

The Geography of Energy Transitions.

The emergence of local contexts as main actors of a sustainable turn

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Abstract.

Since the 1973's oil crisis everyone on the planet was well aware of the economic development's dependence from fossil fuels supply and their producers. Nowadays, just like then, an economic and energy crisis has once again highlighted this unsolved dependence. Dealing with such a complex dynamic implies a substantial shift in every country's societal structure aspects: economic, political and cultural. Such a shift towards a substantially new energy regime cannot be managed recurring to the traditional management tools (traditional regulation, policy and market measures), but requires an effective societal restructuring: a transition.

However, there is still a wide debate concerning the localisation of these processes. While such profound changes must run over complex systems that involve at least national level structures, empirical analysis reveal that at such level wide participation is weakened and transition initiatives tend to be driven by the powerful regime actors of the involved sector (e.g. corporations) (Kemp, Rotmans, & Loorbach, 2007).

In this paper, given the recent democratic developments and pressures towards power decentralisation, I challenge the application of energy transition initiatives only at the national level. Pushing further this assumption, I tried to understand how narrower contexts can interpret transitions and create networks of transitions experiences, developing a multi-scalar perspective and analysing the application of transition methods on the regional and local level.

I analysed the small Southern-Italian municipality of Melpignano, where has been recently established a community-cooperative in charge of the creation and management of a wide network of solar panels over local buildings through the active involvement of the local community. Using both the literature on Transition Management (Rotmans, Loorbach, & van Asselt, 2001) and Transition Culture (Hopkins, 2008) as useful interpreting tools, and previous researches on localisation of transitions (Späth & Rohrer, 2010), through qualitative research methods, I investigated the structure of this narrow transitional process, the role of central government, the pressures on stakeholders and institutions to design shared transitional paths (e.g. technological, economic, socio-political, environmental), the level and the methods of stakeholders involvement in the processes, and their perception of them.

The main aim of this work is therefore to contribute to a deeper understanding of lower-scale initiatives' potential to initiate energy transition processes.

The overall results of the research pointed out how, even if participation is more likely to be facilitated at a narrower scale level, the intervention of national authorities providing a set of measures across the territory (i.e. feed-in-tariffs schemes) are needed and preconditions to substantial transition initiatives. Moreover, the local contexts are perceived as the best available backgrounds where participated energy policies can be designed and implemented and tend to be seen as far more efficient in opening networking spaces where heterogeneous subjects cooperate, confront each other, and design shared paths towards more sustainable energy structures. On the other hand the lack of political national sensibility and political planning towards this topic is perceived as the main barrier to the implementation of these processes, limiting the chances of structural success of localised initiatives. This immobile national context leads to perceive the local scale as a political substitute to the absence of national political action and likely to challenge the traditional hierarchical political cascade creating a bottom-up pressure process through which to scale up successful initiatives.

Introduction.

Dealing with climatic change implies a substantial shift in every country's societal structure aspects: economic, political and cultural. Such a shift towards a substantially new energy regime cannot be managed recurring to the traditional management tools (traditional regulation, policy and market measures), but requires an effective societal restructuring: a transition.

“A transition is a radical, structural change of a societal (sub)system that is the result of a coevolution of economic, cultural, technological, ecological, and institutional developments at different scale levels” (Rotmans, Loorbach, & van Asselt, 2001). The understanding that often historical transitions have not led to sustainable regimes, brought some academics to design a new discipline named “Transition Management” (TM). TM is a complex governance model shaped specifically to deal with complex societal changes aimed at influencing them in order to produce the desired outcomes, in this case to create more sustainable societies. For the first time, the transitional approach was adopted at a national scale in the Netherlands to deal with persistent problems that occurred in four different identified societal systems: agriculture, biodiversity, mobility and energy (VROM, 2001). The model adopted aimed at identifying long-term goals and designing effective strategies to achieve them through the development of the so-called “transition-arenas”, public-private networks involving various societal actors in a reflexive and deliberative process. Transitions are multilevel and multi-phases processes of innovation.

However, there is still a wide debate around the localisation of such processes. While such profound changes must run over complex systems that involve at least national level structures, the empirical analysis of the Netherlands' energy transition process revealed that at such level wide participation is weakened and transition initiatives tend to be driven by the powerful regime actors of the sector (e.g. corporations) (Kemp, Rotmans, & Loorbach, 2007).

In the last years some authors (Späth & Rohrer, 2010; Hodson & Marvin, 2009; Smith et al., 2010) have pointed out how the political tendency towards the regionalisation of political processes challenges the application of energy transition initiatives only at a national level. In this paper I wanted to push further this assumption analysing a local attempt to initialize a substantial energy territorial transition. I pointed my magnifying-glass

on the Southern-Italian region of Puglia, where a small municipality has recently established a community-cooperative in charge of the installation and management of a wide network of solar panels over local buildings through the involvement of the local community.

