Matthew landscapes

Segmentation and concentration in reward systems visualized

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Dutch visual arts policy, 1984-2007

System of subsidy schemes:

• Consumer choice:
  ○ Interest-free loans for art buyers (RSR)

• Institutional choice:
  ○ Purchases by museums (MA, MA_TASR) or the State (RA)
  □ Commissions by the State or its agencies (KenB, KO, PBK, RGDperc, VO)

• Peer group (artists & other experts) choice:
  ○ Fees for visual artists (BKV, BS_I, BS_II, ProdS)
  ■ Grants or stipends for visual artists (OIS, WB)
  ▲▲ Stipends for starting visual artists (StartS)
Questions and expectations

• Segmentation: Do subsidy schemes serve different sets of visual artists?
  - Expectation (D. Crane): Type of people awarding rewards is relevant to who and what is being rewarded.

• Concentration: Who benefits over time?
  - Expectation (R.K. Merton): Rewards (subsidies) tend to accumulate among a small number of artists.
Matthew Effect

• Matthew (XXV, 29): “For unto every one that hath shall be given, and he shall have abundance: but for him that hath not shall be taken away even that which he hath.”

Data, technique, results

  - 16 subsidy schemes (+ 7 rejections),
  - 21,013 visual artists,
  - 105,142 grants/applications plus amount of money per grant.

- Correspondence analysis:
  - Subsidy schemes in principal coordinates, artists in standard coordinates.
  - Weights: Number of times (years) that an artist applied for or received money from a subsidy scheme.

- Results: **Dynamics of the reward system.**
Concentration of benefits

- **Artists in standard coordinates**: Allows for comparison between a subsidy scheme and all artists (but not single artists).
- **Calculate the average benefits of artists at the same grid location in the correspondence map**: visualize as heights.
- **Interpolate heights for grid cells without artists** (linear interpolation, package Akima in R).
Visualization: contours (*1,000)
Visualization: 3D (South view)

Cumulative benefits by artists, 1984-2005.

XXVII Sunbelt International Social Network Conference, Corfu (Greece), May 1-6, 2007
Visualization: 3D (North view)

Cumulative benefits by artists, 1984-2005.

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Conclusion

• Centripetal forces in the Dutch subsidy system for visual artists: Subsidy schemes increasingly serve the same group of artists (Matthew effect).

• Durable segmentation requires strict formal conditions for applicants (e.g., starters) or input from non-experts (consumers).

• Is it necessary and efficient to have different subsidy schemes?