

## **MAKING FRIENDS WITH WINDMILLS: BUILDING TERRITORIAL CAPITAL**

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**Abstract:** *The role of community engagement in the development of sustainable territorial capital and territory-based governance is explored. The aim is firstly, to describe the development of a community that started in 2006 in a Nottinghamshire village and secondly, to identify what might be learned. The latter is argued to take the form of research principles. The challenges to the development of the community included the coordination of the variety of purposes of the participants. The central tenet of the research principles is the initiation of sustainable interactions that support the improvement of individual life. The principles differ from those of traditional research, but they are shown to belong to the same class as the latter. In the example a sustainable support system was described that enhanced individual activities without the need for a collective preference or some individual's dominance.*

**Keywords:** *Social finance, Territorial capital, Territorial governance, Community, Sustainability, Triple Bottom Line, Research Principles*

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\*The title "Making Friends with Windmills" refers to a fictional literary figure, Don Quixote, who imagined windmills were giants and fought with them. Here we describe how we worked together, rather than fight, to build a wind turbine through a community-based project set up in a village.

## Introduction

Traditional financial systems seem to focus on some forms of capital rather than recognise the many forms it may take. As an example, traditional finance tends not to recognise the role of the creative industries and of capital that tends to concentrate geographically (Boix et al., 2010). While traditional economic activity may effectively determine the use of some forms of capital, other activities may benefit from the use of other forms. For example, there is a growing body of evidence concerning the role of ‘territorial capital’ (Perucca, 2014; p. 538). It refers to the accumulation of resources available inside local communities. The result, referred to as territorial capital, serves as “a system of territorial assets of economic, cultural, social and environmental nature that ensures the development potential of places” (Perucca, 2014, p. 537). The focus in this paper is on the process of accumulating such capital. It is argued to consist of that very process in contrast to more traditional forms of capital. The process may be improved via a number of principles that are shown to belong to the same class as those of traditional research.

The accumulation of such territorial assets is illustrated by what happened in a small Nottinghamshire village. It proved possible to initiate a number of changes that all involved accepted as beneficial. These were not imposed from the outside and depended on participation and on equal voice, albeit quite diverse ones. There was also no attempt to make villagers share their preferences or decide on them. The experience raised the question what could be learned to support such changes (as improvements) and how did they relate to territorial finance. One possibility would be of course to treat that process as a (temporary) product and identify its properties, e.g. in the form of some theory. The one we preferred was to focus on the process, i.e. on the time dependency of the developments – and in that sense decommodify that process. This suggested the notion of a framework as a way to delineate a domain of experiences. The framework that seemed particularly relevant appeared to be that of practical paradoxes such as the Tragedy of the Commons (Hardin, 1968) and the (iterated) Prisoners’ Dilemma (Axelrod, 1984). They identify strategies to prevent any group of participants from controlling the wealth construction in the village.

The paper is organised in seven sections. The second provides details of what happened in the village, the third discusses the advantages of the framework chosen and the fourth explores the processes of constructing collective resources within the framework. In the fifth section, we identify these processes as exemplars of certain research principles. In the sixth section, some practical implications are considered in the context of the banking system. The last section contains the conclusion. The intended contribution is the delineation of what we learned from the experiences in the village and the way it can be summarised in terms of the research principles needed to support the process of accumulating territorial resources.

## The village example

The illustration we use is taken from experiences in a small village in Nottinghamshire. The villagers started to interact and thereby create the human and financial resources to collectively purchase and erect a wind turbine. The community is now busy developing other projects. It consists of a mix of traditional older residents and newer ones, most of whom did not know one another. Part of the reason for that was that there is a busy public road that cuts through the village, creating a physical barrier. The change started when one of the authors met a resident in the bus stop who then offered his barn that was then used to house a

Christmas 'bring and share' meal which led to the development of a forum to discuss concerns such as the dangers of the road and to look for what to do about them. An email newsletter was set up to foster interchanges and bring the community together to overcome the barrier of the road. Sometime later, through the actions of the residents, road-calming measures were introduced. Meetings continued and more ideas were voiced on how to bring about improvements.

