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Diffusion patterns of grassroots innovations for sustainability

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Background and objectives

Place, space and scale have been central in the discussion of the role of grassroots movements in the emergence of alternative economies. However, only a few studies have focused on the movement 'across space' of grassroots innovations for sustainability, and those who did have done so more theoretically than empirically. For example, various scholars have argued that grassroots innovations spread in a rhizome-like fashion (Bailey et al. 2010, Scott Cato and Hillier 2010). The rhizome metaphor emphasises networking, relationality and transversality rather than spatial proximity, and aleatory connectivity rather than patterns and structure in the process of diffusion.

This study explored the spatio-temporal diffusion of Gruppi di Acquisto Solidale (Solidarity Purchase Groups, GAS) in Italy, and the Transition Network (TTN) in Italy (TTN-IT) and Great Britain (TTN-GB). It aimed to uncover their diffusion patterns, and thus to advance our understanding of the geographical dimension of grassroots-driven sustainability transitions.

Research questions and method

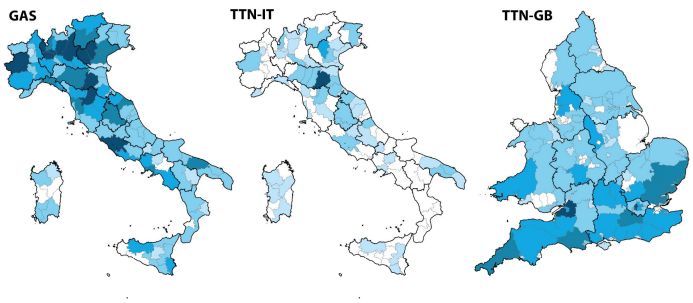
This study addressed three questions on spatial diffusion, two of which are presented in this poster: (i) where grassroots innovations have diffused and whether they are randomly distributed in space, (ii) what similarities and differences there are in the diffusion between (i.e. TTN-GB and TTN-IT) and within (i.e. GAS and TTN-IT) countries.

Data related to the diffusion of GAS and TTN were collected from the databases available on the movements' respective websites, geocoded and aggregated by spatial unit. The cartographic maps were acquired from the Italian and British statistical offices. Data were analysed with GeoDa 1.4.6.

An exploratory spatial data analysis was carried out. This entailed mapping the distribution of GAS ant TTN, a statistical test (*Moran's I*) of random spatial distribution, and a statistical test for local clustering (*LISA*) (Anselin 1995, 2003).

Results

The growth of GAS, TTN-IT and TTN-GB has corresponded to a spatial diffusion that is not randomly distributed, and instead has a spatial structure. This is reflected in statistically significant values of the Moran's I: 0.36 (GAS) 0.34 (TTN-IT) and 0.20 (TTN-GB) for 2014 data.

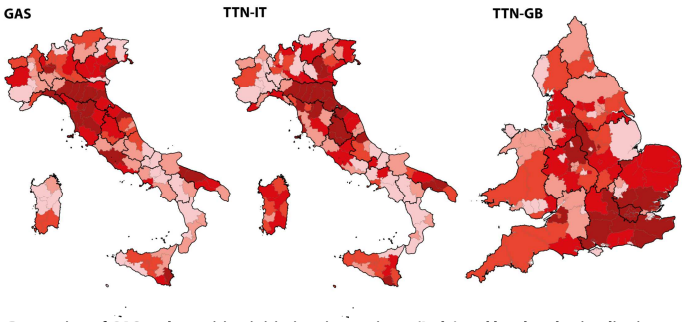


Number of GAS and transition initiatives in Italy and Great Britain (2014)

Results (continued)

GAS and TTN-IT have clustered in the same part of Italy, which is where TTN-IT originated (Bologna province in the Emilia Romagna region). The diffusion patterns of GAS, instead, have changed over time from clustering in the north east to a growing clustering in central Italy (not shown in figure).

TTN-GB and TTN-IT have followed different diffusion patterns, whereby in TTN-IT tends to be more present (both in absolute figures and proportion within selected provinces) than TTN-GB. Moreover, TTN-IT has grown in numbers in the area in which it originally emerged, while TTN –GB originated in the South West of England, but over time has increasingly clustered in the South East.



Proportion of GAS and transition initiatives in provinces (Italy) and local authority districts (Great Britain) (Empirical Bayes smoothing, 2014)

Discussion and conclusions

This study sheds new light on the narrative that often presents grassroots innovations networks as spreading *virally* or in a *rhizome-like* fashion. These metaphors are often used to emphasise the momentum of grassroots innovation diffusion, and the spaces of possibility for alternatives to emerge in the interstices of mainstream, neoliberal economies. In fact, this study indicates that grassroots innovation spatial diffusion is structured and suggests that such spatial structure may depend on place-specific conditions (pre-existing social and organizational structures, political support, presence of 'gatekeepers', progressive culture) and diffusion mechanisms (relational mechanisms and movement brokers). Spatial analysis can help identify pathways of transition to sustainability in different places, and thereby help advance our understanding of the geography of grassroots innovations for sustainability.

References

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