

Infinite Simplices: An Excursion into Simplicial Sets

Research Sharing Luncheon

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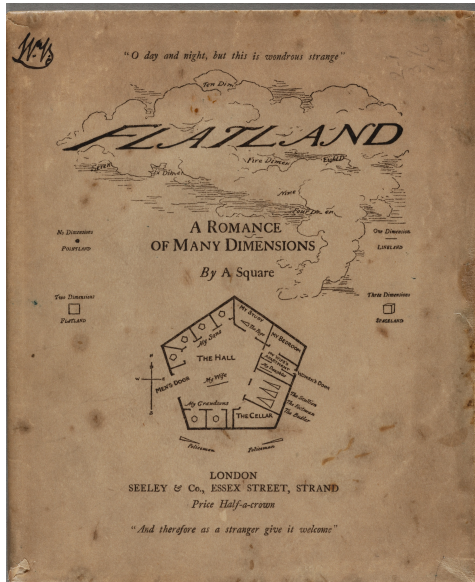
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Outline

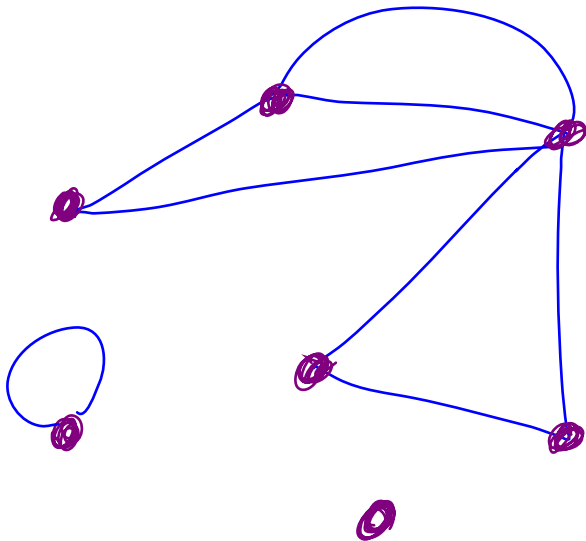
- Hypergraphs
- Simplicial Sets
- Synthesis

