Discussion: Mage

Quick Video

- https://www.youtube.com/watch?v=AlBCScTDYKs

So…

- What did you think of the paper?
  - Writing
  - Interface/Approach
  - Evaluation

The paper ...

- Argues that spreadsheet like tools lose track of interactions, and by capturing all of those in code automatically, they can keep track of it – is this a good idea?
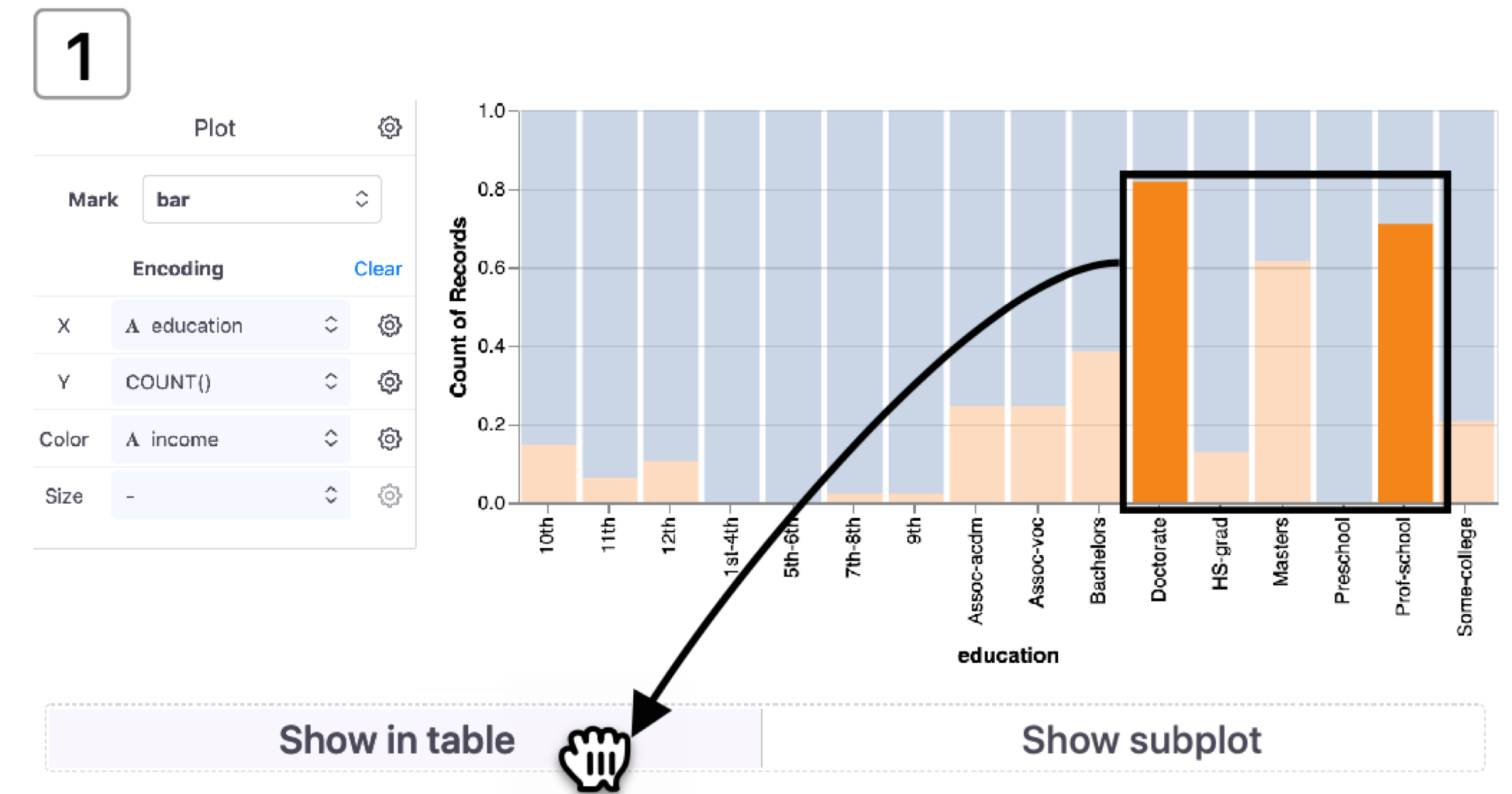
What other...

- Widgets might make sense? Beyond plot, table, image, datasplit, confusion, save...
- Are any of the above widgets not that useful?

Widget Name	Common DS/ML Task
table	A spreadsheet widget that reflects direct manipulation actions in generated code.
plot	A chart that generates selection code when a user selects data through direct manipulation.
image	A basic image editor that generates code for common image data processing tasks.
confusion	An interactive tool for exploring classifier model performance.
api	A basic form interface for building correct calls to a web API to retrieve data.
datasplit	An interactive tool for splitting data into sets needed to train and test a model.
save	An interactive tool for saving a plot or figure with export settings.

Multi-Tool

- There was one example of multi-tool usage – are there other examples?

Do …

- Lux and Mage compete? Are they solving different problems? The same problem? Can they be combined?

The Approach ..

- To go back and forth between code and interactions is a bit clunky.. Are there any ideas on how to alleviate this issue?

```
1  crop_img = dogs[1][0:750, 100:850]
2  foo(crop_img)
3  %summon image crop_img
```

The Study …

- Used paper prototypes instead of Mage – pros/cons?