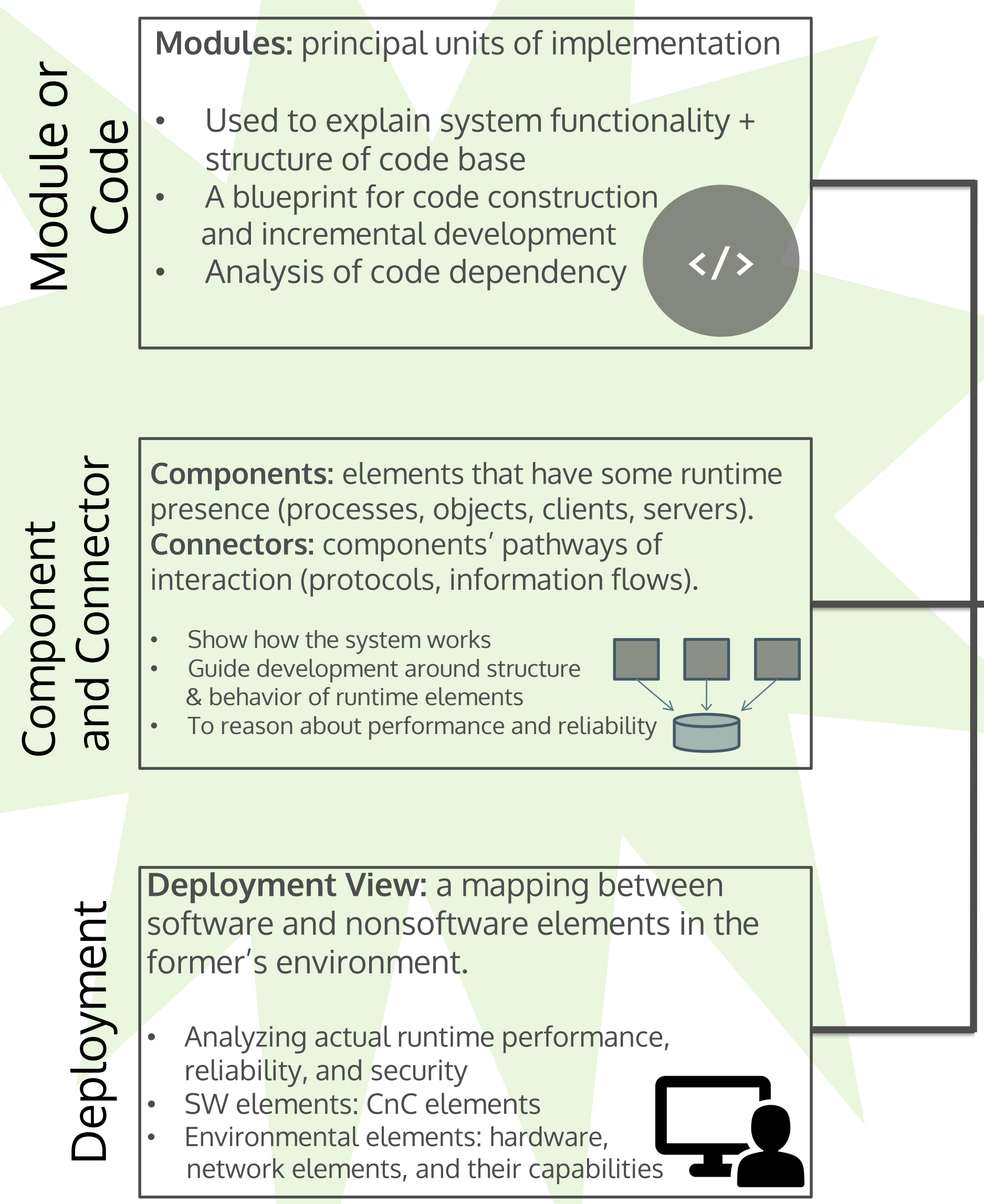


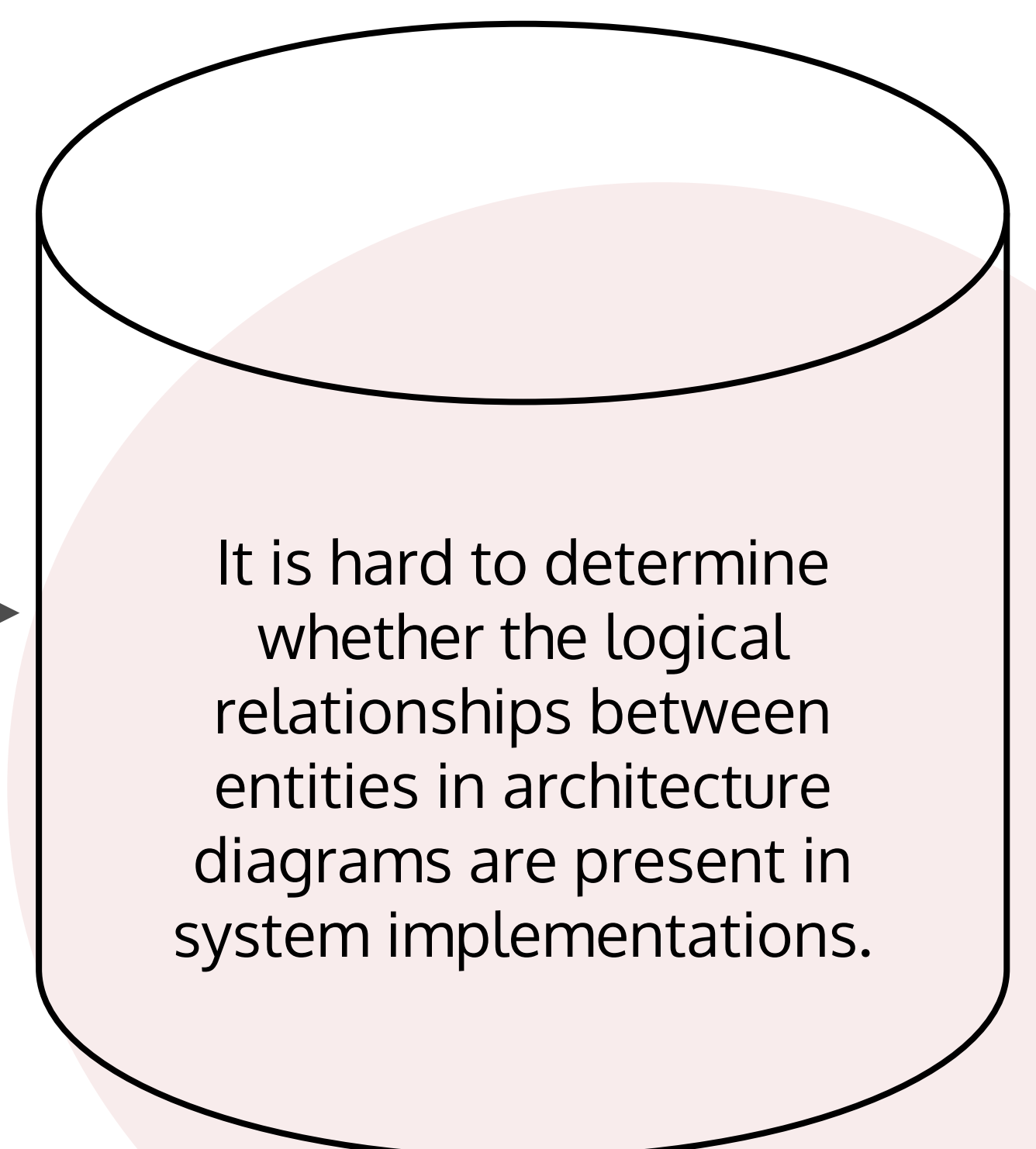
Software Architecture

the “fundamental organization of a system embodied in its components, their relations to each other, and the environment”

Architecture Views



The Problem



Previous Solutions

**Architecture Description Languages (ADLs)**

- (-) *Description*: Inferred by the name, ADLs only describe software architectures; they do not prescribe, or **enforce conformance** to them
- (+) *Analysis*: ADLs are focused on system analyses
- (+) *Formal Notation*: Currently, ADLs are the most formal mainstream architecture tools available

**ArchJava** Java extension unifying SWA and implementation

- (-) *Application*: Does not do anything interesting with SWA (i.e. checks)
- (-) *Distributed Systems*: No support for distributed systems
- (-) *Multiple SWA Views*: Lacks support for multiple architecture views; focuses only on Component-and-Connector view.

Trinity's Approach

Readability, Conformance(?), Communication Integrity, SWA as a live component, 3 SWA views

Design

Example