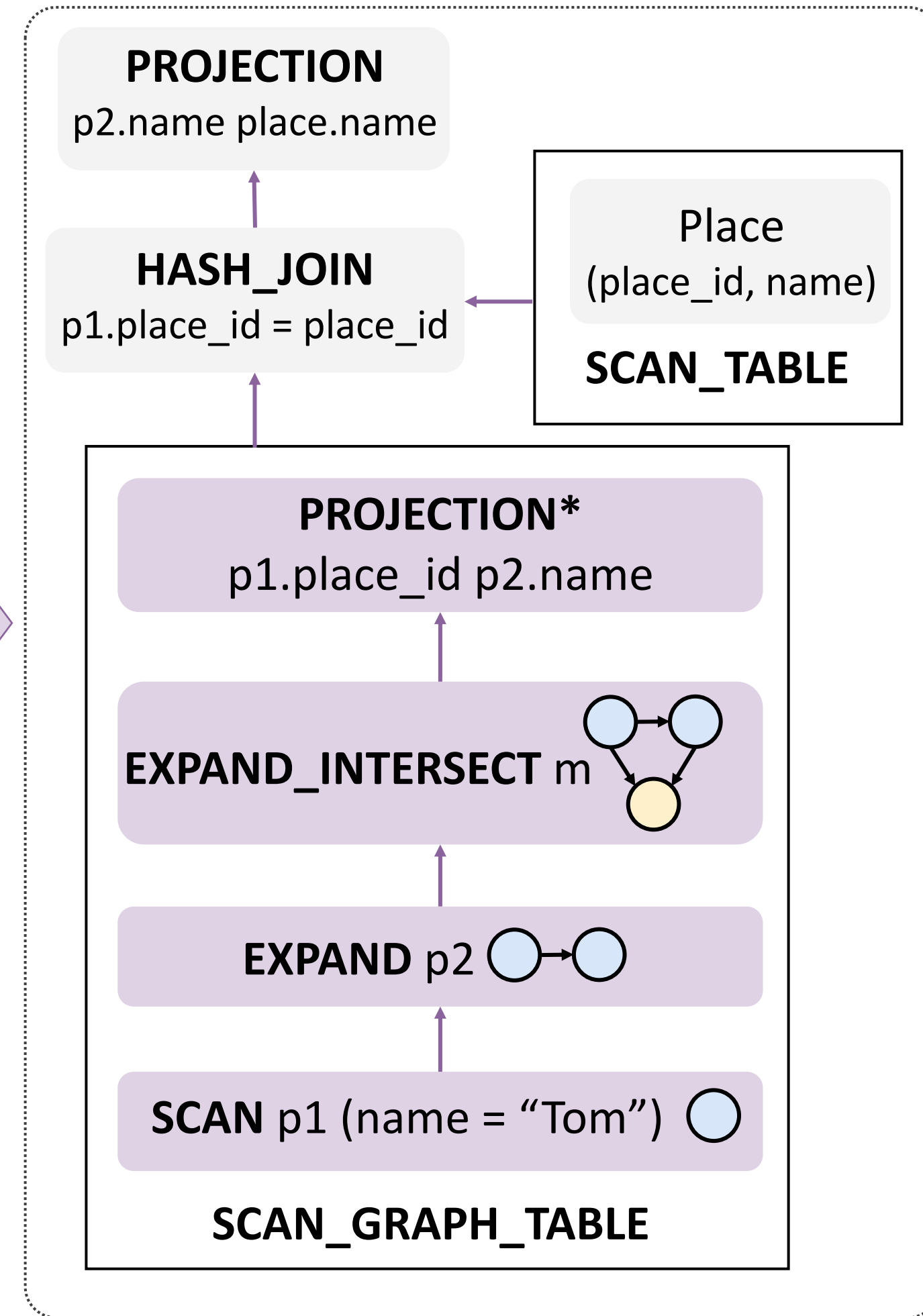
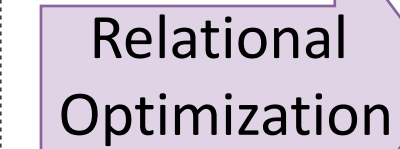


(b) Optimized SPJM



(c) SPJ with Scan Graph Table

## Core Workflow



(d) Optimized Execution Plan