The main aim of this work is therefore to contribute to a deeper understanding of lower-scale initiatives' potential to initiate energy transition processes. The overall results of the research pointed out how, even if participation is more likely to be facilitated at a narrower scale level, the intervention of national authorities providing a set of measures across the territory (i.e. feed-in-tariffs schemes) are needed and preconditions to substantial transition initiatives. Moreover, the local contexts are perceived as the best available backgrounds where participated energy policies can be designed and implemented, even though coordinated and harmonized at the national level. On the other hand the lack of political national sensibility and political planning towards this topic is perceived as the main barrier to the implementation of these processes, limiting the chances of structural success of localised initiatives which tend to be seen as far more efficient in opening networking spaces where heterogeneous subjects cooperate, confront each other, and design shared paths towards more sustainable energy structures. This immobile national context leads to perceive the local scale as a political substitute to the absence of national political action and likely to challenge the traditional hierarchical political cascade creating a bottom-up pressure process through which to scale up narrower successful initiatives.

01. Localising Transitions: the theoretical framework.

I limited my analysis to those that I consider the two main strains in the transitional debate that are experiencing empirical application in a wide variety of contexts: the first is the one recognized under the label of Transition Culture (TC), a localised and community-based approach initiated by Rob Hopkins in the UK in 2005, the second is Transition Management (TM), a more systemic and institutionalised approach by this time widely accepted in The Netherlands.

Both these approaches consider as motivating factor the combination of two dynamics: climate change and scarcity of energy supplies. Even if both TC and TM agree in considering that, especially in industrialised countries, the challenges imposed by environmental and economic threats necessitate deep societal and structural changes (FEASTA, 2004), they tend to identify very different 'solutions' both in the 'geography' of

transitions, in the way such processes should be facilitated, and who should be in charge of initiating and responsible of carrying them on.

If, according to TM theorists, we define a transition as a “gradual, continuous process of change where the *structural character of a society* (or a complex sub-system of society) transforms” (emphasis added) (Rotmans et al., 2001) it is not possible to identify a circumscribed area entitled to act as ‘core-location’ for transitions. Even if a societal structure is often identified with a geographical area and considering them as two mutually influencing dynamics (Morgan, 1984), we must say that transitions take place systemically rather than geographically. This lack of identification of a best available geographical scale left an implied interpretation of transitions as enforceable only at a national level. However, recent pressures towards power decentralisation (Murat & Morad, 2008), and the recognition by the European Union of the subsidiarity principle (EU, 2002), make least centralised authorities able to effectively cooperate towards the implementation of transition processes. Therefore, multiple academic studies are trying to challenge this approach on a multi-scalar perspective (Smith et al., 2010), analysing the application of transition methods on a regional (Späth & Rohrer, 2010) and local level (Hodson & Marvin, 2009).

TC instead clearly points out the local level as the perfect environment for initiating transition processes. Localisation is described as a far more equitable and fair response to globalisation’s devastating effects on traditional agricultural economies (especially in under-developed and developing countries) (Shiva, 2001), over-consumption of natural resources, environmental and biodiversity degradation (Retallack, 2001; Shiva, 2005), and cultural homogenization (Barnet & Cavanagh, 2001). Furthermore, since according to TC the peaking of world oil production will profoundly affect our everyday life and economic system, the heavy internationalisation and global interdependence of markets will be substituted by a radical relocalisation of the economy (Kunstler, 2005). The concept of localisation that Hopkins keeps in mind is that defined by Norberg-Hodge (2003) as a process aimed at enabling communities “to diversify their economies so as to provide for as many of their needs as possible from relatively close to home”.

02. The Research Approach.

Far from considering TM and TC two opposite poles, I think that they carry useful complementary insights. If complex transition processes are carried out at a national level with consequent difficulty of wide involvement of public opinion and dominance of

participatory arenas by powerful stakeholders, it would be viable to analyse how networks of more localised processes where public participation and control can be more easily facilitated can support transition processes. Some could argue that community-based initiatives are not powerful enough to deal with such big and profound processes that involve much more powerful subjects. This would be agreeable if we thought of a relationship between transition initiatives and local governments as a confrontation, with the latter admitted just as external supporters. However, local administrations are commonly considered the authorities more likely to intercept the local needs and involve local communities in participatory processes. In addition local authorities have a wider range of available enforceable measures and instruments than those of common people. Hence, the role of government, the level of stakeholders involvement, the localised contexts in which to facilitate transition initiatives, and the practices to bind these altogether are the main dynamics around which this article moves forward. Considering the whole contextual debate briefly displayed above, the aim of this work is to shed some light on the raising concern around the contribution that lower-scale contexts can give to transition processes. Thus the main research questions of this work are:

- Can regional and local authorities prompt transition initiatives in the energy field?
- Can these localised transitions be considered supporting niches to wider transitions?

