Introducing Manakin:
Overview & Architecture

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Outline

Manakin Overview

(non-technical)

1

What is Manakin?
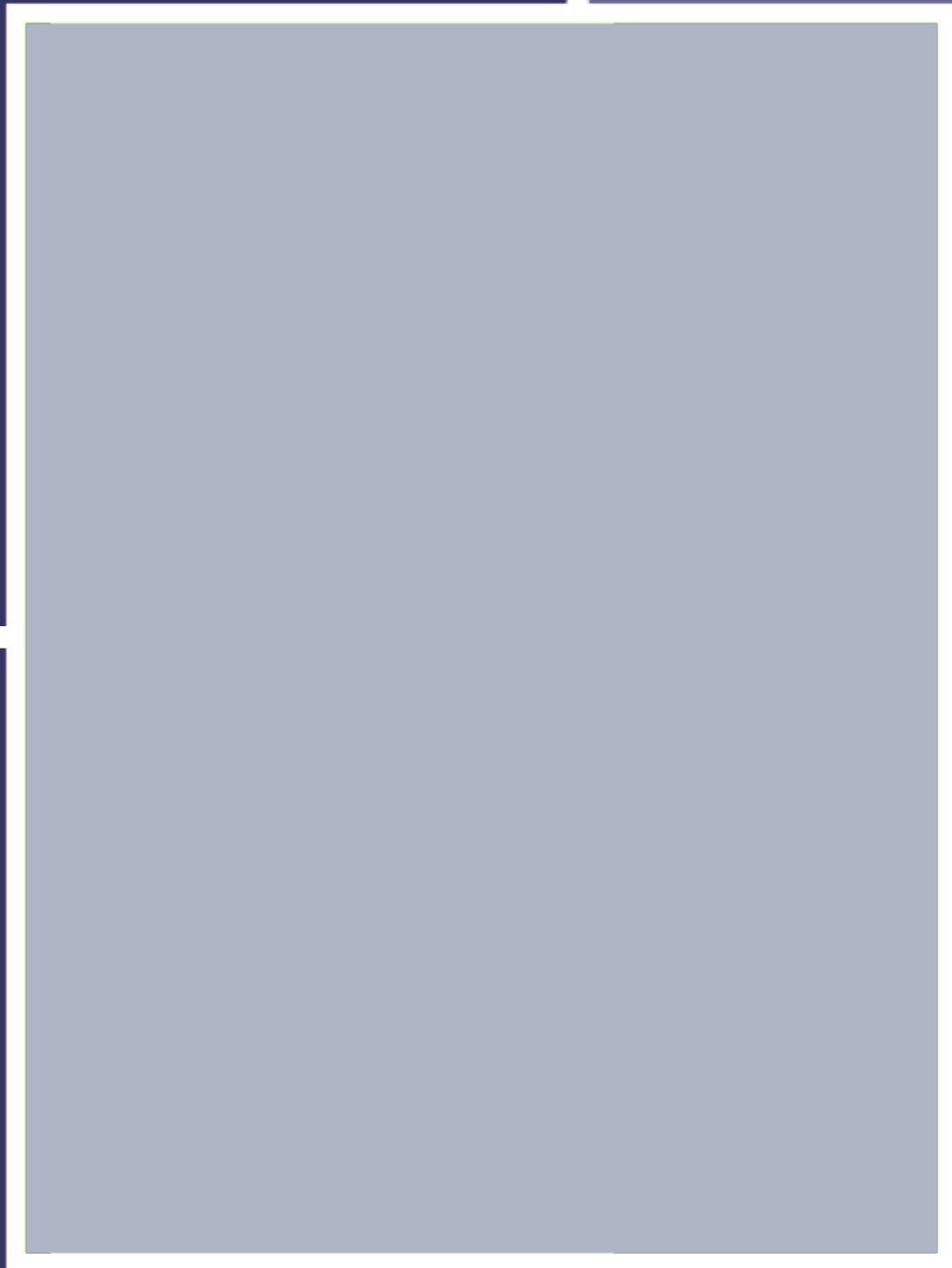
- ▶ Interface framework
  - ▪ *Modular*
  - ▪ *Extendable*
  - ▪ *Tiered*

- ▶ A new interface to Dspace

What can Manakin do?

