

Process Modeling

NADDI Sprint 2014

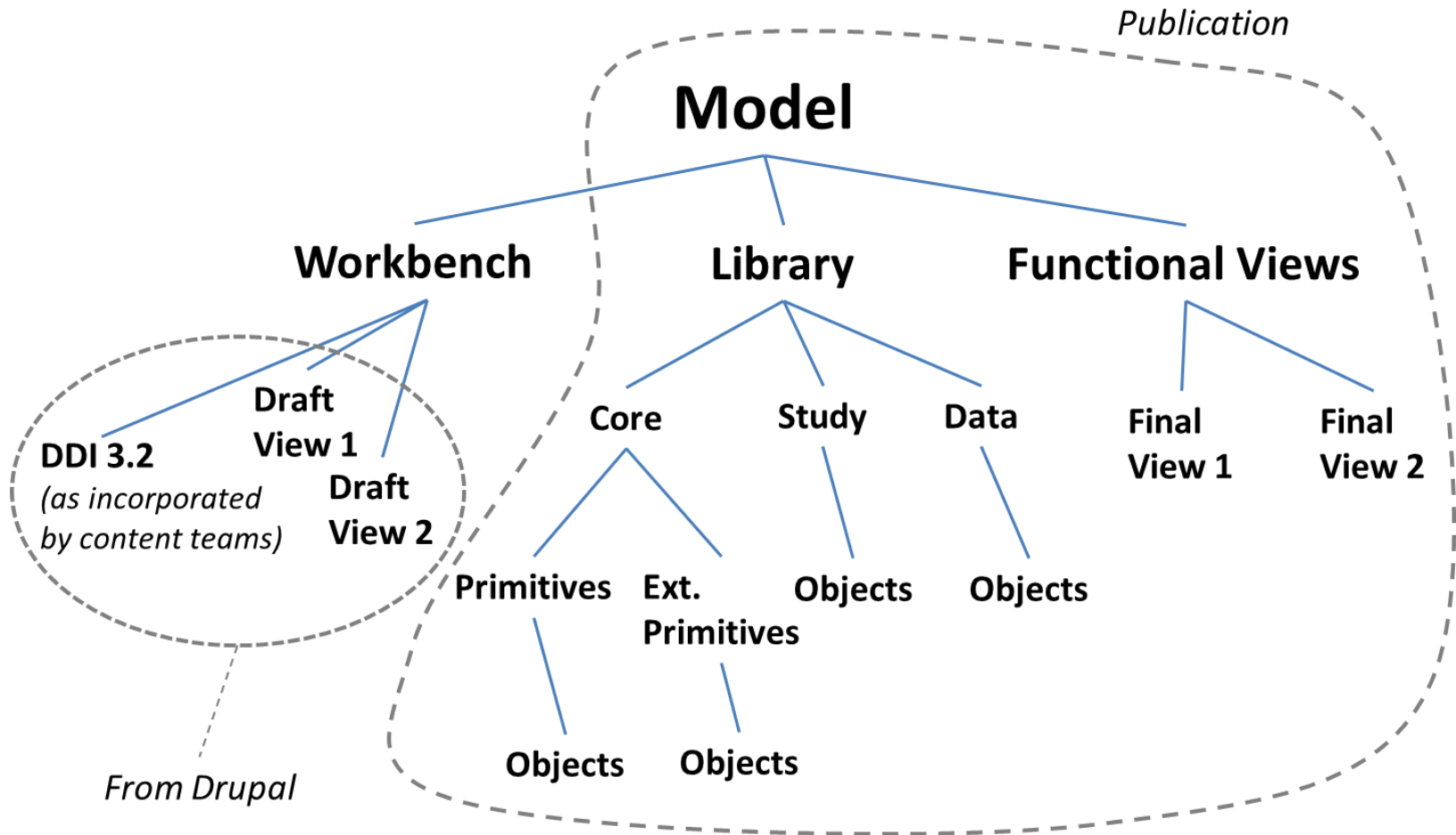
30 March

Background

- Prior to the NADDI 2014 Sprint a [design paper](#) on the process model was developed
- It remains a work in progress
- The design paper needs to be informed by the emerging information object architecture which has its roots in a short EDDI 2013 sprint where the idea of views was first introduced
- The view architecture has matured a bit at NADDI 2014
- The emerging view architecture has informed some additional modeling work undertaken at NADDI 2014 and reported here