TM and TC theories, both understood as an “attempt to develop explanations about reality or ways to classify and organize events, describe events, or even predict future events” (Hagan, 2006), have been used throughout the text as interpreting tools. I deconstructed the case, the processes, the inherent dynamics, the endogenous and external pressures using the theories as a template to make them comparable with the cases analysed in the debate.

I tried to isolate similar indicators to those identified in other investigations (Späth & Rohracher, 2010). The main dynamics I chose to analyse are: the structure of transitional processes, the pressures on stakeholders and institutions to design shared transitional paths (e.g. technological, economic, socio-political, environmental), the level and the methods of stakeholders involvement in the processes, the rate of decisional influence of non-institutional actors, the involved actors’ perception of the initiatives themselves. Here I tried to graphically transpose the interpretive grid, the main dynamics and factors to be analysed:

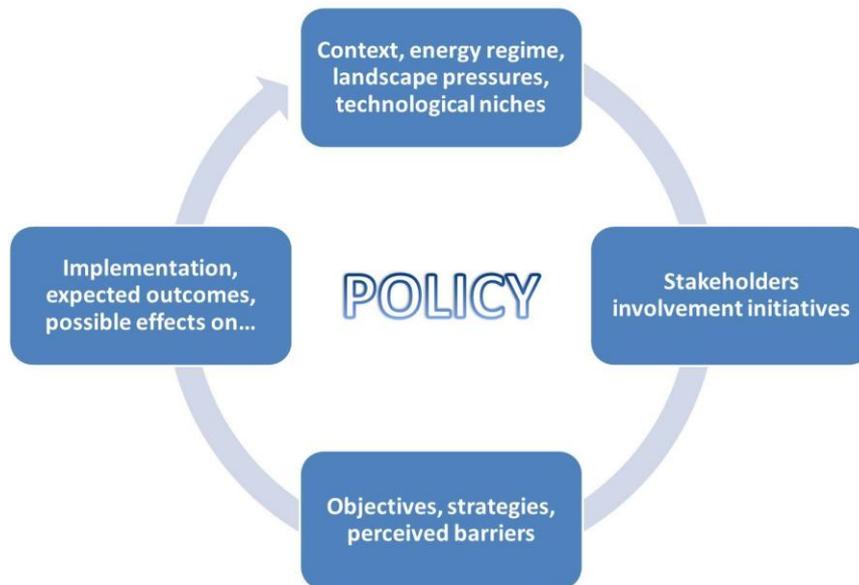


Fig. 2.1 Dynamics, factors and indicators analysed throughout the dissertation.

The case study analysis was mainly carried out through a qualitative research approach: documents analysis and interviews. Being transitions multi-stakeholders processes, I realized a total of 17 interviews to a heterogeneous group of subjects (companies, public officials, associations, environmental NGOs, consultancies, etc.).

03. The community-cooperative model: the case of Melpignano.

Melpignano is a small town located in the southern part of the region Apulia and part of that category of 'small municipalities' (less than 5000 residents) which constitutes the 72% of Italian municipalities and gathers nearly 20% of the overall national population (Anci/Formez, 2006). These small towns, are facing a long time crisis mainly due to a continuous depopulation process with economic, cultural and environmental consequences. Melpignano's economy is mainly based on agriculture, tourism and mining.

3.1 Main characters and key roles.

In the scenery described above, often measures and initiatives aimed at facilitating communities self-organization and self-management are considered viable for strengthening the local economic and social fabric. In order to implement this kind of measures the Melpignano local administration decided in 2011 to establish a cooperative in charge of managing the installation of integrated PV panels over local buildings.

Furthermore, instead of redistributing the revenues among the associates, the cooperative's assembly will be in charge of deciding how to reinvest the revenues coming from the energy production in local socially-valuable policies. The administration is backed in this initiative by four different subjects: the Engineering Department of Lecce University, the social cooperative *Officina Creativa*, the association *Borghi Autentici d'Italia* (Authentic Italian Small Towns), and *LegaCoop* (these last two subjects recently signed an agreement to spread cooperative practices among Italian small towns). Their role is to support the project, through networking actions, consulting, and even with financing assistance. The engineering department of the University of Lecce, assisted by the cooperative *Officina Creativa*, carried out a feasibility study to identify the local structures likely to host the solar panels and the number of plants to be installed.