Flatland by Edwin Abbott

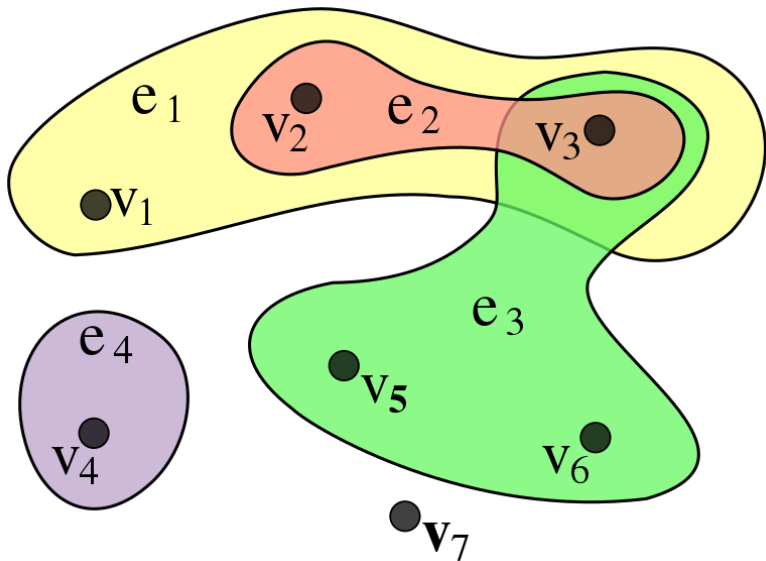


Picture: Wikipedia

Graph

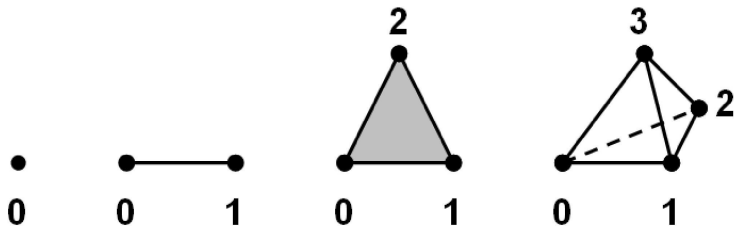


Hypergraph



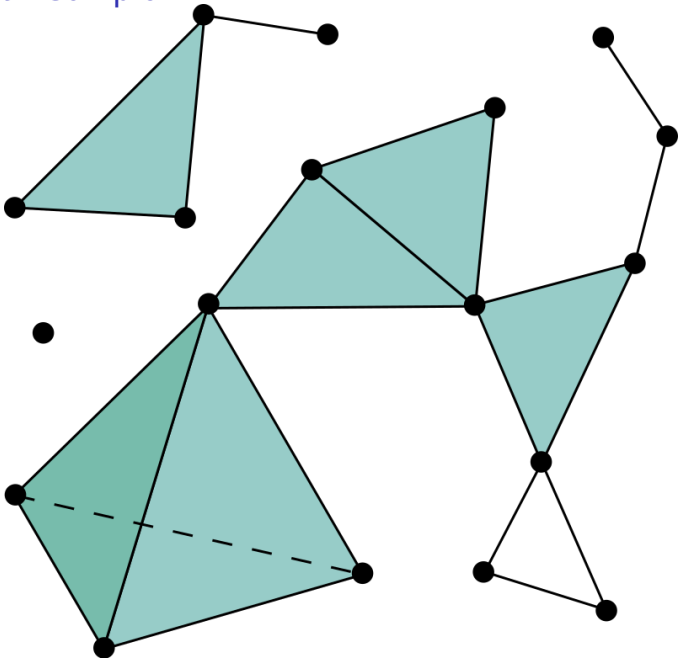
Picture: Wikipedia Creative Commons

Standard simplices

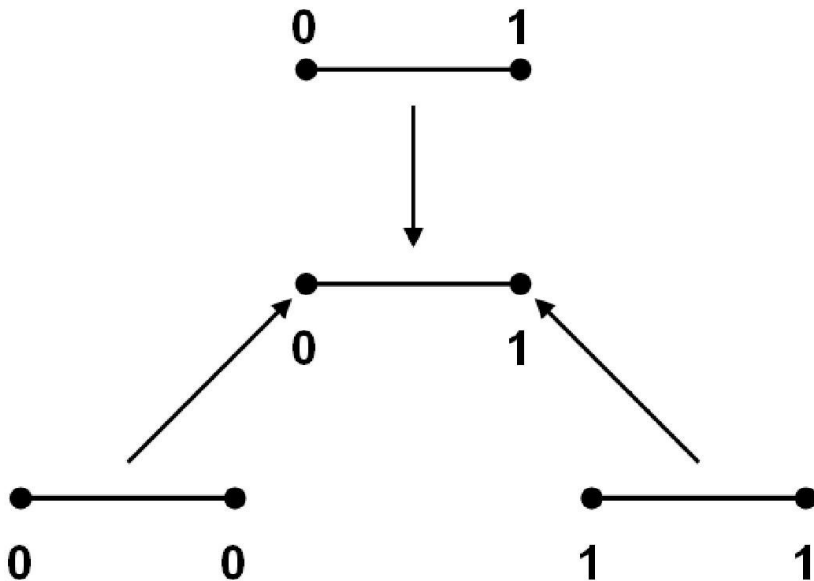


Picture: Friedman, Greg. "Survey article: an elementary illustrated introduction to simplicial sets." The Rocky Mountain Journal of Mathematics (2012): 353-423.

Simplicial Complex

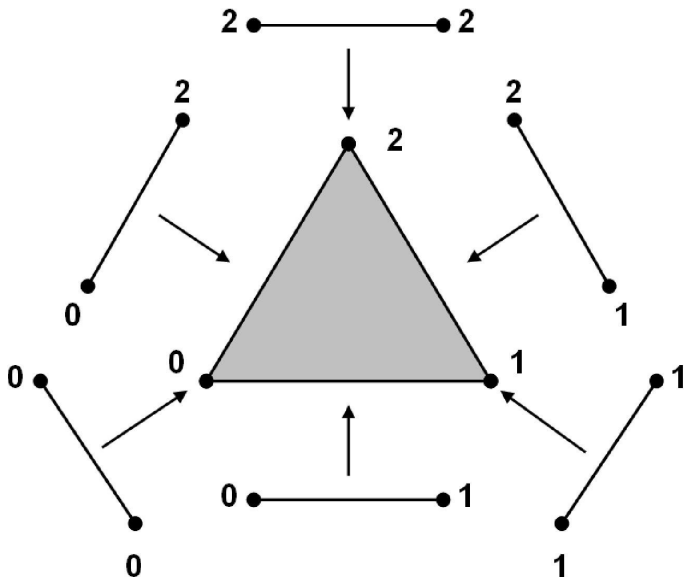


1-simplex $[0,1]$ Expanded Edition

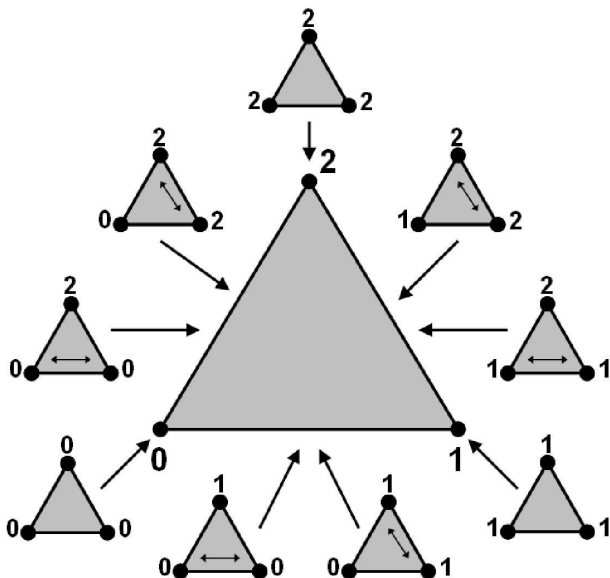


Picture: Friedman, Greg. "Survey article: an elementary illustrated introduction to simplicial sets." The Rocky Mountain Journal of Mathematics (2012): 353-423.

2-simplex $[0,1,2]$ Expanded Edition



2-simplex $[0,1,2]$ Expanded Edition ctd



Hereon..

- Machine Learning with Simplicial Sets

Hereon..

- Machine Learning with Simplicial Sets
- Model misinformation?