

# Two competing approaches for authoring Adaptive Hypermedia

Adaptive hypermedia allows content to be personalized according to user's requirements. Authoring for it can be a complicated process. Our research has created two separate systems, aimed at simplifying the process of creating adaptive courses in different ways.

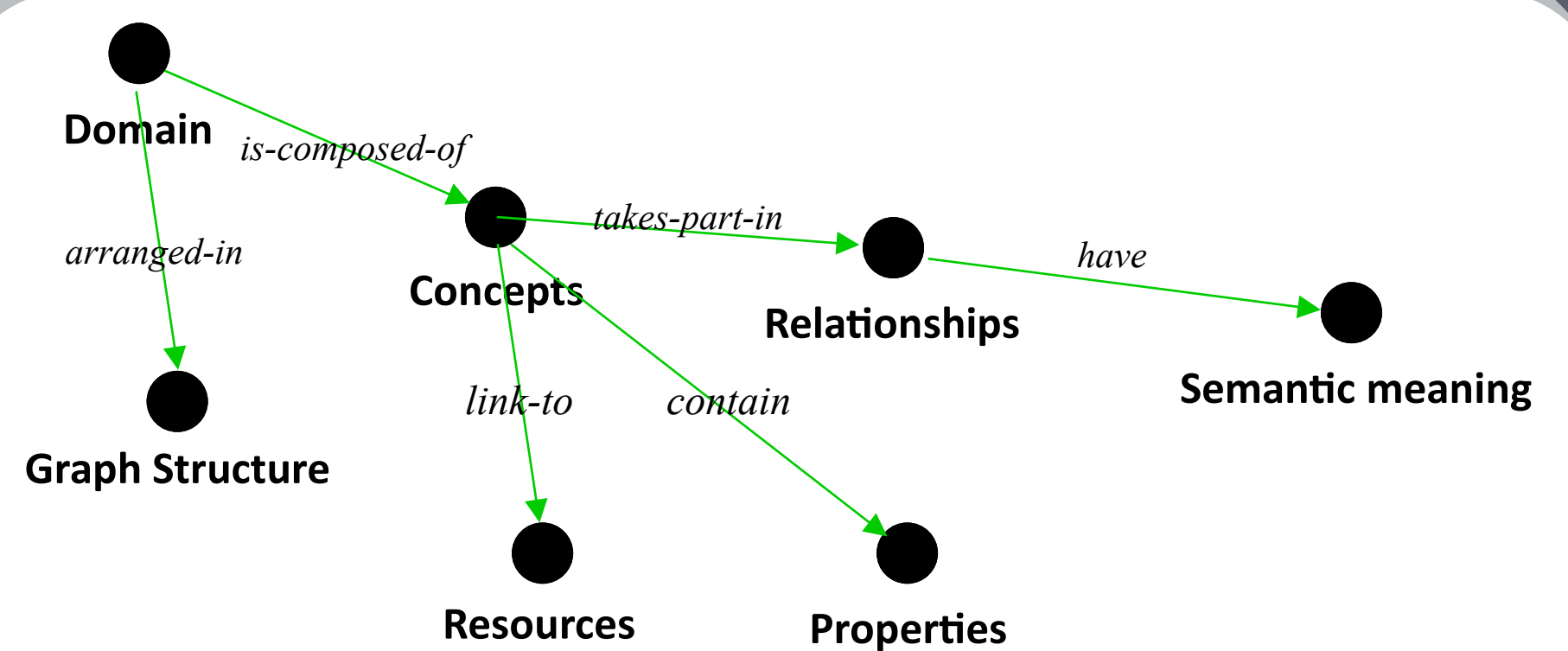
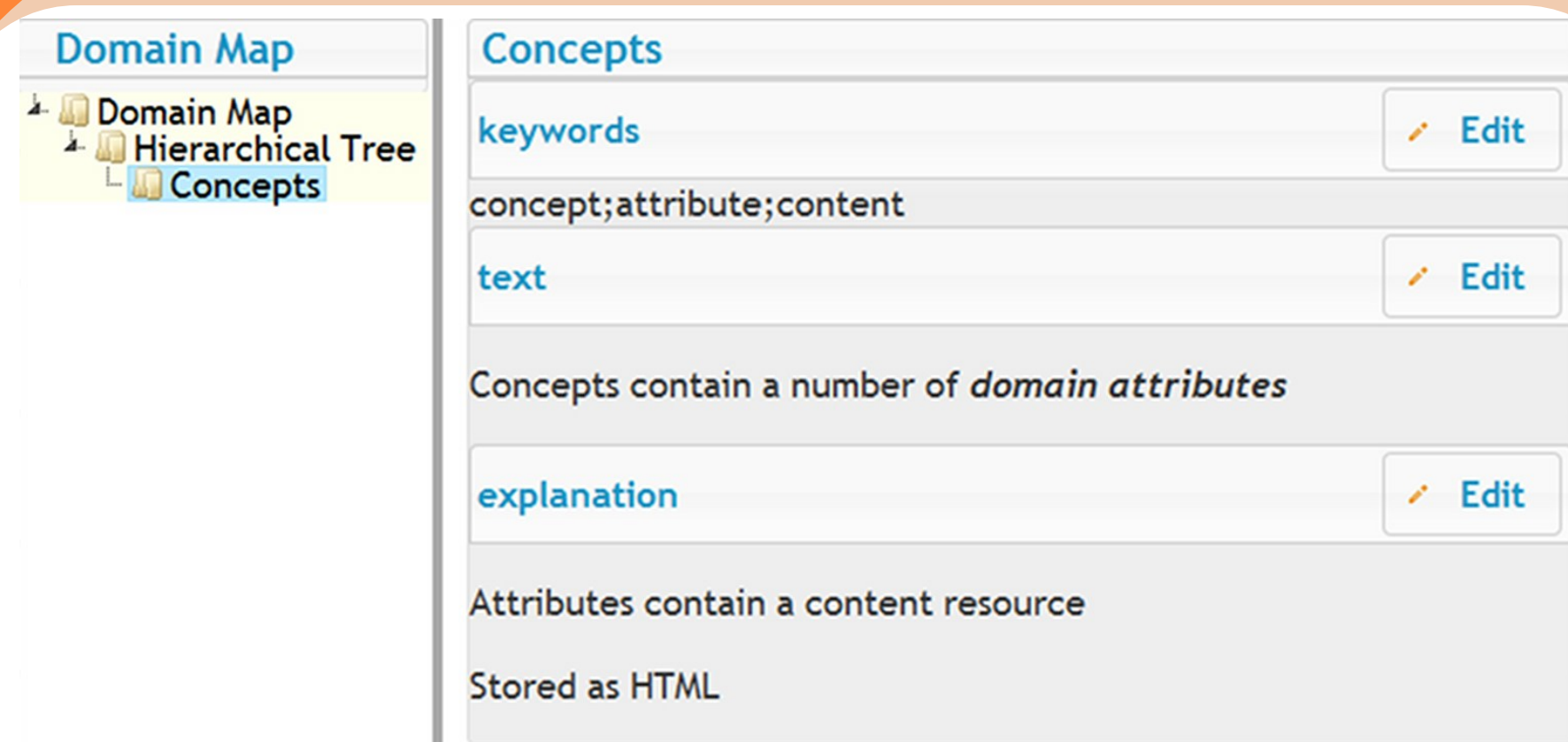
## MOT3.1

