

Towards **Visual** Sedimentation

<http://www.aviz.fr/Research/VisualSedimentation>

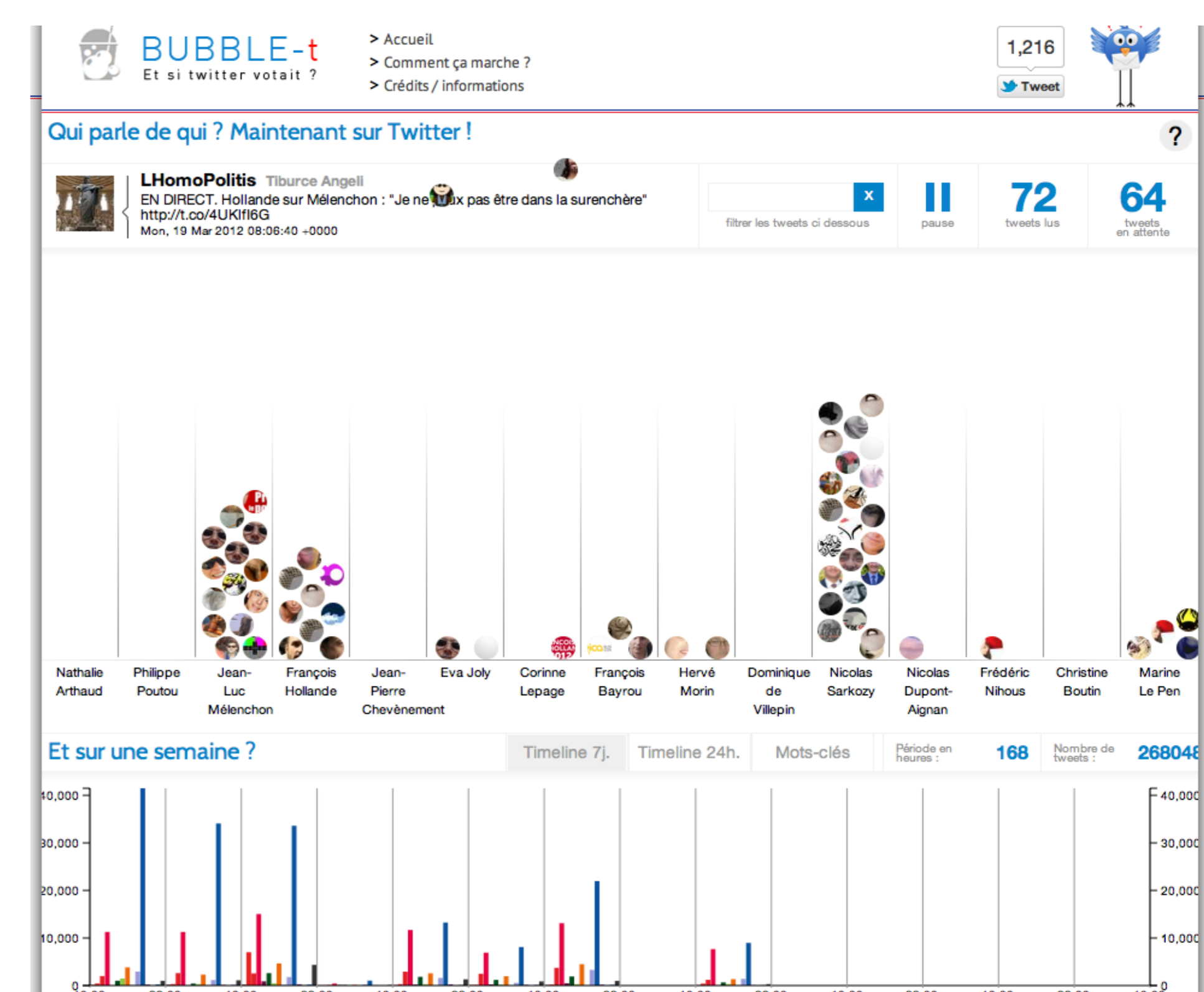
A new design framework for visualizing streaming data inspired by the physical process of sedimentation.



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Case studies and implementation

Live Tweet Monitoring for Presidential Elections



Bubble T is a web-based visualization of the 2012 French presidential election tweets. Each tweet is represented as a token. Tokens fill up columns corresponding to all presidential candidates.

Live Visualization for Social TV



Bubble TV is an extension of Bubble T for monitoring the result of live polls during a TV Show. This second iteration differs from Bubble T in the way that a bar chart is at the bottom of the tokens column. It requires less screen real estate and provides an overview of previous tweets and details of latest ones.

Open Source Javascript library

[Download it !](#)

An early alpha version of visual sedimentation is available as an opensource javascript library. Download it, test it, and send us feedback!

Objectives

- Provide a design framework to visualize data streams with continuous update
- Keep a graphical continuity between the representation of new and aging data
- Generalize the metaphor to area charts
- Make it fun to watch and simple to implement.

Design Space

Tokenization

Continuous data streams are sliced into discrete token elements.

