

Measuring Descriptive Representation

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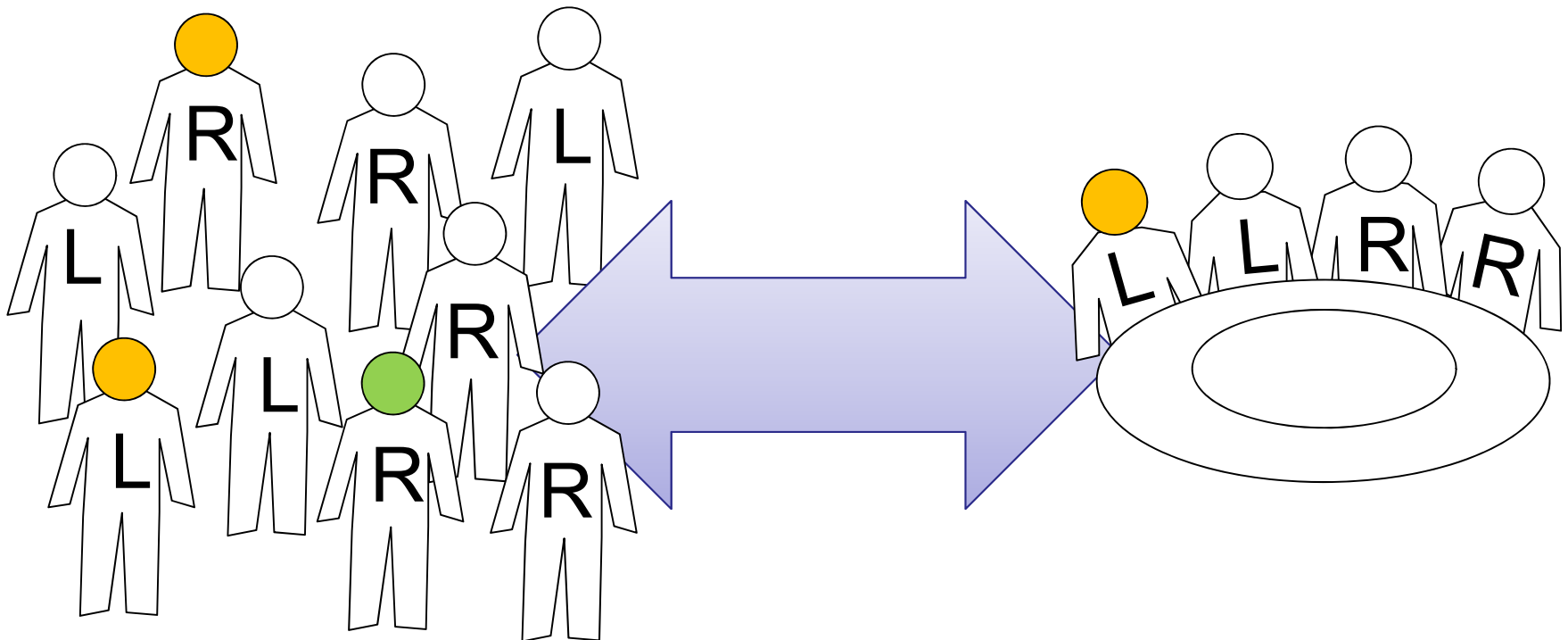
Dreiländertagung, Basel

Overview

- Concept: Political representation
- Measuring representation: criteria
- Examples
- Conclusion

Political representation

- Substantive representation
- Descriptive representation



Measuring representation

- Unordered groups
- n groups
- Z – citizens
- R – representatives
- RS – representation scores

1. Multiple Groups

- Gender: male/female
- Ethnic groups: just minorities?
- Class: upper middle class?
- Religion: Protestant, Catholic, neither

2. Homogeneous Population

- Poland: 99.4% Polish
 - 99.6% in parliament
 - What if 100%?
- Georgia: 84.5% Georgian
 - 93.1% in parliament
 - What if 86%?

3. Splitting Groups

- Conceptual clarity
- Data reality
- Example of absent minority groups

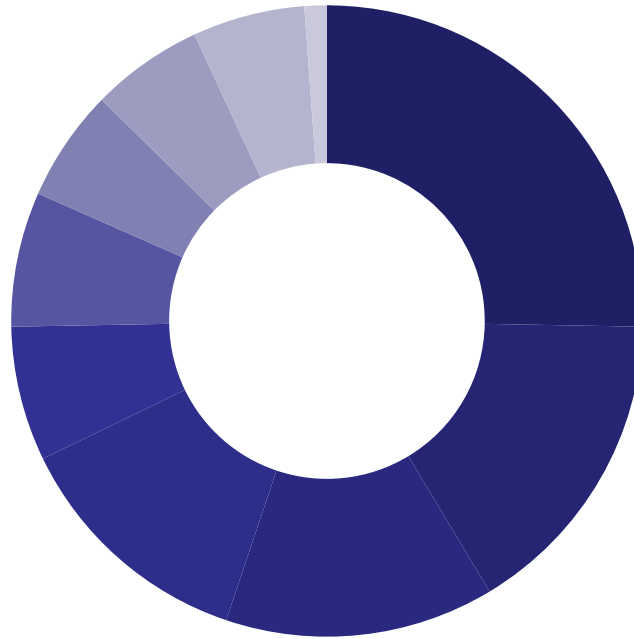


4. Outliers

- South Africa: 29.3% Whites (14%)
- Malawi: 1% Asians (0.1%)
- Denmark: 1.1% Faroe Islands, Greenland
 - 2 seats: over-representation
 - 1 seat: larger under-representation
- Slovenia: 1.1% Hungarians (0.3%)
 - Inclusion or not?

5. No Clear Minority

- Religion in Germany, Switzerland
- Ethnic groups in Kenya



6. Clear Bounds

- Interpretation
- Absence of minorities
- Perfect proportionality



- Perfect disproportionality (theoretical)



Examples

	<i>Multiple</i>	<i>Homog.</i>	<i>Splitting</i>	<i>Outlier</i>	<i>No min.</i>	<i>Mirror</i>	<i>Bounds</i>
Yes/no	No	Yes	Yes	Yes	No	Yes	Yes
R_{\min}	No	Yes	Yes	Yes	No	No	Yes
R_{\min}/Z_{\min}	No	Yes	Yes	No	No	Yes	No
$1-\Sigma(R_i-Z_i)$	Yes	No	Yes	Yes	Yes	Yes	Yes
1-Gallag.	Yes	No	No	Yes	Yes	Yes	Yes
$\Sigma(R_i/Z_i)^2$	Yes	Yes	No	Yes	No	No	Yes
#3 * H	No	Yes	No	No	No	No	No
#4 * H	Yes	Yes	No	Yes	Yes	No	No

Conclusion

- Clear criteria
- Particularly useful measures:

$$- \quad RS_7 = \frac{R_{min}}{Z_{min}}$$

$$- \quad RS_9 = 1 - \frac{1}{2} \sum |R_i - Z_i|$$