- ▶ Modify **Look-and-Feel**

- ▶ **Visualize** Metadata

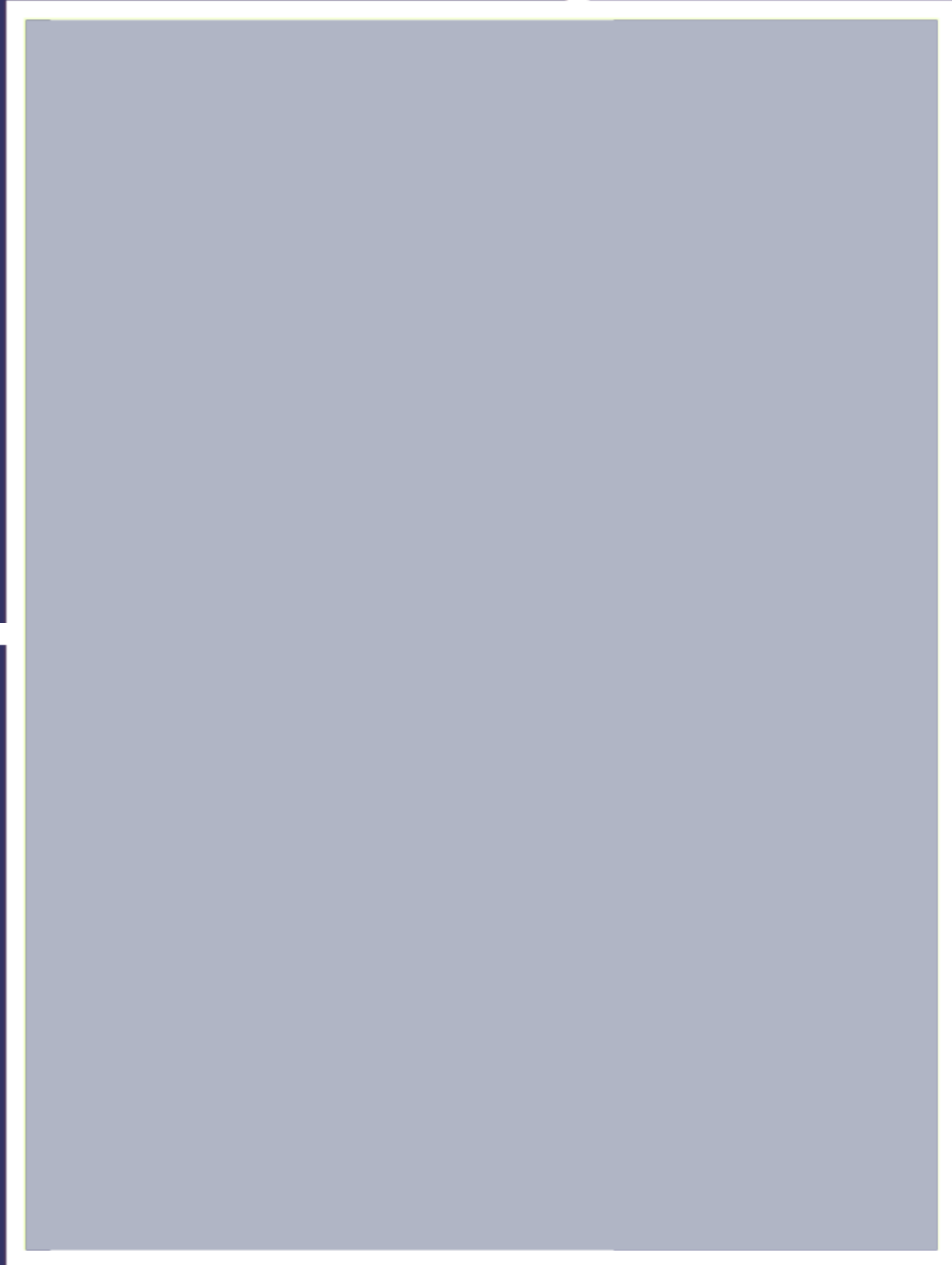- ▶ **Brand** Content

- ▶ Provide **Modularity**
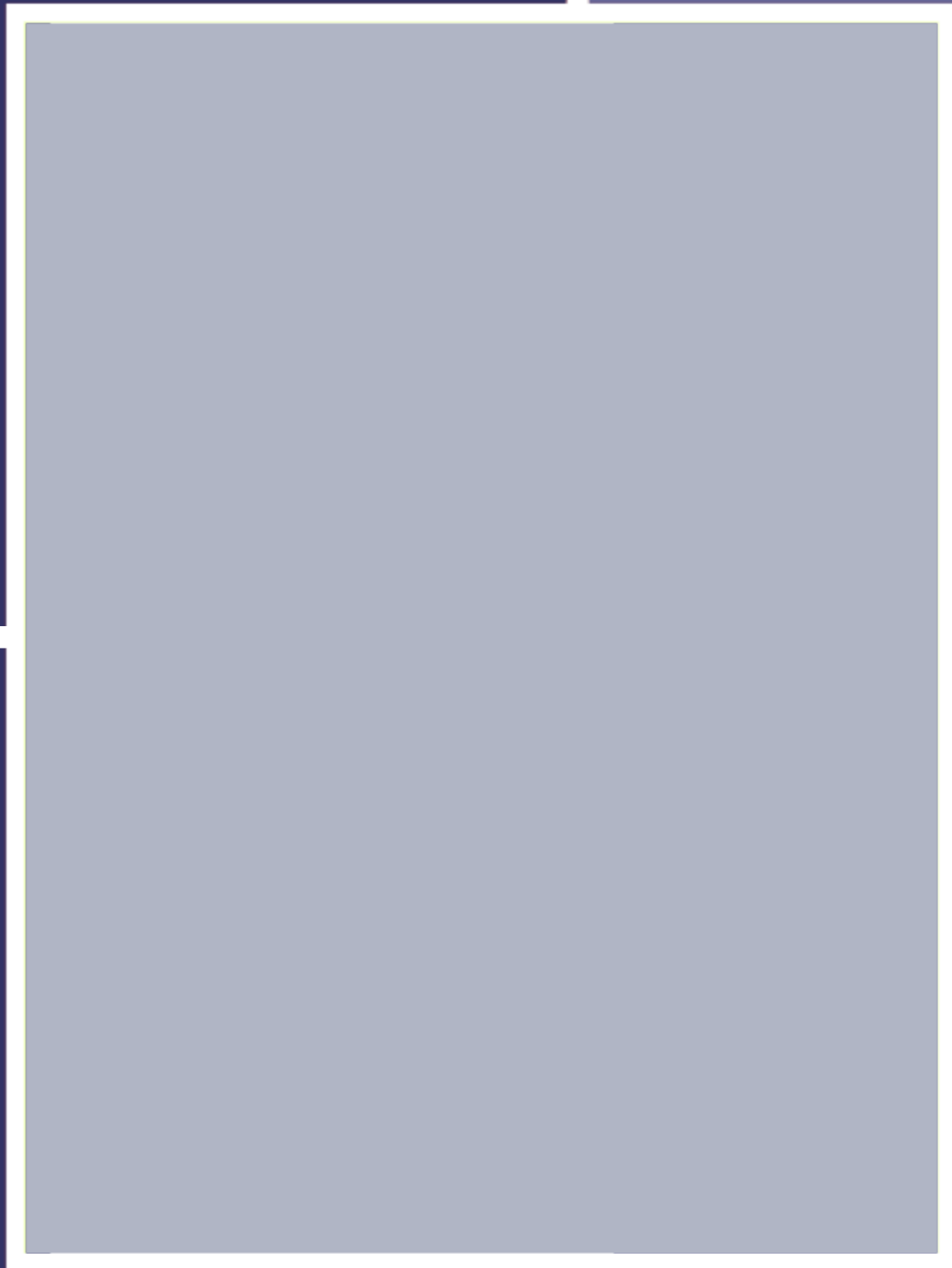
Look & Feel

- ▶ Style
- ▶ Adapt

Visualization

- ▶ Interpret metadata
- ▶ Explain metadata
- ▶ Link metadata

Branding

- ▶ Repository
- ▶ Communities
- ▶ Collections
- ▶ Items

Modularity

- ▶ Extend
- ▶ Modular

Manakin vs JSP UI

- ▶ JSP UI
  - ▪ *Difficult & expensive to extend*
  - ▪ *One monolithic interface for all collection regardless of content*

- ▶ Manakin
  - ▪ *Modular design makes extensions easier*
  - ▪ *Multiple interface that can adapt to the needs of a collection*
  - ▪ *Metadata in native formats*

It is ready now

▶ Manakin 1.0 released

- Browsing, Searching
- Authentication
- Submission
- Administration

http://di.tamu.edu/projects/manakin/

How do I get started?