The idea of an energy efficient village was mooted in 2006. Eventually after further meetings and surveys a community owned wind turbine was proposed and installed using local skills (in 2009). A website was set up. Capital was raised through transferable shares of £500. It was expected that the investors would benefit from a range of returns above the bank rate and it was agreed that excess returns would flow to the wider community. A plot of land to erect the wind turbine was leased from a farmer whose family had owned the land in the village for generations. The turbine has met its aims so far, which includes offsetting the carbon footprint of the village and the generation of renewable electricity. There is also a reduction in the amount of waste produced and a rise in the awareness of sustainability issues.

The returns from the project have led to the initiation of additional activities: a phone box library, a green scheme to finance householders to switch to low energy, the purchase of a solar farm, financial nudges to use local produce and services and the organisation of educational talks. Moreover, surpluses have been employed in projects that ensure a sustainable source of finance. Some of the villagers that originally had abstained from joining have started to ask for support and appear keen to get involved. Another important type of outcome has been to lend financial and training support for the development of similar activities in neighbouring villages and counties. Surpluses are employed also for events to bring the village together at least once a year.

Regular meetings between directors are taking place to keep the governance in place. Directors are rotated every few years in the Annual General Meetings. The organisation runs with internal and external shareholders. All major decisions are made through general participation. Information is shared through regular newsletters. In addition, the organisation works along with the parish council but is a distinct entity. It has proved possible to handle conflicts, for example someone claiming that projects could be done cheaper, by direct negotiation. No issue is excluded from the discussion.

## **Interpreting the developments**

There are many different ways to learn from the example of the village. One is by noting that they are linked to changes in the wider society. The latter is growing in terms of the variety of its participants, its resources, its background cultures and laws, etc. This is putting existing organisations and communities under severe stress, for example those created by religion or by living relatively closely together. While individuals are connected technologically and economically more than ever before, the number of collective amenities in the rural area is diminishing, for example schools, pubs, shops, libraries and doctors; communities and villages lose the lifestyle they developed through their depletion. The example, presented in this paper, shows that this tendency can be resisted.

Another interpretation takes its lead from more specific societal changes. Two are the 'financialisation' of society (Epstein, 2001) and the increasing emphasis on consumption. The quality of life is often valued less in terms of love, life and laughter, i.e. in terms of the process of human life, and more in terms of financial costs and gains. Lifestyle is, hence, being commodified. Differences in individual values are corroded by the urge to compete

with others in owning ‘things’ and there seems no longer space to build (free) resources together. Although Arrow (1950) showed the impossibility (not just the difficulty) to align individual preferences into a social welfare function, the example suggests a way out. One should focus on the way villagers interact and thereby create resources that help enrich their lives.

A third way to learn from the example is to contrast two types of approaches. The first focuses on observing from the outside of what is happening and on transforming what is experienced into knowledge that can be transferred to other parts of society. The procedure is called traditional, as it has persisted for a long time. Its first step is to collect the observations (data), which villagers report concerning what is happening, map them onto statements (often equations) and when the quality of the mapping is high, use these equations to predict the consequences when something is changed. This means that interventions, to repeat the example in other communities, are based on knowledge.

The second approach is to explore the example from the point of view of those internal to the development, i.e. the villagers. One cannot assume that each is aware of what happens or has happened to other villagers. Each presumably focussed on finding resources to benefit, while trying to serve as resources to others. An example that comes to mind is a flock of geese. As Reynolds (1987) has shown each goose profits from flying together, but the strategy to do so is to only relates to neighbours. The result is the usual V-formation. The villagers similarly seem to have linked to some neighbours, but not all, thereby starting a number of beneficial activities.

