HOW TRANSFORMATIVE INNOVATION MOVEMENTS CONTRIBUTE TO TRANSITIONS

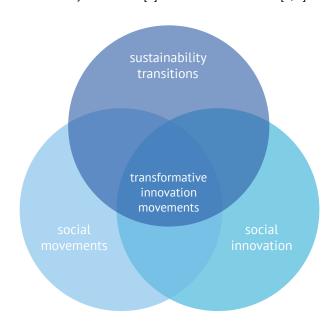
Transformative innovation movements create new ways of doing, thinking and organizing with transformative ambitions. They challenge existing systems through (1) prefiguration, (2) socio-material innovation across domains, (3) translocal empowerment, (4) a diverse repertoire of actions and (5) strategic collaboration across movements.

Flor Avelino / Lara Monticelli / Julia M. Wittmayer

TRANSFORMATIVE INNOVATION MOVEMENTS: BRIDGING THREE FIELDS OF RESEARCH

Numerous initiatives worldwide aspire to contribute to transformative social change towards more sustainable, resilient and just societies. In this piece, we focus on *transformative innovation movements* and their potential to contribute to such sustainability transitions.

The notion of 'transformative innovation movements' builds on three fields of research: social innovation [1, 2], sustainability transitions [3] and social movements [4, 5].



Positioning transformative innovation movements in three fields of research

We define social innovation as changing social relations, involving new ways of doing, thinking and organizing [1, 2]. Social innovations are 'transformative' to the extent that they challenge, alter and/or replace dominant structures and institutions in the social context (ibid). Social movements have been defined as (a) mostly informal networks of interaction, based on (b) shared beliefs and solidarity, mobilized around (c) contentious themes through (d) the frequent use of various forms of protest [5]. By combining elements of the abovementioned concepts and underlying fields of research, we characterise **transformative innovation movements** as:

- informal networks of interaction with a shared identity that mobilize collective action around common themes, by:
- changing social relations and creating new ways of doing, knowing and organizing,
- and that have explicit ambitions to contribute to sustainability transitions by challenging, altering and/or replacing dominant institutions and structures (i.e. the dominant ways of doing, thinking and organizing).

COMMUNITY ENERGY, ECOVILLAGE MOVEMENT, IMPACT ENTREPRENEURS & PARTICIPATORY BUDGETING

In this piece, we explore how transformative innovation movements mobilize and contribute to sustainability transitions by discussing four case studies:

1. Community energy movement – diverse initiatives of citizens and entrepreneurs producing and consuming (i.e. 'prosuming') their 'own' energy, locally, regionally and internationally cooperating through networks such as e.g.

the European federation for renewable energy cooperatives (REScoop);

- 2. Global ecovillage movement hundreds of ecovillages around the world experimenting with new ways of living in harmony with nature and each other, connected through the non-profit organization Global Ecovillage Network (GEN) and in several regional and national sub-networks (e.g. GEN-Europe, GEN Netherlands, etc.);
- 3. Network of social 'impact' entrepreneurs a network of impact entrepreneurs, organised in local 'Impact Hubs' (combining elements from co-working spaces, innovation labs and business incubators) in over 100 cities across the world, globally connected in the international Impact Hub network;
- 4. International movement of participatory budgeting informal network of citizens, communities and municipalities that aim to involve citizens in deciding how (local) public money is spent and prioritized, as part of a broader movement for promoting participatory democracy as represented by e.g. the International Observatory for Participatory Democracy (OIDP).

Each of these cases includes both informal networks as well as formalised organisations, but differ in their institutional orientation (see infographic *Four Transformative Innovation*). Participatory budgeting, for instance, is clearly focused on increasing democracy in the public sector and involving citizens in (local) government spending, while the global ecovillage movement is much more focused on the informal community sphere and the Impact Hub network operates in the context of a market logic. The movement of community

energy is primarily characterised by non-profit organisations and hybrid organisational forms such as cooperatives and social enterprises.

