

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.”
- R.K. Merton (‘The Matthew Effect in Science’, 1968): Rewards signal quality, enhance positive expectations, and yield disproportionate attention and new rewards.

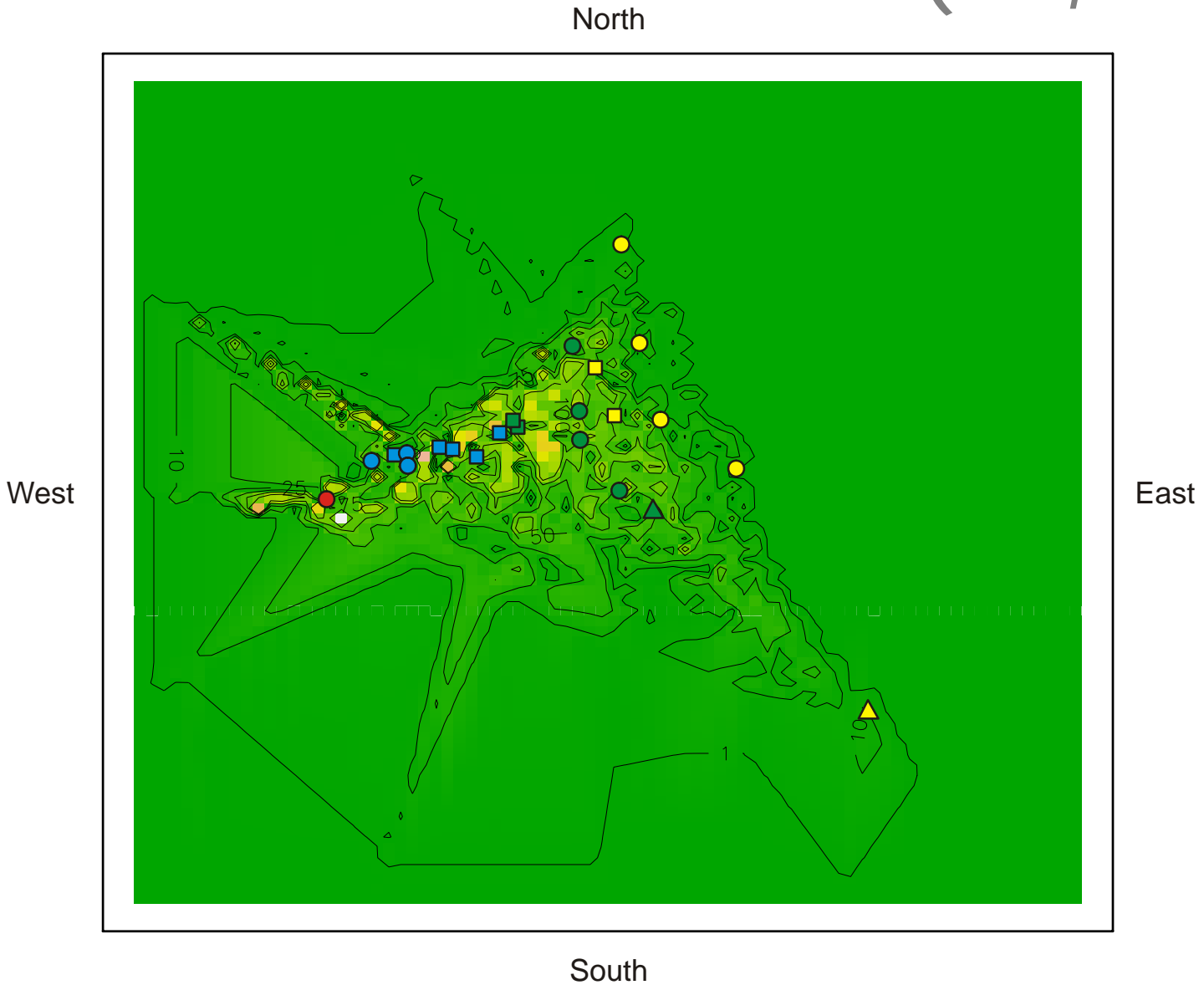
Data, technique, results

- 2-mode network (1984-2005):
 - 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