- ▶ You will need an installation of DSpace

- ▶ First, install Manakin on your DSpace
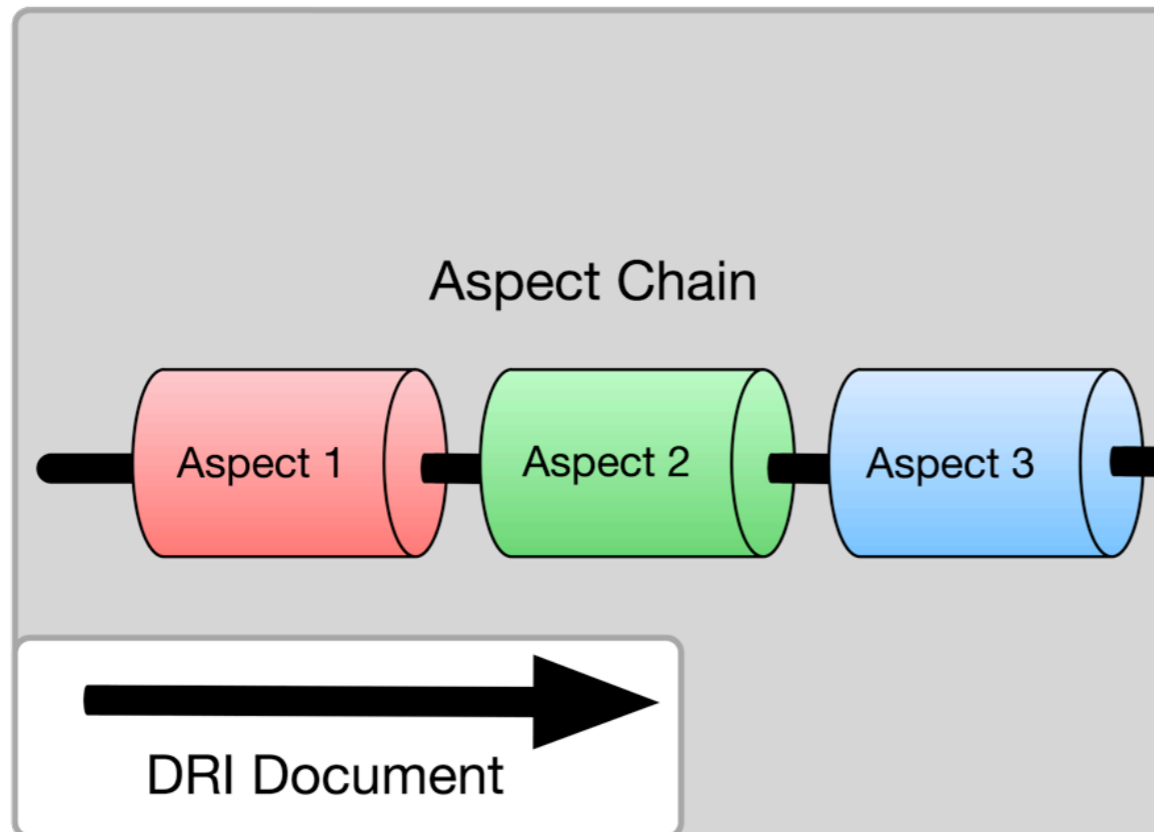
- ▶ Next, design your new interface
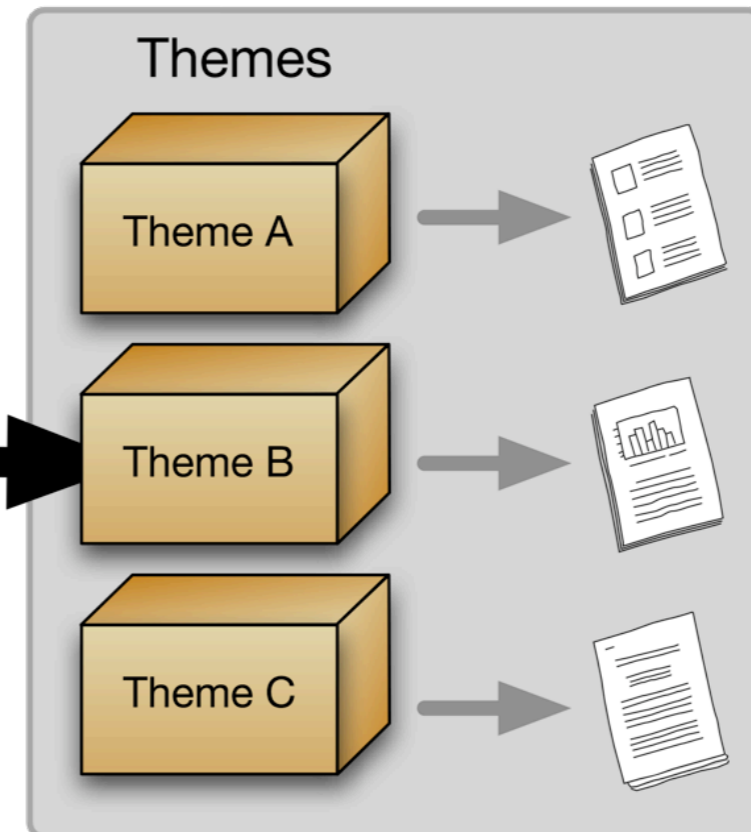
Architecture