The first approach leaves out a number of aspects. It does not include preferences, objectives and other non-observational experiences. It leaves out that individual villagers have their own life to live and do not appear willing to contribute to others. Every individual accumulates capital, but not the resources that others may provide. The second approach appears limited in that people do not seem to follow a strategy to cooperate with ‘neighbours’, in the sense the geese appear to do. Both these comments suggest that what one might like to learn from the example is to combine the approaches, i.e. to develop cooperation from the inside and check on what is achieved from the outside. The result may take the form of conscious sustainability or of an ‘anti-fragile’ system (Taleb, 2013) that benefits a community socially, financially and with respect for the environment, i.e. as a triple bottom line approach (Elkington, 1997).

### **A research framework**

To further explore this combination we tried to identify what the example teaches us. It obviously is not the fact that one can buy a wind turbine, or implement a website. What stands out is the way local interactions contribute to benefits that accrue to all participants and that together can be recognised as a self-defining system – just as in the case of the geese. Each goose is able to individually save energy by cooperating with some others, while at the same time creating something that benefits outside observers (the spectacular V-formation), even though this is not intended by the flock. In the same way the villagers seem to have found resources to support their own activities while creating what benefits the village (including those who do not participate), even though this was not intended.

This type of lesson appears to be an old one. Examples include classical dramas (the Oresteia by Aeschylus, where individual revenge clashes with the law), but also modern ones like the Tragedy of the Commons (Hardin, 1968) and the Prisoners’ Dilemma (Axelrod, 1984)). Their defining characteristic is that what happens on one level of organised activity

(i.e. the level of the individual) helps to create another level (that of the meadows getting overgrazed; that of the Prison authorities who wish to know ‘who did it’). In both cases, the lesson is that the effects on that level are unintentional. They may be beneficial (as in our example), but also disastrous – but those on the first level appear unable to avoid the latter.

As the concept of a tragedy refers to the latter inability (the individual cannot control the second level effect, however well-intentioned), it suggests that there is no way to avoid it. That is not necessarily the case. Three strategies may be distinguished to avoid the tragic inability to control fate (i.e. the second level). Taking the case of the Tragedy of the Commons (Hardin, 1964) (an example whereby the commons can be overgrazed by actions of residents introducing more animals without consideration of the finite nature of the grazing resource) as our example, the first strategy is to limit the free use of the commons (i.e. the capital or resource that farmers use to feed their cows and get more). This is something a government may do – for example by introducing capping and have grazing policed (the first strategy), or by instituting property rights (the second strategy). The third strategy is to cooperate such that the tragedy is prevented from occurring (Rapoport, 1974; Axelrod, 1984).

That is quite remarkable as tragedies appear relatively common, which emphasises the value of what happened in the village. For example, Kolb (2010, p. 496) points out that “market participants are motivated to protect themselves but not necessarily to protect the system as a whole. This results in a type of ‘Tragedy of the Commons’, a collective action problem in which the benefits of exploiting finite capital resources accrue to individual market participants, each of whom is motivated to maximize use of the resources, whereas the costs of exploitation, which affect the real economy, are distributed among an even wider class of persons”. Adverse events such as a financial banking crisis exemplify the inability to avoid the negative effects on the second level.

What may be learned thus is that in our example no tragedy has occurred yet and that this appears to be due to the careful way interaction was supported. Offering contributions started out as accidental, for example, but a conscious effort was made to keep it that way. It was also attempted to avoid anyone claiming to ‘know better’ and dominating the interaction like a dictator or government. Disagreement, for example over what would be cheapest, was encouraged. Contributions developed freely, while conflicts between individuals rather than over issues were nipped in the bud. As they could be accessed as resources, they served as social capital (Bourdieu, 1986). They refer to the experience of living in a community – so they may also be labelled ‘territorial capital’ (Camagni, 2008). Such capital identifies the “shadow of the future” (Axelrod 1984, p. 126) that is forever present in the interactions. Awareness was also encouraged that interaction is a process where the outcome cannot be predicted and where participants’ experiences (like smell, preferences and emotions) are modified such that as contributions they benefit the participants. Eventually the wind turbine was no longer discussed. It is part of the consciousness of the village that it is there.