3.2 The vision.

The main aim of the project, but not its final goal, is to constitute a social cooperative gathering the local institutions, associations, companies, artisans and individuals. This cooperative, owning the solar panels and the energy produced through them, will obtain revenues selling the energy to the main national grid. The citizens hosting the plants will access to the energy free of charge. The installation of the solar panels will be provided by the local workforce involved within the cooperative. Subsequently, the revenues coming from energy production and feed-in-tariffs scheme will not be redistributed among the associates but will be reinvested into publicly useful activities and interventions which will be identified within the cooperative assembly. Hence, the overall project aims at creating a means to stimulate local economic development through community participation and to empower citizens in order to identify shared needs, strategies and goals to be pursued together and relying as far as possible on local skills and workforce.

In doing so, while Transition Management seems to presume that the implementation of such processes (at least those aiming at transforming complex socio-technical regimes) should invest at least the national level (Smith, Voß, & Grin, 2010), the Melpignano case can help us to understand how visions from a localised level “can ‘translate’ broader and rather abstract visions of sustainable energy futures into more concrete agendas reflecting the specific requirements and opportunities of a particular [...] context” (Späth & Rohracher, 2010). It is therefore useful to mention which, according to the interviewees, were the main factors putting pressure towards this kind of initiative:

- To block the slow depopulation of the town;

- To enhance the skills available within the territory;
- To create a form of income for the local institution able to facilitate investments in worthwhile territorial policies;
- To defend the territory and the landscape “anticipating” all sorts of external investments towards massive solar plants;
- To facilitate the identification of viable common objectives through widening decisional processes.

It is quite clear that a small town seldom has the instruments of a big city to shape its own socio-technical regime (e.g. road pricing), and the political strength to initiate transition processes without the involvement and consensus of the community. Melpignano seems thus to act as a mediator between the generalized attempt to support sustainable energy and the peculiar needs of the territory, reshaping the traditional policy-structure towards participative mechanisms. Hence, the objective was to embed the interest in energy transition and renewables in a more complex and wider discourse involving the political structure and local development, developing interconnections, synergies and support for a far more complex set of projects. In this particular frame renewable energy seems to function more as the instrument rather than the final goal. The Communitarian and national feed-in-tariffs systems are the measures that make this technology viable, and one of the few available mechanisms through which small municipalities can support their budgets.

3.3 The process.

In the year 2010, during a meeting, a cooperation agreement between the mayor of Melpignano, the national chairman of *LegaCoop* and the national chairman of *Borghi Autentici d'Italia* (BAI) was signed. Afterwards the administration organized a series of workshops inviting all the subjects that might be interested in taking part in the project. These workshops registered the presence of not just energy related subjects but also professionals, associations, companies, political parties, research centres, and citizens. In these meetings the idea was presented and discussed, suggestions were gathered and deeply elaborated in multiple bi-lateral meetings with the main collective subjects of the town. The storylines along which the discussions moved referred mainly to the pressures already identified by the administration: “we have to give our sons a chance to keep living in their hometown”, “why to pay a bill to big companies or other countries when we have sun for almost the whole year”, “we should employ local workers, instead of selling the land to foreigners”. The simplicity of the project regarding the solar panels installation

facilitated the confrontation among the subjects and the building of a wide consensus around the initiative. In this phase the local administration was the key actor mobilizing its peculiar instruments to involve the stakeholders and facilitated the creation of an informal heterogeneous network that lately crystallized itself in the constituted cooperative. Furthermore the informal network along with the design of the vision, and the constitution of the cooperative, resulted particularly active in spreading these dynamics outside the town borders, especially to the surrounding communities that are right now examining this process and evaluating the possibility to adopt it and to generate a “network of social community cooperatives” in the area.

3.4 The community cooperative.

Around 150 households expressed their willingness to offer their structures for the solar plants, each plant is going to produce 3 KWh, this means 450 KWh of electricity production by the end of the year 2011. These subjects become automatically part of the cooperative as “user associates” in a structure that provides:

- Government Bodies: Chairman, Board of Directors, *Collegio dei revisori* (entitled to stand over the regular financial management);
- Investors Associates: Local administration, LegaCoop, BAI;
- Workers Associates: those who work for the realization of the PV plants system (engineers, installers, maintainers, etc..);
- Users Associates: those who accept to host the panels on their buildings, and those who, even without hosting a panel are willing to join the cooperative paying an associative share of €25;
- Employees Associates: citizens who choose to self-organize themselves for the management of some services or the creation of new jobs.

The cooperative aims at producing a profit of €80.000 per year corresponding to 4% of the local administration’s total annual income.

3.5 Provisional outcomes.

The community cooperative project is still in its initial phase, the agreement that constituted the cooperative has been signed in a public event in the main square of the town on the 18th of July of 2011. Hence it has not been possible to carry an empirical evaluation of the results achieved. However it was possible to analyse the factors that are

perceived by the key players as strategic to achieve a wide range of objectives. To investigate these indicators I tried to identify which were the main pressures perceived by the stakeholders, and whether they are perceived as contextual opportunities or threats, to initiate this project and which were the desired/foreseen main effects. Almost all the interviewees identified the same set of factors. I interpreted the answers transferring the pressures on a graphic where the number of subjects identifying a specific variable and their positive or negative perception of that particular variable combine themselves. What I can highlight is a substantial general agreement among the opinions gathered with a cloud distribution of the variables towards the positive and negative extremes rather than along a growing continuous line.