## GAT

### Step 1: Domain

#### Separate course materials into fragments of content

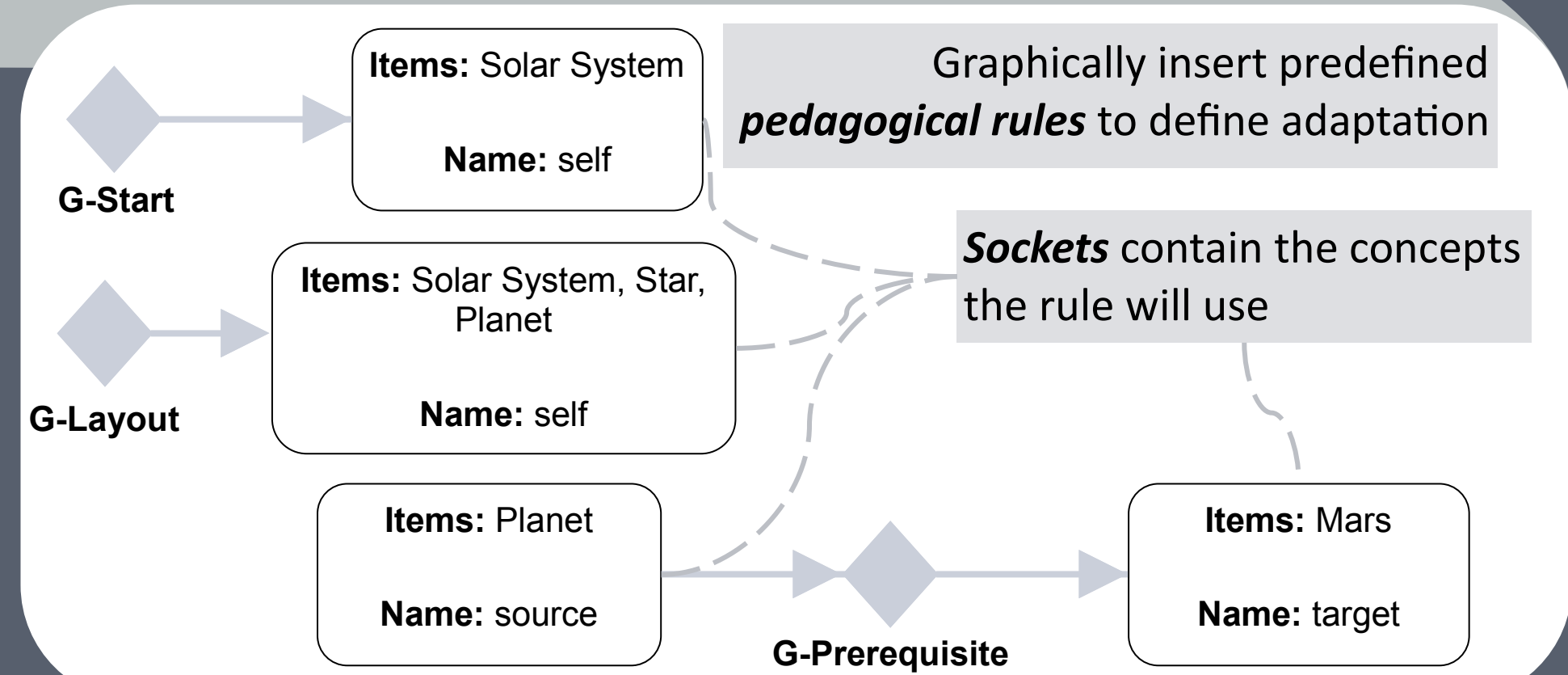
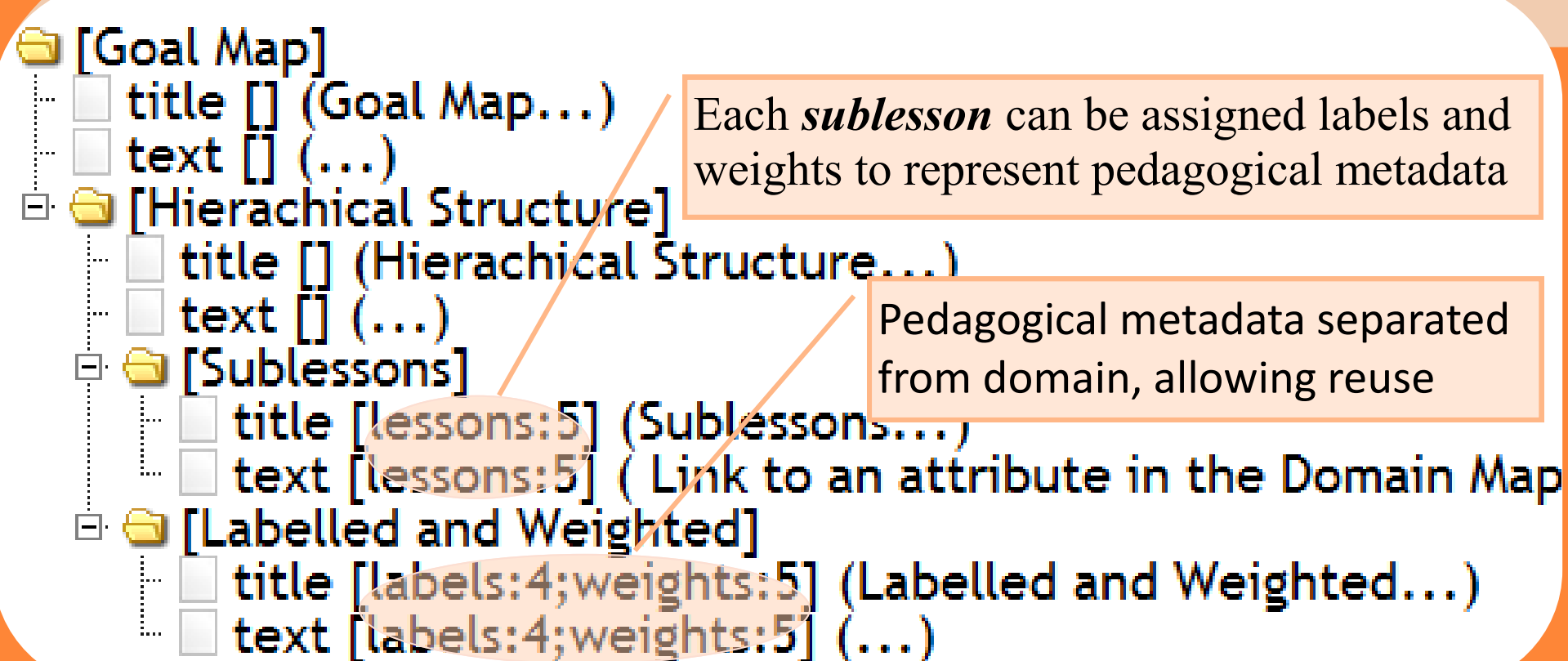
Concepts in MOT3.1 contain HTML attributes, whereas GAT concepts store URLs of online learning resources