Once the lesson the example provided was identified, the question arose how cooperation might be strengthened (and tragedies avoided) systematically and the experience transferred.-or in other words, whether the process of doing so might be a form of research that would be closely related to traditional research (i.e. focussed on the acquisition of knowledge). The latter also aims to avoid a type of tragedy, which is that no high quality mapping can be found (i.e. knowledge) and hence that the effects of its use cannot be controlled. The latter is referred to as a ‘wicked problem’ (Churchman, 1967; Rittel and Webber, 1973); it conveys the idea that interventions based on knowledge of insufficient quality generate reasons for new interventions without end.

### **Research principles acquired**

To determine whether what was learned could serve as a form of research it seems useful first to consider what form of thinking research exemplifies and then to relate it to what happened in the example. This form of thinking is characterised by the use of axioms as a way to determine the shapes in which it may proceed. This suggests a relatively straightforward way to identify what alternative forms there are: they should all satisfy the same axioms. What needs to be done therefore is to identify whether what we learned via the example satisfies the same axioms as traditional forms of research. We identify the parts of what we learned in relation to the axioms of traditional research, to demonstrate that they satisfy the same axioms. It may be noted that the axioms allow for more forms of research than just the two discussed here, for example those of decision-making (Edwards, 1954), problem solving (Newell and Simon, 1972) and game theory (Von Neumann and Morgenstern, 1944).

The first step in our example was to bring together a number of individuals (for example the two who met in the bus stop). This is linked to the construction of a set of reported observations or data (axiom 1 of traditional research). The individuals have to be invited to consider each other as possible members of an interaction. This second step is linked to the selection of sentences (axiom 2). Interactions should then be initiated. This third step is linked to the mapping of the set and the sentences (axiom 3). The interactions have to be strengthened and improved. This is linked to the fourth step, which is to increase the quality of the mapping (axiom 4). As what we learned from the example and traditional research satisfy the same axioms, they belong to the same class. This completes that argument that the example does suggest a form of research. In both cases there is a process of improvement – the one leading to knowledge as a resource to any action, the other to interactions that help construct resources to individual actions.

### **Towards a sustainable financial sector**

How can community/territorial capital contribute to traditional capital? One has to only look at the Greek Tragedy that is being recently played out. Here is a country where principal actors exchanged promises and money to bring about greater prosperity when Greece joined the Euro-zone. Negotiation deals were done with officials taking weighty decisions. As a result, individuals and communities inside the country have been made responsible for external decisions. The current danger of rift has no satisfactory solution in the immediate future and the tragedy will influence the regional geopolitics and probably the world economic outlook also. This top down approach did not engender any sustainable capital in the longer term; no improvement at the individual or the collective level can be claimed. Conversely, as what happened in the Nottinghamshire village contrasted completely in terms of management styles. The former was a top down approach, whereas the village made changes based on grassroots' consensus.

Neoliberalism and financialisation have, at their heart, clear ideas about how political economies should behave (Zhang and Andrews, 2014). The financial and banking systems that were the backbone of economic development (through activities such as investment banking, mortgage booms and cheap, easy lending) in the previous century have been severely criticised and continue to be subject to invective, attack and fines. What is criticised, for example, is that they do not seem to support economic development via high quality contributions. Particularly irksome is the increase in salaries for their managers that appear undeserved and their apparent lack understanding or imagination of societal needs at local

level. Thus upside risk (gains) have brought personal benefits but downside risk (losses) accrued to society at large without much effect on the financial actors. The main result appears to be that there is a strong focus on financialisation and globalisation. This is not to say, of course, that finance does not have an important role in economic development. It is to say that processes of financialisation have tended to induce a special type of tragedy, i.e. an increasing neglect of the process aspect of capital formation, in particular of aspects such as individual preferences, objectives and positions. This justifies our attempts to find ways to re-introduce these aspects in the way of research, as developed in the previous section.