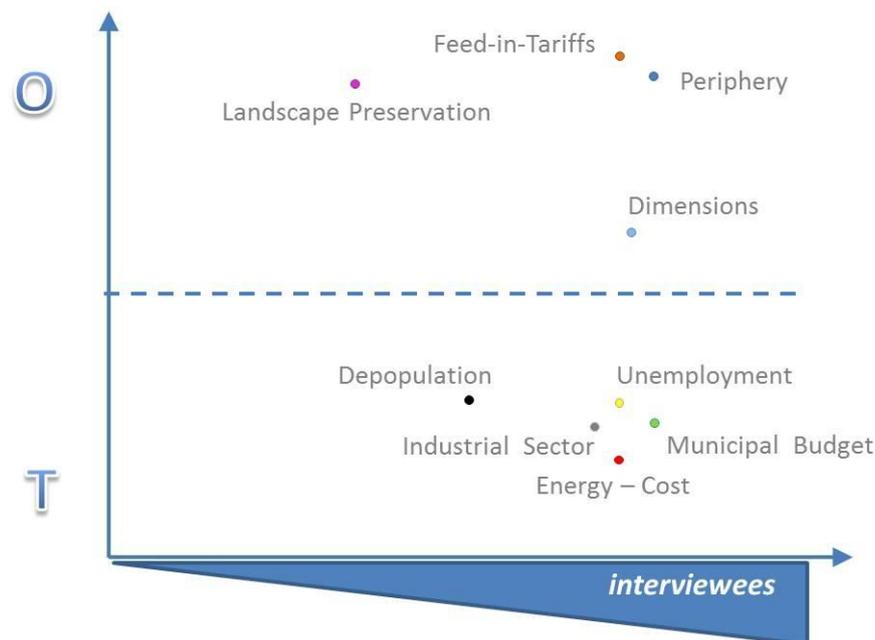


Fig. 3.1 Distribution of contextual pressures as perceived by the interviewees of the Melpignano case study.

Horizontal axe: number of interviewees quoting a certain factor

Vertical axe: interviewee perception of that particular factor (either 'opportunity' of 'threat')

The main findings of this brief cross-referencing of the factors identified are mainly 3: firstly the polarization of the pressures in the economic field: the majority of the contextual dynamics perceived as necessary to be either overcome or exploited tend to straightforwardly belong to the economic discourse. Obviously this distinction is a simplification of reality since some factors belong to two or more societal sphere (e.g. unemployment can be considered both pertaining the socio-political sphere and the economic one). Secondly, only a minority of the interviewees highlighted environmental indicators as necessary to be taken into account (e.g. landscape protection). Thirdly the

peripheral position of the small towns in respect of the ‘institutional’ energy flows and dynamics is perceived as an opportunity facilitating the experimentation of such measures otherwise of difficult application in bigger and far more central contexts. The only variable around which the subjects interviewed seemed in contrast is the perception of the “dimension of the project”. While the majority tend to see this factor as an opportunity able to facilitate the dialogue between the subjects involved through proximity and simplicity, others interpreted the narrowed context of application of the experiment as a factor heavily influencing the capacity of local authorities and community to produce effective policies through lack of instruments and attention dedicated by highest-level institutions.

The vision-designing process was mainly dominated by the economic discourse even if I identified a three-fold constituting character, apart from the already cited economic one, we can distinguish the socio-political discourse and the energy discourse.

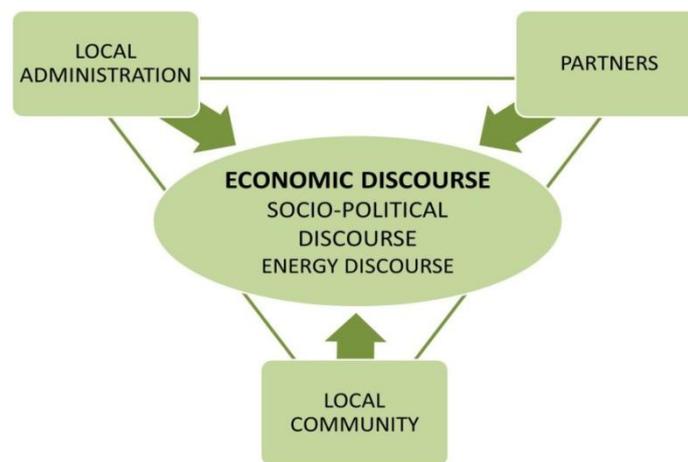


Fig 3.2 Melpignano designing-vision and actors' informal network.

