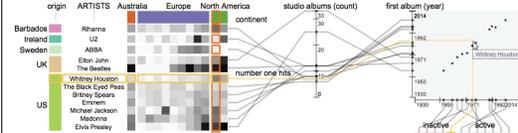




Domino: Extracting, Comparing, and Manipulating Subsets across Multiple Tabular Datasets

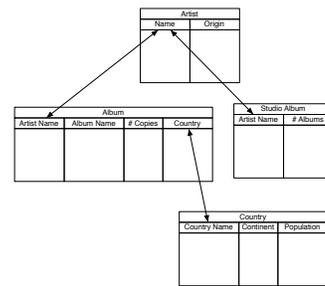
Presented by: Jessica Wong



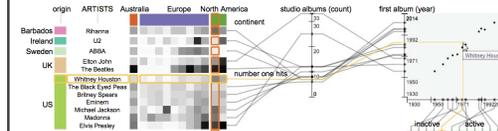
What is Domino?

- Designed for datasets with many different heterogeneous subsets that share identifiers
- Visualize subsets and the relationships between them

For example...



Domino

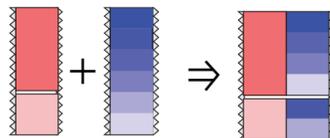


Blocks

- Represents a subset
- Three types
 - Partitioned
 - Numerical
 - Matrix

Blocks

- You can perform set operations on blocks (union, intersect, difference, etc.)

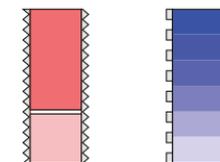


Block Relationships

- A relationship degree defines how strongly related two blocks are
- Based on whether blocks share an item type, sorting, and partitioning method

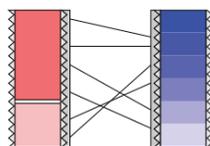
Block Relationships

- Four types of relationship degrees:
 - None



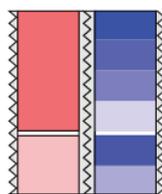
Block Relationships

- Four types of relationship degrees:
 - None
 - Weak



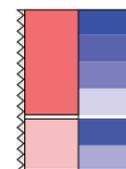
Block Relationships

- Four types of relationship degrees:
 - None
 - Weak
 - Medium



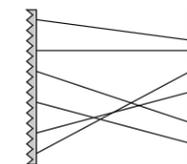
Block Relationships

- Four types of relationship degrees:
 - None
 - Weak
 - Medium
 - Strong



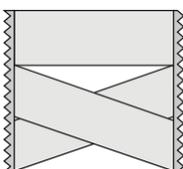
Block Relationships

- Weak and medium relationships can be shown at three levels
 - Item



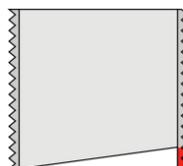
Block Relationships

- Block relationships for weak and medium relationships can be shown at three levels
 - Item
 - Group



Block Relationships

- Block relationships for weak and medium relationships can be shown at three levels
 - Item
 - Group
 - Block

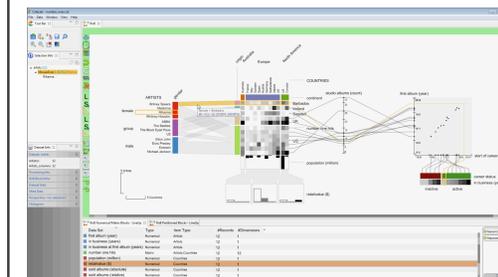


Domino

- Implementation uses Caleydo (Java, OpenGL)



Domino



Idioms

- Colour (different partitions)
- Width encoding of the block relationship bands
- Spatial position of blocks conveys relationship
- Parallel and rectilinear layouts

Idioms

- Juxtaposed views
- Highlighting between views
- Filtering (different relationship granularities)
- Zooming/panning

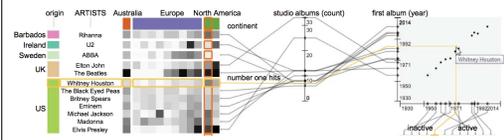
Comments

- Can be confusing with all the blocks put together
- Overlapping lines between blocks can be hard to read
- Examples given in the paper can be confusing

Comments

- Letting people choose could be good or bad
- A study on how whether the user created visualization is a complete display of info or actually just focuses on the target task could be interesting

Recap



Questions?