This appears even more important given that fact that in the UK alone, 5 million micro-businesses account for 96% of all businesses, 33% of employment and 19% of turnover (Ward & Rhodes, 2014). Many struggle to get the financial help they need as in the post crisis era they are deemed to be risky. This means that voluntary interactions such as those of our example among these businesses can be very important in creating further resources. In this context Wigstrom (2013) believes that “[c]urrent supply-side policies aimed at increasing investment in the infrastructure and in small- and medium-sized enterprise (SME) sectors are likely to fail because they neglect constraints and market failures on the demand side” (p. 22). We see this as referring to the constraints in interactions. Wigstrom proposes that “[i]n contrast, a commercially operated but mandate-driven public investment bank can mitigate market failures on both sides by not only supplying capital on favourable terms to financially viable projects but also stimulating demand through policy-signalling effects”. What he seems to be saying is that policies to stimulate activities such as in the case of the Nottinghamshire village may help reinstate respect for individuals and allow such villages to build powerful forms of territorial capital.

To clarify the ideas presented, a number of quite concrete suggestions can be derived from the characteristics of interactional research (as derived from the example). We thus propose that banks start research to help communities develop their various types of resources, e.g. via some form of relationship banking. This could be done by arranging community events and encouraging opportunities for interaction – with a clear focus on increasing territorial capital. It would appear that information and agency costs could be reduced, as would reputational risk. A number of studies have indicated that engagement in corporate social activities may be of benefit, but the success would depend on the path dependency of stakeholder engagement (Barnett, 2007). Rowe et al (2014) have collected empirical data from various communities to judge the impact of corporate engagement activities. Berger et al. (2013) propose a number of banking structures that can support communities. They conclude that small businesses are better served by community banks (small, single-market, local institutions) that are able to form strong interactions with their inhabitants. Liu, Eng, & Ko (2013) discuss the literature on social capital and community initiatives. There appears to be little literature, however, on how communities can serve the financial sector.

It may be surmised that many of the criticisms of banks are due to the fact that larger corporates can make dominant contributions to interactions and thereby accelerate the occurrence of a Tragedy. Being dominant and following a ‘top down’ approach may be necessary, but we suggest that care should be taken to follow the appropriate form of research (sections 4 and 5). As argued above, without it there will be a tendency to focus on financialisation and commodification due to corporate greed. Alternatively, the capital generated by community activities would benefit the financial sector. Surpluses from territorial capital enrich the economy in a sustainable way. It would thus appear that having a community cell would alert financial institutions to opportunities to contribute to economic

activity by more extensive forms of interaction and engagement. The initiatives in our example came from the community and not from any financial institution. Even so, various banks have benefitted from the activities in the village.

It would appear that the procedure we identified on the basis of our village experiences and that we showed to be a form of research is ready to be transferred to effects elsewhere. This suggestion should not be read as an attempt to generalise a statement. It refers to the fact that our procedure consists of (assumed) instructions that are addressed to anybody who aims to improve interactions (in the sense defined above). This means that they are not addressed to those who are isolated. They also are not addressed to those who wish to exploit others – as their implementation prevents such dominance. This suggests that the instructions may be especially useful to small entrepreneurial businesses that aim to follow our example. Involving communities may increase common financial resources as well as benefit corporations, including financial institutions.

### **Conclusions and future research**

We described a village that managed to create resources to deal with their (varying) preferences and purposes. The procedure that was followed was the starting point of our investigation of what could be learned from these experiences. It was noted that its structure could be described by situations such as those of the Tragedy of the Commons, a tragedy in the sense that individual activities do not necessarily control those implied by the interaction – so it sometimes is good strategy to accept fate (and the Tragedy). A key role in generating resources in communities are interactions as these do provide the opportunities for collaboration but also for dealing with community's and its assets and wealth constructions, i.e. their 'conscious sustainability'. The main issue with these interactions was identified in that communities are not externally defined but built and maintained through self-reference processes. The paper has explored the connections or implications for new forms of sustainable financing, e.g. where wealth creation is driven and coordinated by those who contribute to the wealth creating activity (like the wind turbine).