The whole analysis of the initial process highlights the steering role of the local administration which pushed further an already existent will to drive the local context towards a more sustainable energy system. However, many of those I interviewed tended to highlight how this predominant role covered by the local administration will be progressively substituted by the cooperative itself: “the mayor, the administration, will make many steps back. They will be associates, just like everybody else, they will participate to the assemblies and express their opinion, but they won’t have a dominant position” (interview 15). Thus local government will “play an active role in this process as a facilitating party, but still as one party among many” (Eising & Kohler-Koch, 1999).

All the subjects interviewed stressed the nature of this project as an experiment, not just referring to the cooperative management of the solar plants but rather to the whole

prosecution of the experience. While they have a clear desired set of objectives to be achieved, neither the final success nor the accuracy of the path are assured. Although the main trigger of the process in this case is represented by the adoption of more sustainable ways of energy production and consumption I can assume that the transition process is towards a more participated community rather than a more sustainable one *tout-court*. It is quite clear when it comes to the listing of the expected and desired outcomes. It is interesting to notice that, while the majority of the pressures can be easily referred to the economic sphere, the subjects interviewed tend to identify a wider group of socio-political achievements. Once again this strict differentiation is a an interpretive tool since many factors fall into both the spheres. Although, it is still true that the list of dynamics having reference to the socio-political discourse grow sensibly when the subjects have to identify their desired set of outcomes.

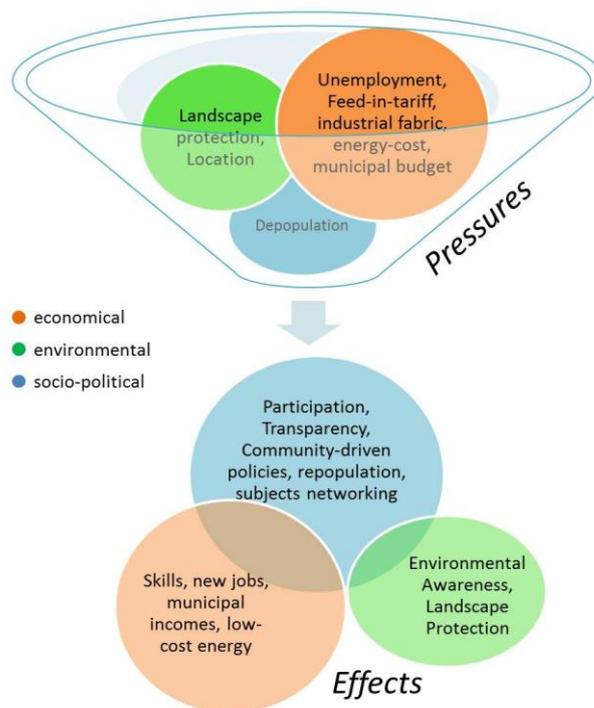


Fig 3.3 Melpignano pressures and desired outcomes

4. The community-cooperative scheme as a possible theoretical-practical synthesis.

Perhaps the most valuable contribution brought by the Melpignano's community-cooperative experience is a natural synthesis of the two theoretical approaches analysed

throughout this article. It does not provide predictable steps or best available methods to be applied but aims at facilitating the development of a complex process that will autonomously create its own peculiar strategies. In doing so it seems to incorporate some of the specific dynamics of both Transition Management and Transition Culture.

While strongly stressing the localisation of the cooperative and highlighting the role that the community will cover in the next future the Melpignano's case seems to belong to the TC sphere, it is also true that when it comes to analyse the contribution of the local institutions it seems to move far away from Hopkin's idea that local communities are (and will be) the main subjects entitled to generate transition practices in order to build self-resilient communities (Hopkins, 2010). As a matter of fact, the local administration acted both as trigger and facilitator of the whole preliminary process, while afterwards a "multi-actor process in which individuals and representatives from government, societal organizations, business, knowledge institutes and intermediary organizations" (Loorbach, 2007) participated, was initiated. Therefore in this narrowed context, instead of coming from the bottom, the transition-vision was mainly controlled at the top level. However, as I already said, the development of the process itself will challenge a definite distribution of the indicators between one sphere of another.