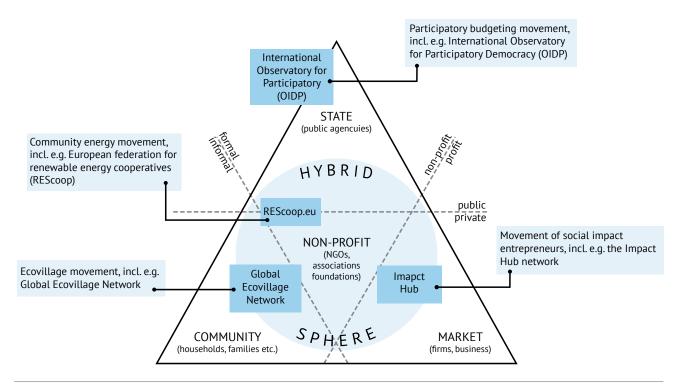
Despite the different organisational and institutional logics underlying these movements, and their differing foci and transformative ambitions, they share some important commonalities, including the way they contribute to transformative change.

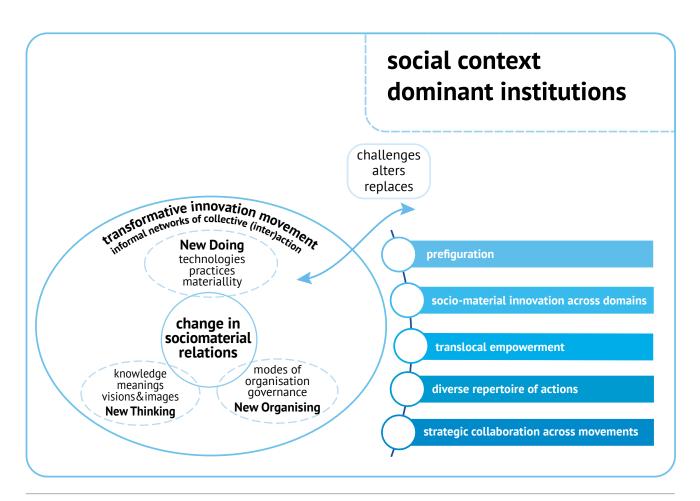
HOW DO TRANSFORMATIVE INNOVATION MOVEMENTS CONTRIBUTE TO TRANSFORMATIVE CHANGE? FIVE HYPOTHESES

Based on insights from researching these movements [2, 1, 4], we identify five hypotheses on how transformative innovation movements contribute to sustainability transitions. We now shortly discuss each of these five hypotheses.

Hypothesis 1: Prefiguration

Roughly speaking there have been three waves of social movements: the class-based movements in the 19th century, the new-social movements of the 60s and 70s, and the alterglobalization in the 90s and early 2000s. Since then, it is possible to observe the emergence of a new wave of prefigurative social movements that "live and strive to reproduce in the present the kind of society they envision for the future" [4, pp. 509-510]. These movements are embodying





How transformative innovation movements contribute to transformative change (five hypotheses)

their vision of the future in their material and social practices. In this way, they re-think and re-politicise patterns of production and consumption, work, social relations and social reproduction by "restoring and creating spaces of resistance and experimentation" [4, p. 509; p. 515].

The four transformative innovation movements all engage in such processes of prefiguration (although, not exclusively – see also hypothesis #4). Prefiguration is an important way in which they challenge existing systems, by providing living proof that there are alternatives to these dominant structures and practices in e.g. energy, housing, entrepreneurship and democracy.

Hypothesis 2: Social and technological, i.e. 'socio-material' innovation across domains

Transformative innovation movements create 'innovation' since they change social relations, involving new ways of doing, thinking, and organizing. All of the four movements that we have looked at, take a rather 'holistic' approach to change and innovation: they do not only focus on technological or ecological dimensions, but also on political, cultural and economic dimensions. This is why we frame them in terms of 'socio-material innovations', rather than just 'technological' or 'social innovation'.