Authors writing about traditional financial systems do not appear to be unaware of alternative forms of capital as described here. These include initiating innovation and concentrating activities geographically (Boix et al., 2010). One possible explanation of the apparent lack of attention these forms suffer is that the alternatives do not lend themselves to the usual forms of research – so they are left out by default. The situation may be remedied by providing an approach to research, as presented in this paper, that does help to develop forms of capital that are social as well as territorial – in the sense of Perucca (2014, p. 537).

## References

- Arrow, K.J..(1950). A Difficulty in the Concept of Social Welfare, *Journal of Political Economy*, 58: 328–346.
- Axelrod, R. (1984). *The Evolution of Cooperation*. New York: Basic Books Inc.
- Barnett, M. L. (2007). Stakeholder Influence Capacity and the Variability of Financial Returns to corporate social responsibility. *Academy of Management Review*, 32(3), 794-816. doi:10.5465/AMR.2007.25275520
- Boix, R., Lazzaretti, L., Capone, F., Propriis, L. D., & Sanchez, D. (19th-23rd August 2010). The Geography of Creative Industries in Europe: Comparing France, Great Britain, Italy and Spain. *Sustainable Regional Growth and Development in the Creative Knowledge Economy*. Jonkoping, Sweden: European Congress Of Regional Science.
- Bourdieu, P. (1986). The Forms of Capital. In Bourdieu, *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood.
- Camagni, R. (2008). Towards a Concept of Territorial Capital. In C. R. Capello R, *Modelling Regional Scenarios for the Enlarged Europe* (pp. 33-47). Berlin: Springer.
- Churchman, C. W. (1967). Wicked Problems. *Management Science*, 14(4).
- Edwards, W. (1954). The Theory of Decision Making. *Psychological Bulletin*, 41, pp. 380-417.
- Elkington, J. (1997/1999) *Cannibals with Forks: The triple bottom line of the 21<sup>st</sup> century business*. Oxford: Capstone Publishing Ltd.
- Epstein, G. A. (2005). *Financialization and the World Economy*. Cheltenham, UK: Edward Elgar.
- Hardin, G. (1968). Tragedy of the Commons. *Science*, 1243–1248.
- Kolb, R. (2010). *Lessons from the Financial Crisis: Causes, Consequences, and Our Economic Future*. New Jersey: John Wiley and Sons.
- Liu, G., Eng, T., & Ko, W. (2013). Strategic Direction of Corporate Community Involvement. *Jo of Business Ethics*, 115(3), 469-487.
- Newell, A., & Simon, H. A. (1972). *Human Problem Solving*. Englewood Cliffs, N.J: Prentice- Hall.
- Perucca, G. (2014). The Role of Territorial Capital in Local Economic Growth: Evidence From Italy. *European Planning Studies*, 22(3), 537-562.
- Reynolds, C. (1987). Flocks, Herds and Schools: A Distributed Behaviour Model. *Computer Graphics*, 21(4), 25-34.
- Rittel, H., & Webber, M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, pp. 155-169.
- Rowe, A. L., Nowak, M., Quaddus, M., & Naude, M. (2014). Stakeholder Engagement and Sustainable Corporate Community Investment. *Business Strategy and the Environment*, 23(7), 461-474. doi:10.1002/bse.1796
- Taleb, N. (2013). *Anti-fragile: Things That Gain from Disorder*. Random House.
- Von Neumann, J., & Morgenstern, O. (1944). *Theory of Games and Economic Behaviour*. Princeton, N.J.: Princeton University Press.
- Ward M and Rhodes C (2014) *Small businesses and the UK economy*. [online] London: Library, House of the Commons.
- Wigstrom, C. W. (2013). A British Investment Bank: Why and How? *Global Policy*, 422. doi:10.1111/1758-5899.12045 Available from <http://www.parliament.uk/business/publications/research/briefing-papers/SN06078/small-businesses-and-the-uk-economy> [Accessed 11 March 2015].
- Zeeuw, G. de (2001). Three phases of science: a methodological exploration. *Systemica*, 13 (special issue), pp. 433-460.
- Zhang, Y., & Andrew, J. (2014). Financialisation and the Conceptual Framework. *Critical Perspectives On Accounting*, 17-26.