In fact, the foreseen cooperative scheme seems to work in a way that can be assimilated to the cyclical approach organised in four different main activity clusters designed by TM theorists, in which the key of the overall process is the establishment of the so-called transition arenas: "a virtual arena, an open and dynamic network in which different perspectives, different expectations and different agendas are confronted, discussed and aligned where possible" (Kemp & Loorbach, 2003);

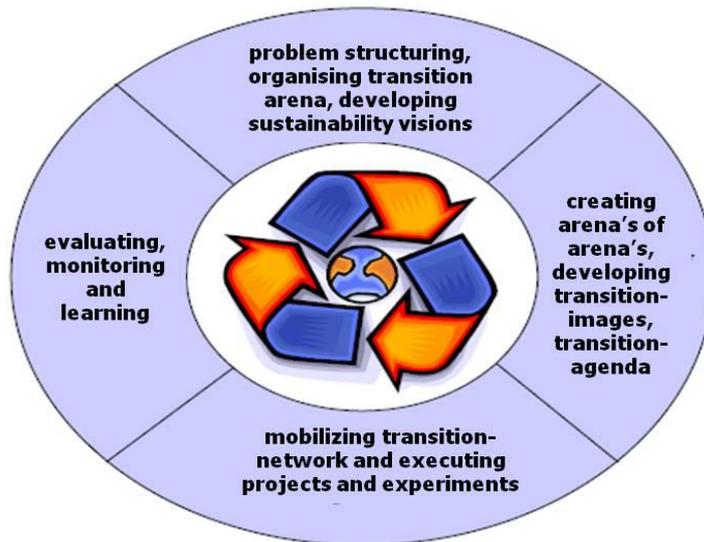


Fig. 4.1 The transition management cycle. Adapted from (Loorbach, 2007)

However, it does not aim at selecting innovators and frontrunners to develop visions and transition strategies (as TM instead does), but will rather gradually become a community-led process through the control of the cooperative general assembly, moving towards a concept of resilience that expresses the ability of communities “to self-organise and to manage resources and make decisions” (Adger, 2003).

Thus after an initial linear phase the project should evolve in a cycle model:

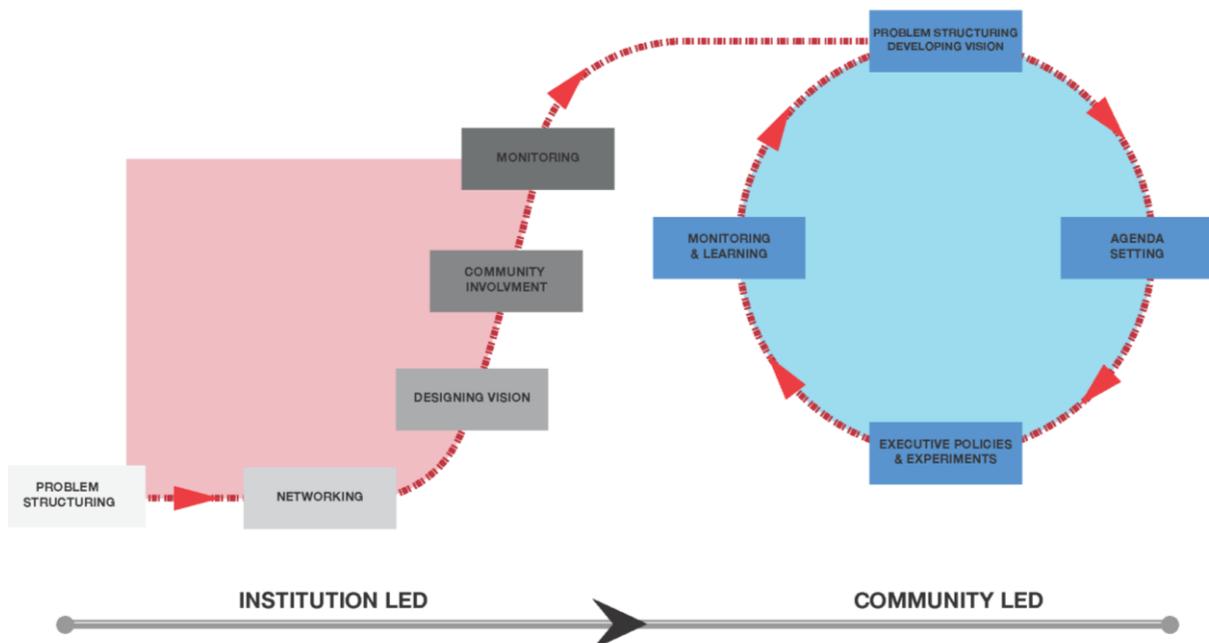


Fig. 4.2 The evolution of the community-cooperative model.

Discussion and Conclusions.

An academic writing usually needs in the end an academic synthesis, a reasonable discussion about findings and outstanding academic outcomes. However I think that this would mean minimizing the impact of the topic treated in this article (and in the whole debate around transitions). How can the transition of the energy regime to a far more sustainable structure be handled and analysed only as an academic exercise? We agreed that such processes invest all sorts of societal spheres. Individual and collective behaviour, industrial and commercial fabric, transportation, the entire economy revolve around the amount of cheap energy supply. It seems quite evident that the consequences and conclusions from this assumption should be nothing but political. Institutions, communities, and companies are the subjects entitled to bear the responsibility of the change. Regulations, laws, agreements are the instruments designed to carry on the process.