### Step 2: Goal Map or Course

#### Arrange and label course content

MOT creates Goal Maps, allowing authors to order and label content—in GAT users graphically assemble a course from rules

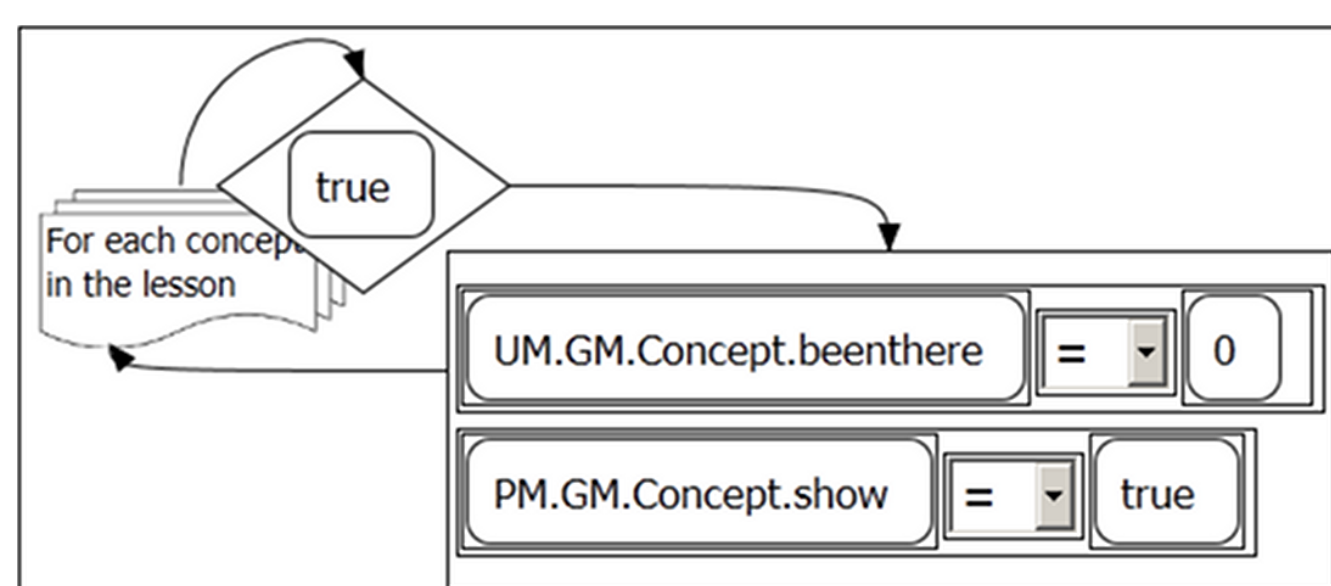


### Step 3: Adaptation Strategy

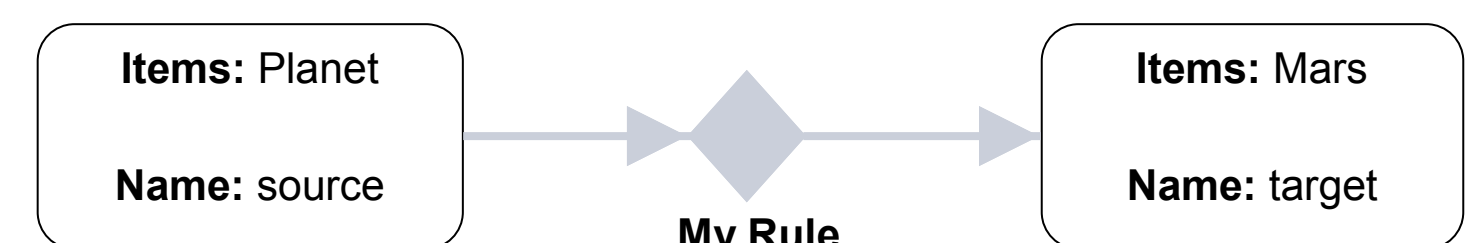
#### Define when/how to show elements of the course