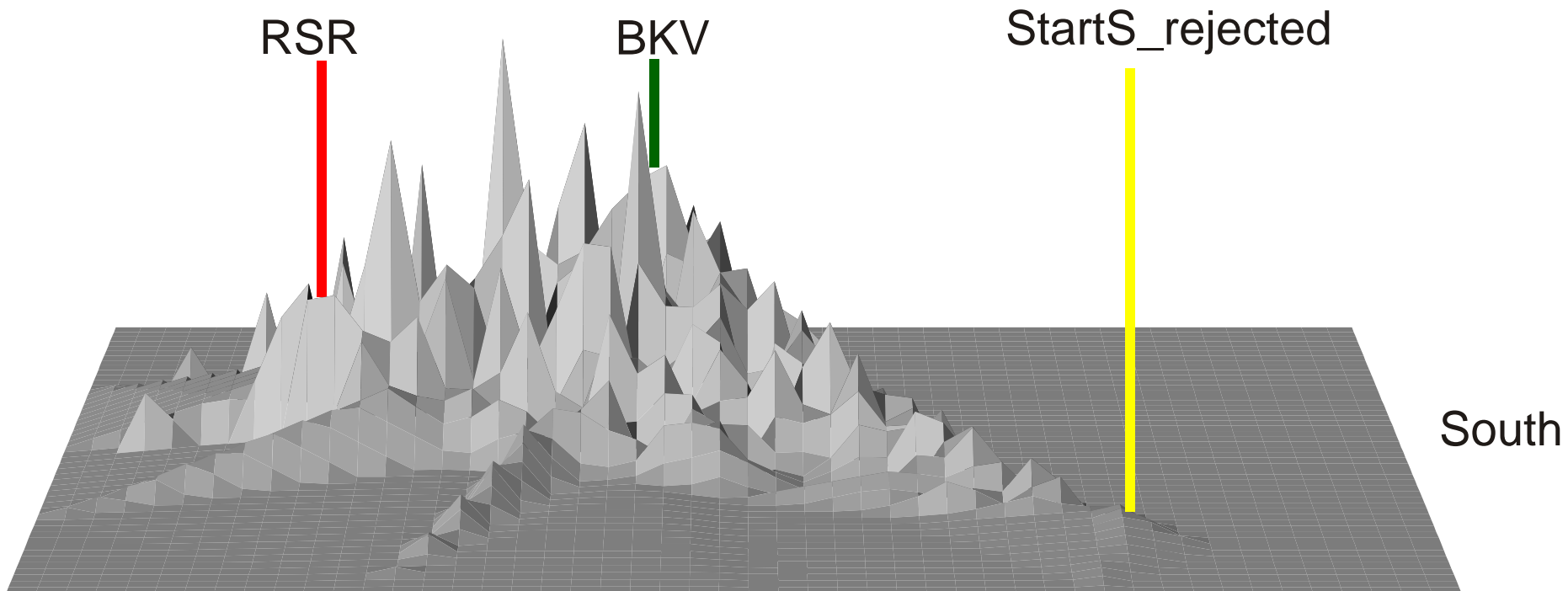
- Artists in standard coordinates: Allows for comparison between a subsidy scheme and all artists (but not single artists).
- Calculate the average benefits of artists at the same grid location in the correspondence map; visualize as heights.
- Interpolate heights for grid cells without artists (linear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

Visualization: contours (*1,000)



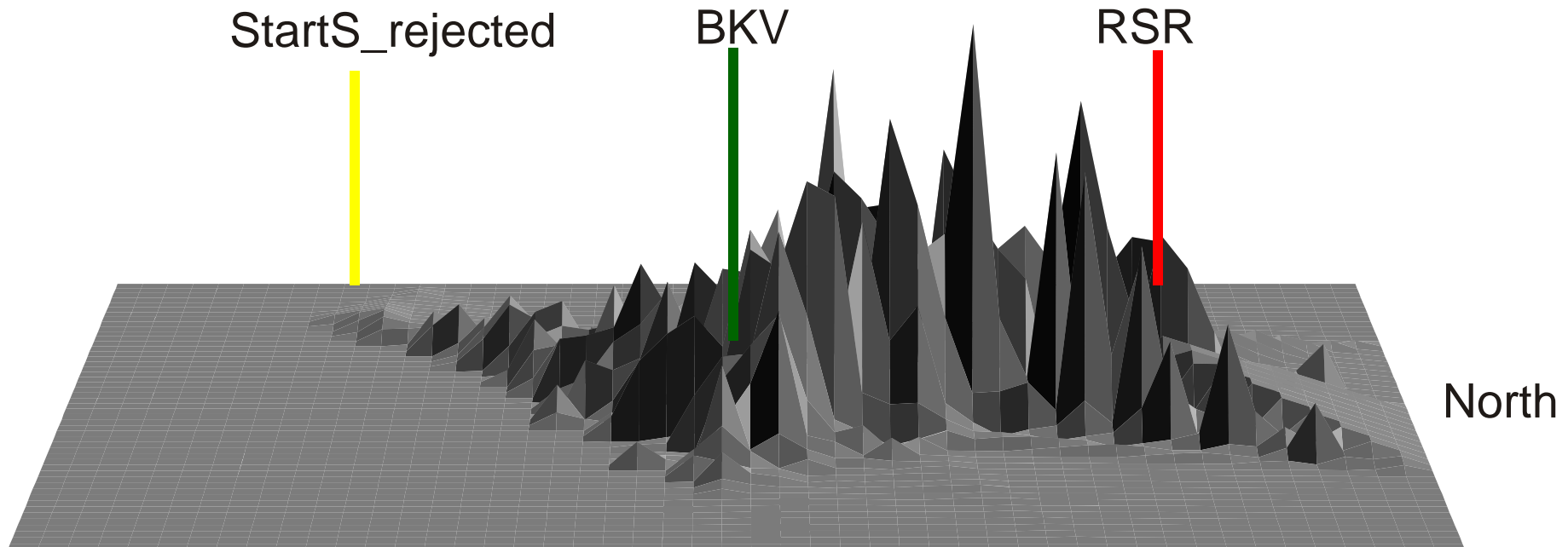
Visualization: 3D (South view)

Cumulative benefits by artists, 1984-2005.



Visualization: 3D (North view)

Cumulative benefits by artists, 1984-2005.



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?