First of all the first barrier identified by all sorts of stakeholders I interviewed during my research project to the definite transition towards a sustainable energy regime is the lack, in the Italian context, of a clear political will to design a well-defined path in this direction. Companies, associations, environmental NGOs and local institutions repeatedly pointed out how the absence of guidelines by the national government produces a state of uncertainty where, for example, it is impossible to plan a clear long-term investment strategy. Every subject is left alone with its own choices, unable to coordinate with other actors and harmonize initiatives. This tends to produce discrepancies across the Italian territory putting at risk even the successful cases of attempts of dealing with energy transition.

This need of national intervention seems to confirm the assumption that such complex transitions are successfully manageable only at the higher scale levels. However, if we go back to the first of the two research questions, “can regional and local authorities prompt transition initiatives in the energy field?”, I provided throughout this study proves that local institutions can initiate, facilitate and even design their own transition paths. In this sense, what seems really important is that even the stakeholders tended to identify narrow decisional centres as the ones capable of successfully apply transition processes. In fact, even if the State is still the political institution holding the most powerful instruments able to deal, facilitate and initiate such complex processes, no one of the interviewees considered the national government the institution entitled to manage transitions. What interviewed subjects tended to stress is the need of governmental intervention in a sense

of providing a complex net of instruments and measures able to facilitate experiments, coordination among initiatives, and gain funding. Moreover the subjects interviewed (local institutions, companies, environmental NGOs, associations, etc.), when they stress as more valuable outcomes issues like networking among different subjects and wide participation to political processes, seem to express the will to self-organize to lead such processes.

Even if participation is often flaunted by politicians, more as a tool to gain wide consensus on final decisions rather than for any democratic ideal (Bayley & French, 2007), the further application of participation processes could represent a real earthquake for crystallized democratic structures. Considering the ability of citizens to engage in high-level confrontation, cooperation, and deliberation as largely demonstrated (Smith, 2005; Gastil & Levine, 2005), it is important to understand how the implementation of such processes could represent an epochal democratic transition especially in a State structurally exclusive where few points of access are offered “to interests and movements beyond a privileged few” (Dryzek & Tucker, 2008). It represents the widely invoked transition from state-centred decision-making to participatory governance (Bruns & Gee, 2009).

While so far the traditional structure of national politics has limited citizen participation to a passive role advocated in the form of voting, in part for “the practical impossibility of direct democracy in a large population” (Zwart, 2007), the progressive delocalisation of political responsibility to regional and local institutions is opening up possibilities to directly engage citizens in decisional processes. In this sense the case study analysed throughout this text constitutes a valuable example. For their proximity to the communities, for their being direct local emanation of the local structure, for their higher sensibility towards local issues and needs, regional and local authorities are more likely to interpret peculiar dynamics and to engage citizens in shared participative processes. This characteristic constitutes an important added value that local institutions directly bring at the very centre of the debate regarding the geography of transitions.

Moving to the second research question, “can these localised transitions be considered supporting discursive niches putting pressure on wider transitions?”, the answer seems to be far more complex than expected. If we agree in considering the relationship between the landscape and the niches as a dialogue and responsibility of the State not only to stimulate that dialogue but to protect the niches, facilitate their diffusion and growth, then the study of this case embedded in the Italian context was not explicative

of this dynamic. The role that local institutions seem to play is that of a surrogate of the national authority. In this sense they *are* active niches capable of putting pressure on higher institutions but within a process that is far away from being considered a 'dialogue'. It would rather seem to assist to a conflict between the different governmental levels.

Anyway, what I mainly tried to demonstrate here is that local institutions have the capacity, within the political power boundaries they have been given, to design visions, initiate transitions, and engage communities autonomously; even challenging the operative stall at the national level, creating experiments that can lead to wider and interconnected experiences. In this sense it would be useful to push even further on the research produced throughout this project firstly analysing more local energy transition initiatives; secondly it would be even more viable to analyse the potential of what I call "networks of transitions", the interconnection of localised and cooperating transition experiences that have a certain set of objectives in common and develop shared visions and transition paths; and thirdly it would be strategic to investigate the potential scalability of such initiatives to wider administrative levels.

Furthermore, the spreading of renewable sources seems to put pressures on a restructuring of the energy grid towards a delocalisation of the production spots where every user becomes producer at the same time, overcoming the traditional centralisation of the energy structure, and running parallel with the delocalisation of political decisional processes. What is at stake here is not only the reformulation of an economic and productive structure but rather the way policies are designed, planned, discussed and implemented. That is, politics itself.

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