(technical)

2

Three Components
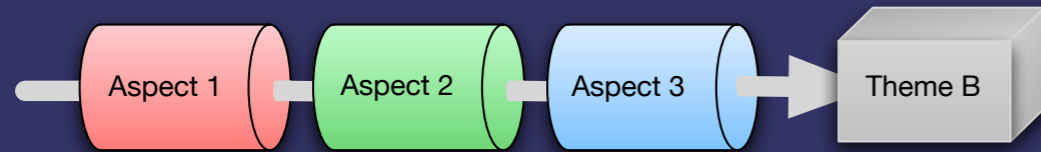
- ▶ Aspects

- ▶ Themes
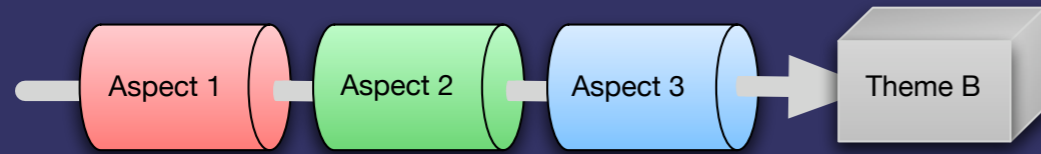
- ▶ DRI Schema

Structural Overview

Aspects

Implement a set of related features

- ▶ Applied to **all** pages

- ▶ "Aspect Chain"
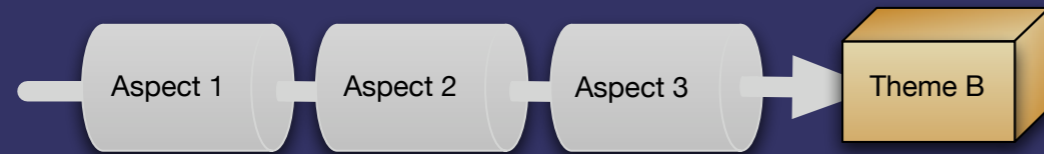 - ◾ Input DRI
  - ◾ Output DRI

Aspects

Implement a set of related features

- ▶ Core Aspects:
  - ▪ Artifact Browser
  - ▪ E-Person
  - ▪ Submission
  - ▪ Administrative
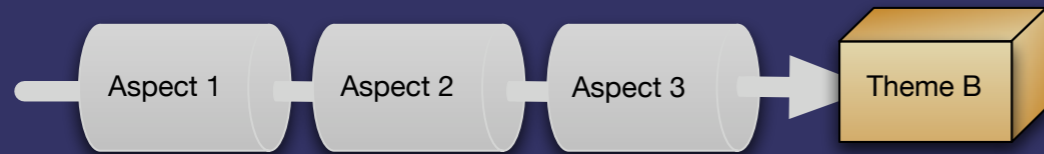
- ▶ Possibilities:
  - ▪ Shopping cart
  - ▪ Specialized searching
  - ▪ Customized workflow
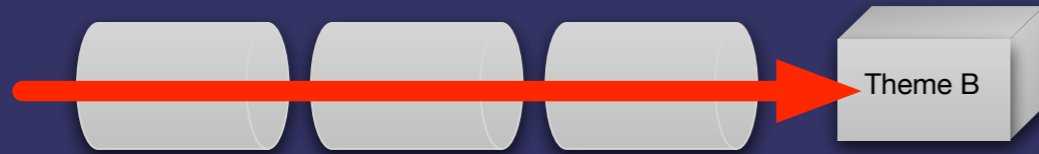
Themes