This holistic approach to innovation is an important way to challenge, alter and replace existing systems, because it enables the movements to tackle multiple systems at the same time and to challenge the functional segregation often dominating those systems. For instance, community energy does not only challenge the dominant socio-technical system of centralised energy-production based on fossil fuels through its focus on decentralized solar or wind energy production. It also challenges underlying political and economic structures by introducing alternative business models and organisational forms such as energy cooperatives.

This holistic approach to innovation is an important way to challenge, alter and replace existing systems, because it enables the movements to tackle multiple systems at the same time and to challenge the functional segregation often dominating those systems.

Hypothesis 3: Translocal empowerment

Another aspect characterizing transformative innovation movements is that they are 'translocal': globally connected and locally rooted, which is particularly empowering for the individuals involved. Building on social psychology and self-determination theory, empowerment can be conceptualised in terms of autonomous motivation along six dimensions, namely a sense of autonomy, competence, belonging, impact, meaning and resilience [1]. Translocal connections increase collective empowerment for collective action in that they do not only provide access to resources, but also enable people to gain a sense of autonomy, competence, belonging, impact, meaning and resilience both at the local and translocal level.

Translocal networks are an imperative factor for members of these movements to experience a sense of impact and increased access to resources. Often these members cannot gain access to resources within the context of existing structures and institutions from which they – by definition – wish to deviate. Hence, gaining access and a sense of impact through a translocal network may provide an alternative to lacking institutional support. This may be one way in which transformative agency can develop despite of the unfavourable power dynamics that transformative innovation movements face in current economic and socio-technical systems.

Hypothesis 4: Diverse repertoire of actions

While prefiguration plays a prominent role in these transformative innovation movements, they also engage in a whole range of other actions aimed at transformative change, such as protest, lobbying, training and campaigning, thus blending of contentious, strategic and prefigurative actions [4]. People living in ecovillages, for instance, are often also involved in environmental protest movements (e.g. residents of Tamera ecovillage organising a protest against fracking in Portugal), while at the same time, the Global Ecovillage Network is also cooperating with other networks and lobbying for community-oriented policies at e.g. the European Union level. This diverse repertoire of actions enables movements to deal with the paradoxical tensions that are inherent to processes of innovation and change, where the diffusion of innovation often comes at a cost of its innovativeness. The challenge for innovation movements is to translate their innovations and radical ideas to the mainstream context, while at the same time nurturing and preserving their radical core. In this sense, transformative innovation movements are characterized by a constant tension: on one side, the need to scale up and, on the other, the willingness to avoid co-optation.

Hypothesis 5: Strategic collaboration across movements

Another important way in which transformative innovation movements challenge, alter and replace dominant ways of doing, thinking and organising, is through strategic collaboration across movements. One example of such collaboration is ECOLISE, the European Network for Community-led Initiatives on Climate Change and Sustainability (www.ecolise.eu), in which the global ecovillage movement collaborates with other movements such as the transition towns movement and the permaculture movement to influence policy-making within the European Union and to organise events for the general public such as the annual ECOLISE day for sustainable communities.

Although transformative innovation movements already demonstrate strategic collaboration across movements, we also argue that such strategic collaborations are still underdeveloped and that there is much potential for more mutual recognition and strategic collaboration. Movements and their respective initiatives and organisations are often focusing on their own strengths, choose their own battles, and fight over scarce resources in order to survive, instead of stressing their complementarities and collaborating. There is a need to support more meta-networks (networks of networks) and spaces for encounter and reflection amongst movements, including constructive confrontation and debate.