View Architecture

Enterprise Architect Perspective

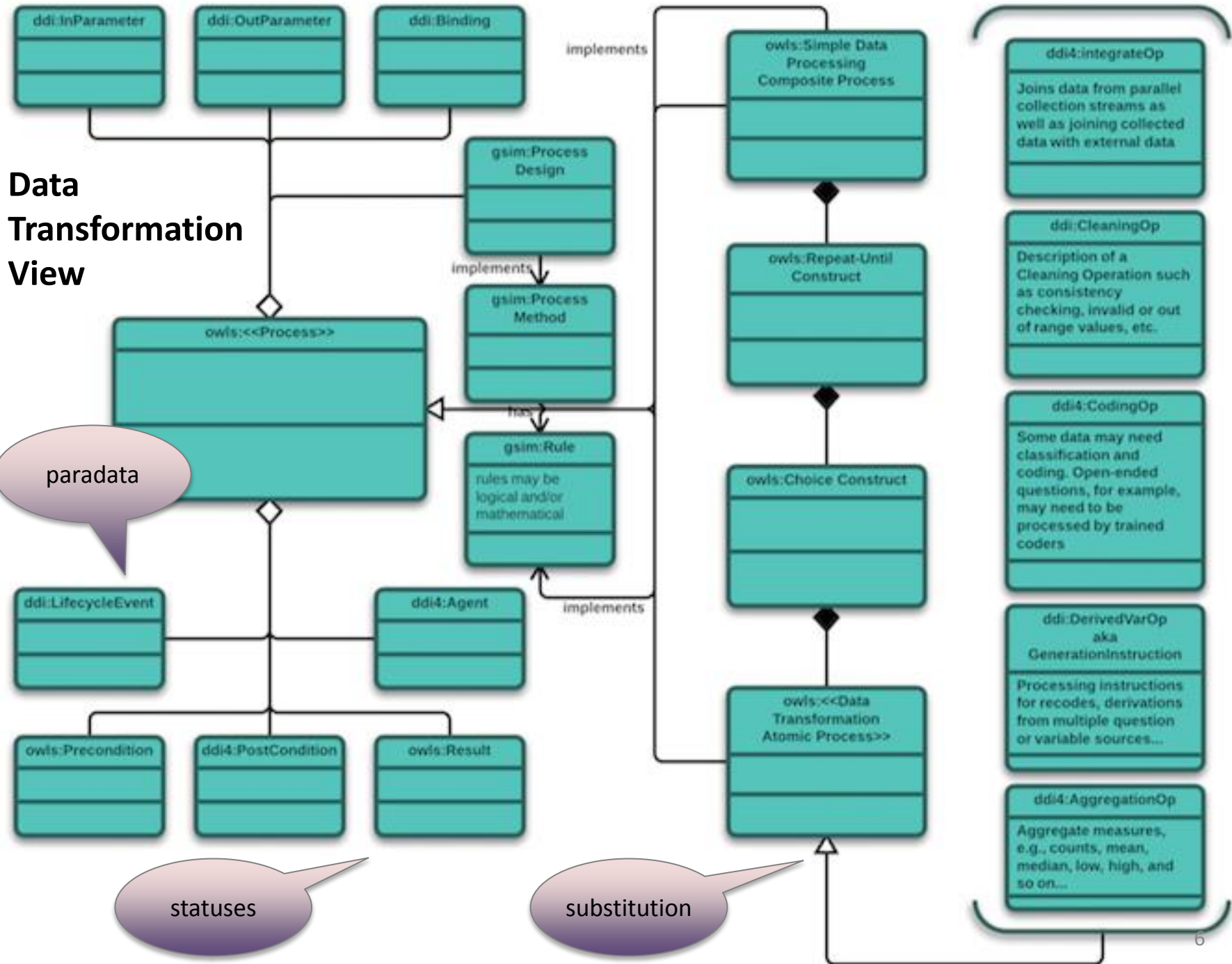


View Architecture (continued)

- In the context of the process model, functional views are templates published to end users that they are able to render useful by *substitution*, *instantiation* and *plug-and-play*
 - In *substitution* an abstract class is replaced by a child class
 - In *instantiation* a class is instantiated by the end user. For example, a choice/select statement instance might be developed by the end user for an OWL-S choice control construct class
 - In *plug-n-play* other views are either included in or can subsequently be hooked to the current view