LAG code defines a whole strategy, GAT uses smaller pieces of code to create pedagogical rules

- Course behaviour specified using the **PEAL** editor to write **LAG** code
- PEAL2 introduces an alternative visual programming feature



- Most authors should be able to create courses using predefined rules

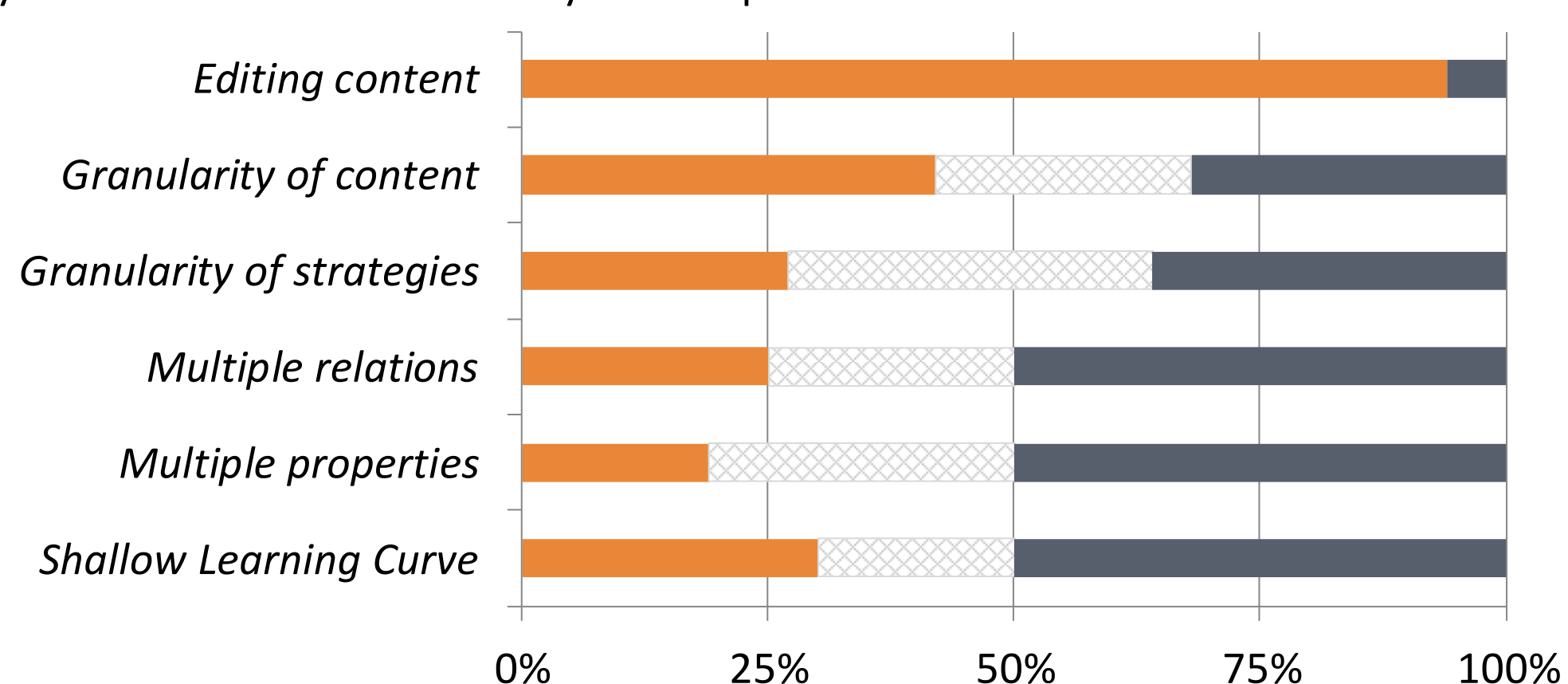


- Advanced authors can use **GALE** code to create their own rules

```
%target% {
#suitability & !'(${%source%#knowledge}>%level%)`
}
```

### Evaluation and Results

Systems evaluated with 20 4th year Computer Science students.



### Conclusions: Simplicity or Flexibility?

In general, users prefer:

- Simple visual interfaces
- Fine granularity of content
- Fine granularity of strategies

Users felt that GAT provided a shallower learning curve, a more familiar interface, and better visualizations.

More support is desired for content, domain relations, strategies as well as concept properties. Overall, functionality must be quick, and responsive.

These evaluations used Computer Science students, who like flexibility.

It is therefore important to add flexibility to an *advanced* mode, to keep the interface simple for beginner users.

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