Territorial Topology Analysis
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Both scholarly studies and common accounts of national politics enjoy pointing at the resilience of ideological divides in the population. In Switzerland, observers identify distinct regional communities from the collective behavior of local populations during popular votes. While research describes those communities in terms of party affiliation, participation and vote outcomes, current methods lack the capacity to measure their evolution across time.

Against such limitation, this study uses a dataset of more than 650,000 municipal outcomes over federal popular votes to assess how local populations organize into different political communities since 1981. Here, I introduce "Territorial Topology Analysis" (TTA), a method that affords various means to evaluate the transformation of political communities by implementing a metric of political agreement/disagreement through Social Network Analysis.

Results show political agreement between Swiss local population increased over the last thirty years, and evolved from regional political clusters to communities made of distant populations. New divides and alignments in local populations vote outcomes thus highlight the dynamic equilibrium of national politics and a strengthening effect of urbanization and globalization on democracy.

DATA: Municipal vote outcomes, 1981-2015

METHOD I : Political agreement/disagreement

METHOD II : Topological network clustering

Credits and references


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