Simple Data Transformation Pipeline

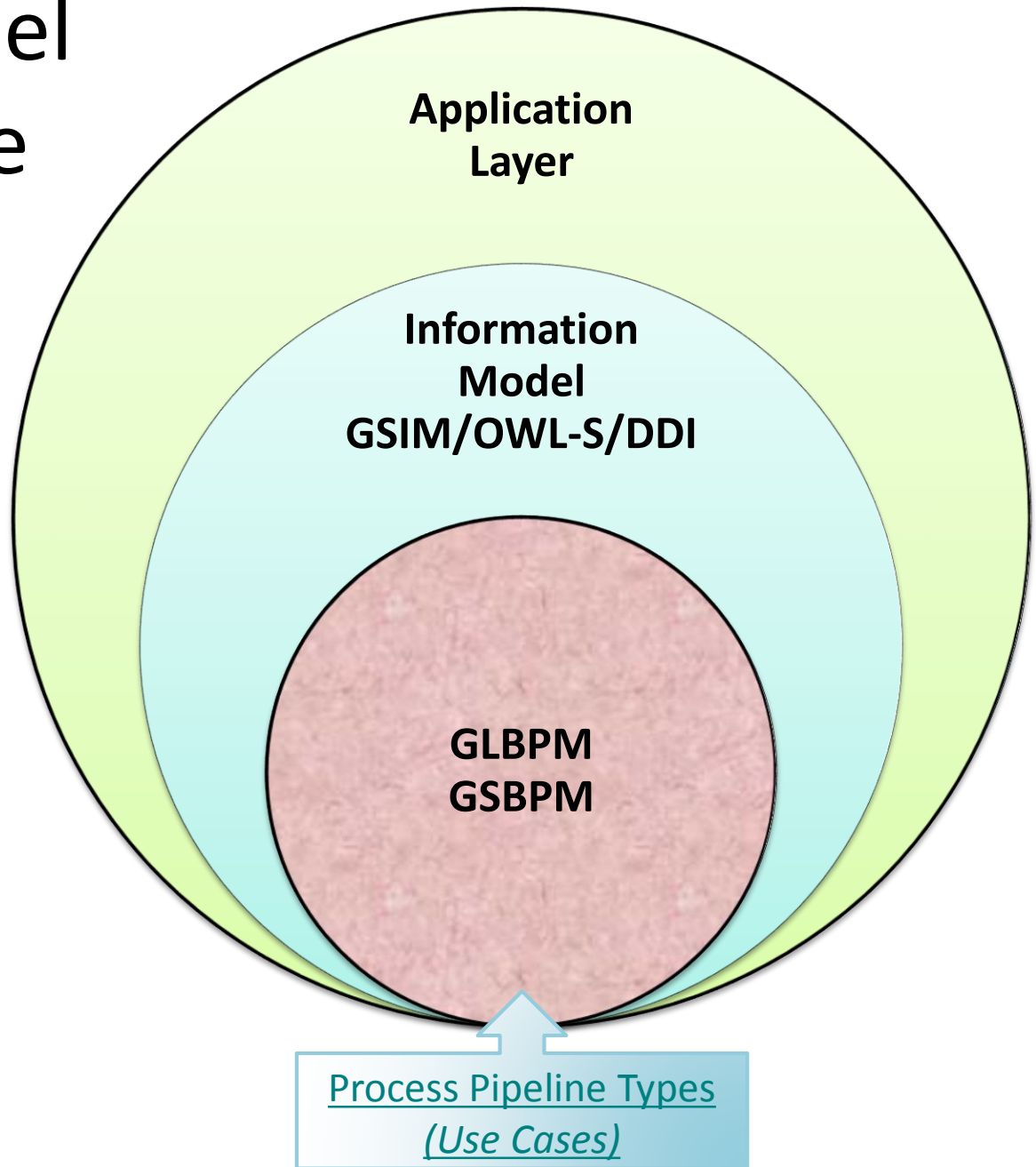
- Other functional views that are users of the simple data processing pipeline include:
 - The Archiving View
 - The Protocol Execution View (also presented here)
- Archiving uses the simple data transformation pipeline at the point it prepares an archival information package (AIP)
- Protocol Execution might use the view to construct a computed variable at visit runtime as part of a preload