Decay process

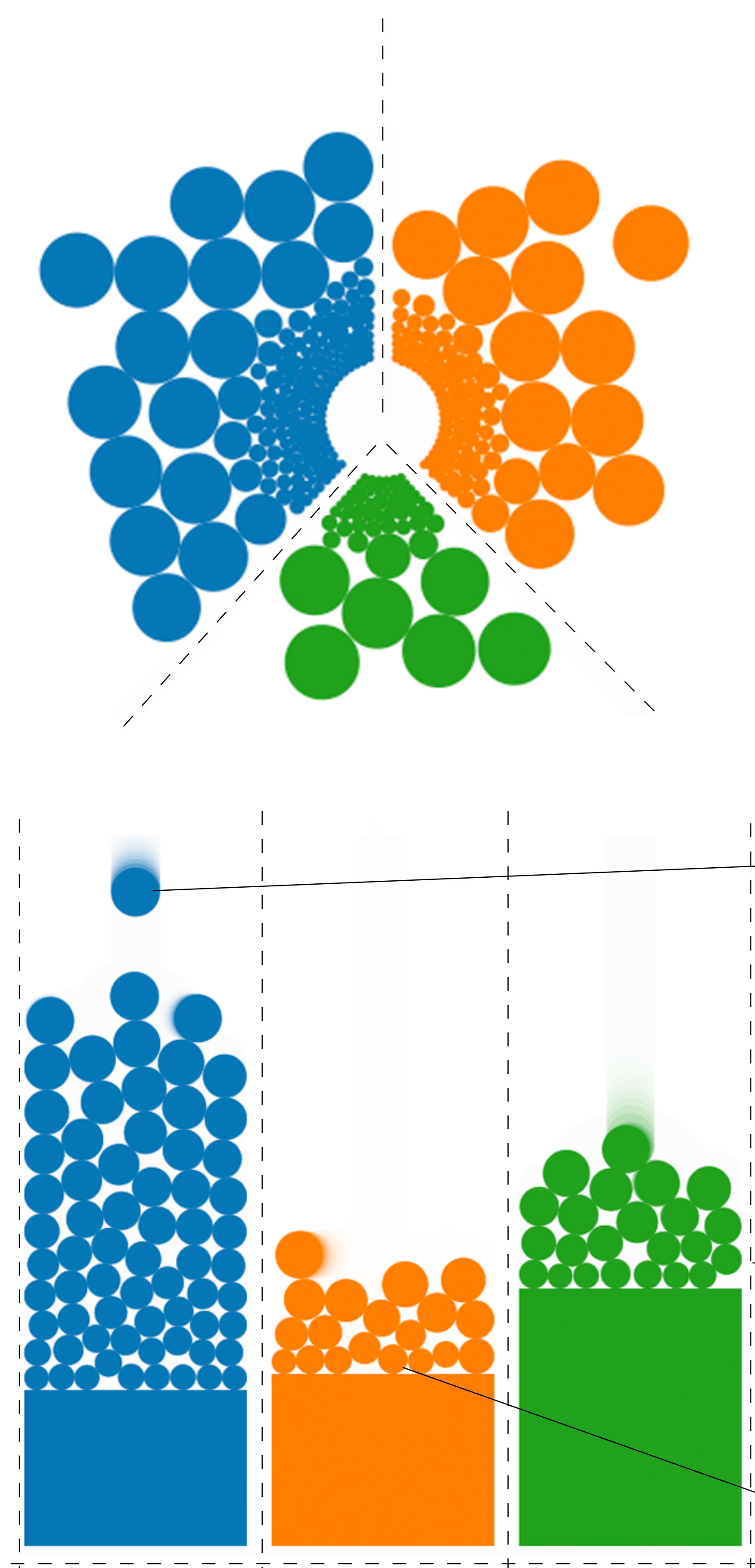
The decay process changes the importance of the token over time.

Barriers

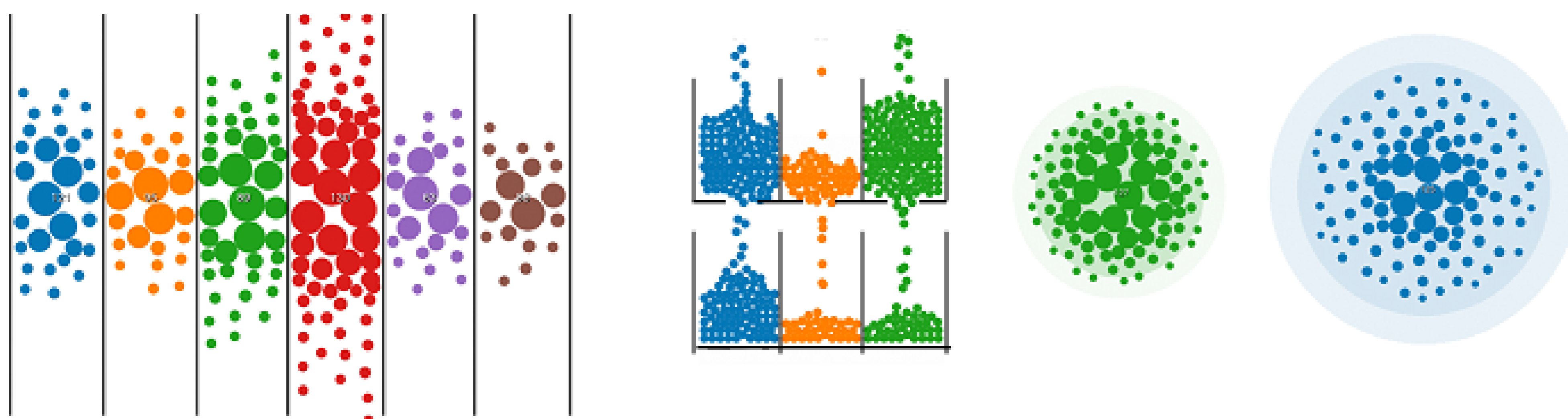
Physical barriers retain the tokens to form the chart's layout.

Flocculation

The deposit of tokens is aggregated into layers.



Generative design:



ACKNOWLEDGMENTS

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More information on :
<http://www.aviz.fr/Research/VisualSedimentation>
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