*Abstract representation
of a DSpace page*

▶ May apply to:

- A Single page
- All pages in a collection
- All pages in a community
- The whole repository

Themes

*Abstract representation
of a DSpace page*

▶ Self contained packages

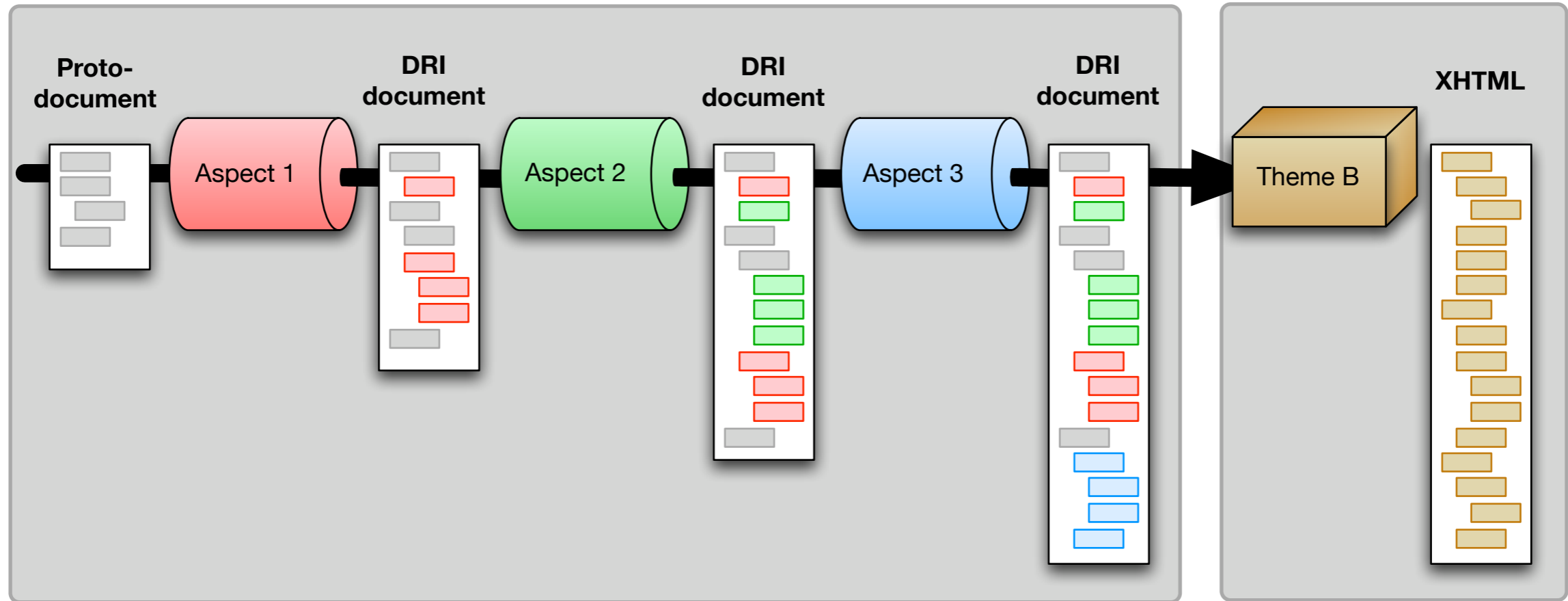◻ XSL stylesheets

◻ CSS stylesheets

◻ Images

◻ Static resources

DRI Schema

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*Abstract representation
of a DSpace page*

Theme B

- ▶ **D**igital **R**epository **I**nterface

- ▶ Metadata elements
  - ■ METS, MODS, QDC, DIM
  - ■ Extendable to other metadata formats

- ▶ Structural elements
  - ■ TEI (light)

Putting it all together

Tiers

1. Style Tier
   - XHTML + CSS
   - Create simple themes

2. Theme Tier
   - XSL + XHTML + CSS
   - Create complex themes

3. Aspect Tier
   - Cocoon + Java
   - Add new features

Demonstration

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