TOWARDS INTER & TRANSDISCIPLINARY RESEARCH ON TRANSFORMATIVE INNOVATION MOVEMENTS

The final hypothesis on the need for strategic collaboration amongst different movements, also leads to our concluding call for more inter and transdisciplinary research on transformative innovation movements that can bridge across research fields such as sustainability transitions, social innovation and social movement studies. While it remains important to acknowledge and scrutinize the differences between contentious and prefigurative actions, between social movements and innovation initiatives, it is equally crucial to explore how and to what extent these different phenomena coalesce in intersectional collaboration. Whether or not we conceptualise them as 'transformative innovation movements' (something to be debated), the goal is to be able to interpret the empirical phenomenon of those social movements that are using socio-material innovations to contribute to transformative change.

Academic researchers can play an important role in coproducing the narratives of how bottom-up movements contribute to innovation and transformative change, also to counter-balance the predominant focus on business-led or government-led innovation and transition policies. Producing and disseminating alternative narratives on how innovation and transformative change comes about, is in itself an important dimension of how dominant ways of doing, thinking and organizing can be challenged, altered and replaced [2]. Academic researchers can play an important role in co-producing the narratives of how bottom-up movements contribute to innovation and transformative change, also to counter-balance the predominant focus on business-led or government-led innovation and transition policies.

Our call for a more inter- and transdisciplinary narrative is not only about doing research or storytelling, it is also about informing and inspiring concrete actions: How energy is produced, how start-ups are born, how better and fairer products are made, how new houses are built, how community-gardens are set-up, and so on. Different movements have different stories, ranging from changing economic models and redesigning products, to political activism, lifestyle change and inner transformation. Acknowledging their value and researching these real life stories is essential to challenge the 'there-is-no-alternative' mantra that has dominated the political and media landscape in the last thirty years. As stated by the makers of the Atlas of Utopias, who aim to encourage and spread insights from transformative and innovative movements: "A better world is not only possible, it is already happening" [6].

REFERENCES

- [1] Avelino, F./ Dumitru, A./ Cipolla, C./ Kunze. I./ Wittmayer, J. (2019): Translocal empowerment in transformative social innovation networks. In: European Planning Studies. Internet: https://doi.org/10. 1080/09654313.2019.1578339. [Last accessed 22.07.2019]
- [2] Wittmayer, J. M./ Backhaus, J./ Avelino, F./ Pel, B./ Strasser, T./ Zuijderwijk, L. (2019): Narratives of change: how social innovation initiatives construct societal transformation. In: Futures, 112. Internet: https://doi.org/10.1016/j.futures.2019.06.005. [Last accessed 22.07.2019]
- [3] Loorbach, D./ Frantzeskaki, N./ Avelino, F. (2017): Sustainability Transitions Research: transforming science and practice for societal change. In: Annual Review of Environment and Resources, 42, pp. 599-676
- [4] Monticelli, L. (2018): Embodying Alternatives to Capitalism in the 21st Century. In: tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society, 16 (2), pp. 501-517.

- [5] Della Porta, D./ Mattoni, A. (2016): Social Movements. In: Mazzoleni, G. (Ed.): The International Encyclopedia of Political Communication. Internet: Wiley Online Libray. DOI: 10.1002/9781118541555. wbiepc010. [Last accessed 22.07.2019]
- [6] Transformative Cities (2019): Atlas of Utopia. Internet: https:// transformativecities.org/. [Last accessed 22.07.2019]
- [7] TRANSIT (2017): Manifesto for Transformative Social Innovation. Internet: https://tsimanifesto.org/. [Last accessed 22.07.2019]

Acknowledgement:

The research leading to these results has received funding from the European Community's Seventh Framework Program under grant agreement No. 613169, TRANSIT (TRANsformative Social Innovation Theory), the EU's Horizon 2020 research and innovation program under grant agreement No. 764056, PROSEU Project (PROSumers for the Energy Union: mainstreaming active participation of citizens in the energy transition), and the EU Marie Skłodowska-Curie project ECOLABSS (ECOvillages as LABoratories of Sustainability and Social change) grant agreement No. 798866