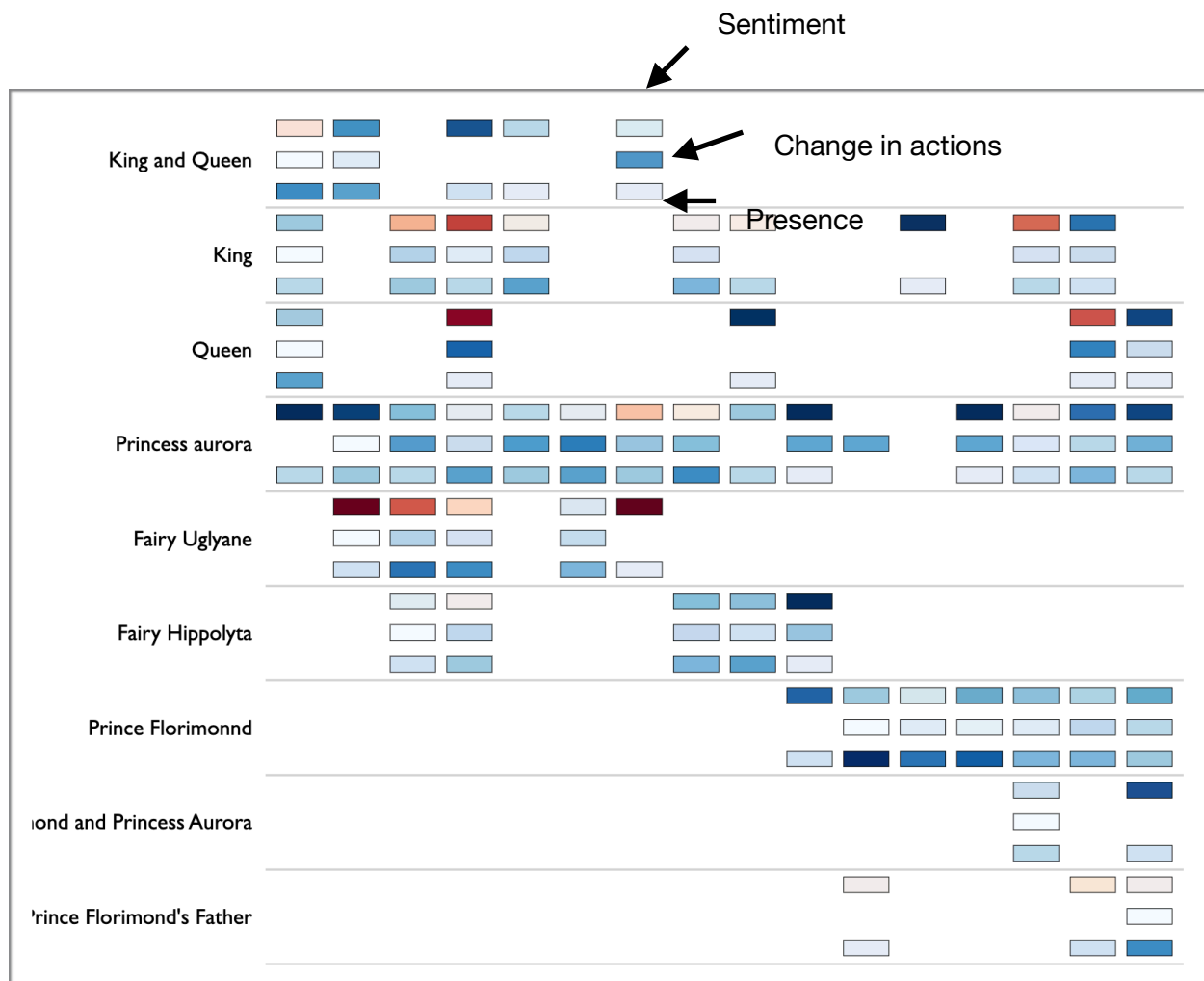


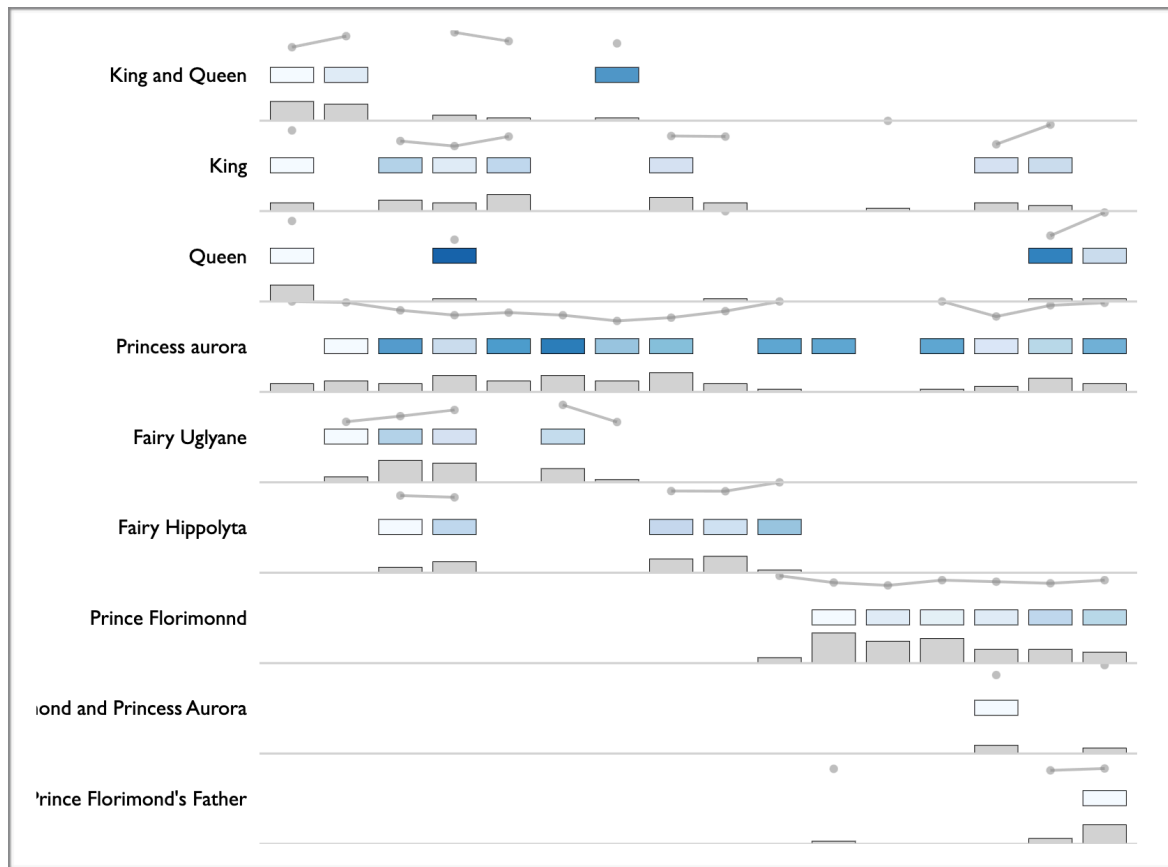
We considered several designs to represent the two key entities in our tool: characters and trait indicators.

Our current implementation visualizes each indicator in a separate view. An alternative to that is to combine the characters and indicators in a single view. The figure below shows such a design. Each row represents a character and is divided into three sub rows, representing three indicators: sentiment, changes in actions, and presence.



There are four problems with this design: (1) the design overwhelms the users with too much information at once. It is difficult to concentrate on any one indicator in isolation; (2) It is difficult to compare the indicators between characters as users need to create a mental model of which sub-row they want to compare across the characters; (3) It is not a scalable solution due to the small vertical space for each character; (4) each indicator will likely require separate visual representations to avoid conflict among them.

We tried using different visual encodings for the indicators. The figure below shows an example of that. But the first three problems persist. Additionally, users need to learn different visual representations for the indicators which can increase the learning curve.



Thus, we decided a **small multiple design** is best suited here.