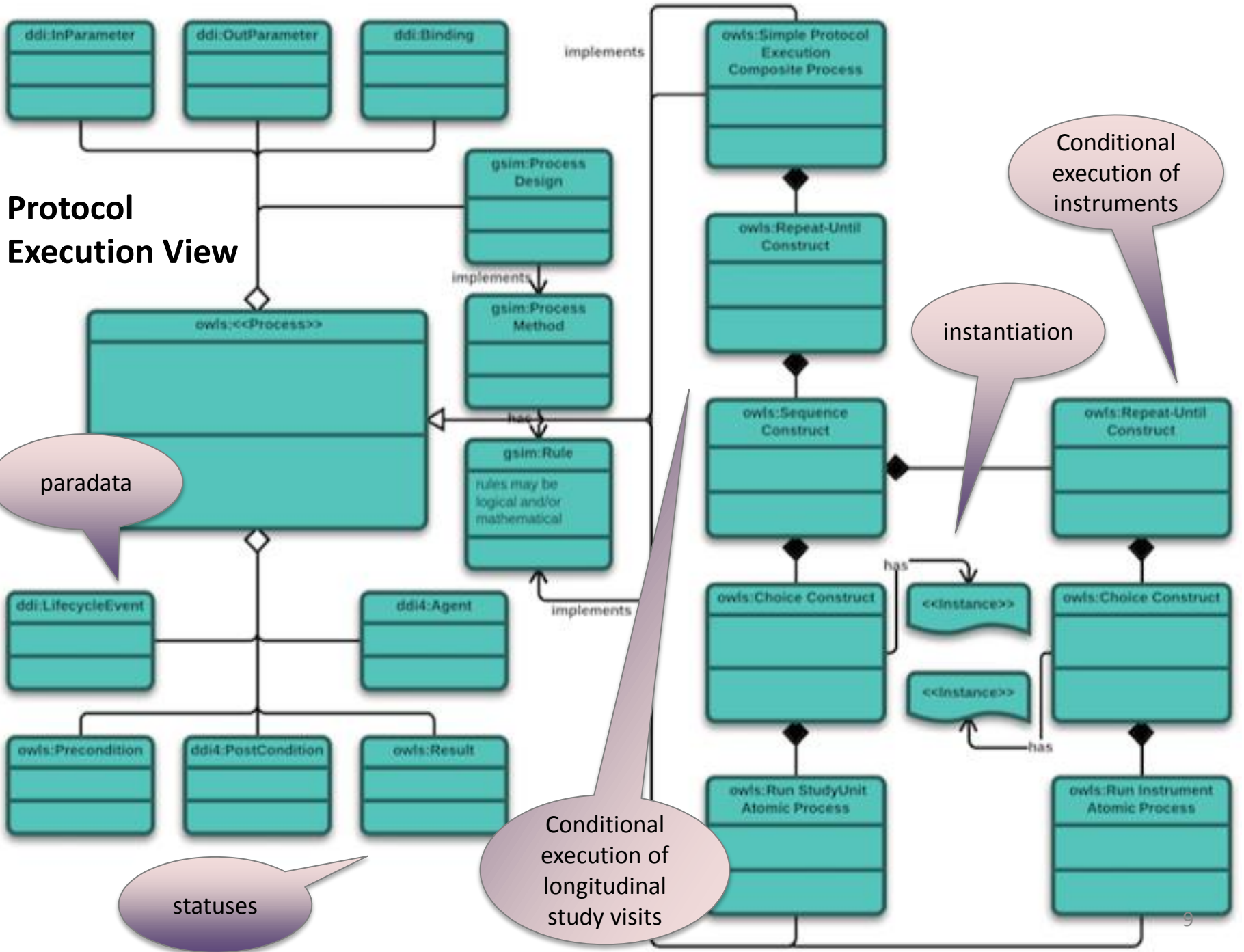


Simple Protocol Execution View

- The simple protocol execution view might be used to document a protocol plan
- However, it has enough specificity that it could be used in conjunction with an application like, for example, [BPEL](#) to run parts of an observation research protocol
- The design paper referenced earlier puts the process model in a larger context
- In this context the process model has a business process core, information objects and implementation applications

Process Model Architecture





Next Steps

- The process model view development team plans to update the design document based on the emerging view architecture
- Also, this document and the two views it describes will be circulated to a wider audience for comment
- Also, we will work examples:
 - The plan now is to work a protocol example in time for a DDI workshop at Census in May where we will make a presentation on adaptive protocols
 - The data transformation example will be completed in time for a June meeting sponsored by the World Bank and NSF on documenting data transformations in DDI