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"Social Representation and Ecological Citizenship: The case of a wind farm setting."

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Introduction

Recent government initiatives have boosted the development of wind farms. Local reaction is often polarised with negative concerns expressed by residents and associations defending the environment, and more positive attitudes expressed by land owners and local elected officials. During the conflicts initiated by these projects, space, landscapes, environment conservation and local democracy are at the heart of the debate.

Wind turbines are a topic of great current conflict, bringing to light situations revealing the original political and ecological contradictions. The term NIMBY (Not In My Back Yard) is often used to discredit opponents of a project seen as beneficial by the majority (Burnigahm, 2000). Many studies have attempted to explain this phenomenon in the case of wind farm projects. Most of the important studies on the proximity to wind turbines (Warren et al, 2005), show a spatial reversed effect as negative attitudes increase with the proximity of a future wind farm, while these negative views fell in line with the proximity of an existing wind farm. These results are consistent with studies on risk perception, which show that local experience diminishes negative attitudes about the impacts of this facility. But beyond the proximity to the wind farm is also the perception of the environment, which will moderate the acceptance of such project.

Economists differentiate between the environmental values assigned to a territory, use value as regards the economic value of a place taking into account real estate, roads etc. and the values of "non - use", as landscape, quality of life and history which refer to the territorial identity. Woods (2003) showed the impact of these "non-use" values, especially due to the change of the rural population (urban workers in Paris's suburbs looking for a better quality of life, a place to rest), with neo-rural and secondary homes owners, seeking to protect an investment as economic rather than emotional.

Global environmental change leads government to deal with new energy policies which need citizen support, especially in the case of a wind farm setting as a renewable energy investment. We are here facing the role of citizen implication in their town planning, stressing the role of organized action in this kind of group conflict. People need to be involved and educated about environmental issues as depletion of resources and need to change habits. Environmental psychology could help to understand the link between environmental concern and behaviour with the aim of promoting conservation behaviour. Which in this case, means dealing with the perception of both local and global environment, and relates to Greenpeace' slogan "Think Globally, Act Locally".

Social representation forms the link between subject and object, allowing analysis of the relationships between the actors of the conflict and its purpose. The content of social representations tells us about the beliefs, attitudes and practices shared by a set of individuals. (Le Bouëdec, 1984) Indeed, social representations are a system of interpretation by which individual interact with his environment and define their attitudes and behaviour. Flament and Rouquette (2003) consider requirements for the existence of a social representation by stressing that "the relationship with society is fundamental." The first principle is "sociocognitive salience" of the object of representation. This means that the object of representation has to be a social theme. If this condition is filled by the words "environment" and "ecology", we can question the existence of a social representation of a wind farm throughout society, but we believe, however, that in a particular setting where wind farms are a source of controversy widely covered by media, we will approach its social aspect. The second principle concerns the "common practices" related to this subject. We already know that "environment" is an object of representations and attitudes such as attitude of respect and conservation (Kalaora and Savoye, 1985) or the gap between natural environment and built environment (Wohlwill, 1983). Similarly ecology provokes political debate. Finally, the wind farm setting also introduces common practices in the society by dividing it between pro or against wind farms.

If we manage to determine the social representation for groups involved in conflict, then we can better

understand what motivates them to engage in a conflict. In other words, we can better understand their position relative to the object of the conflict, and why the positions and practices of other groups are unacceptable.

Method

The survey was conducted in a peri-urban commune of Ile de France facing conflicts over the setting of wind farm which have been selected from local press “Le Parisien, Aujourd’hui en France” " (17/10/2006) A local referendum approved this wind farm project by 79% of 38% of voters. However, an association of residents “Vent de colère en Visandre" (Angry wind in Visandre) denied this and intented a justice action over this setting run by Energie 21.

The sample consists of 90 participants divided into 3 groups according to their practice of communal space ie: simple residents, farmers, and elected officials of the commune.

The general assumptions are divided into several functional hypothesis, we will present here the main one: We assume that the content of social representations differ depending on the categorical identity of the actors, related to the use habits of their environment.
The questionnaire was made up of research interviews. First we look for the social representations of “environment”, "ecology" and "wind farm" by the method of free association. This method is to propose a term to induce subjects and asking them to produce everything that comes to mind when they think of this word (5 word or phrase). This technique allows easy and rapid collection of information. It also ensures the spontaneity of subjects and allows a classification (by the order of apparition and frequency).

Results and analysis
In identifying the core of representation, prototypic analysis (Verges, 1985) is based on a list of words produced by subjects from a term proposed by the researcher. The prototypical analysis of this list is to take account of the frequency of the word and its rank of apparition. Each of the elements obtained in this way, an average frequency of occurrence and average rank. These two criteria of prototypicality, determine a table with four cases where for each word, its frequency and its order of appearance. There are four possibilities to classify an item: A "strong" has a high frequency of occurrence and a low rank. It will serve to support the hypothesis of existence of a central core in the representation considered. A "low" has a low frequency of occurrence and a high average rank and belongs to the peripheral zone of representation. High frequency and high grade appearance or low frequency and low grade of appearance show ambiguous zones of the representation. Vergés (1992) describes them as "potential areas of change"; between a central, rigid and stable consensus and changing periphery, characterized primarily by individual variations.

Social Representation of Ecology

Farmers

We kept 10 evocations with frequency above 4 and with average grade of 2.72 and average frequency of 6.

	High frequency	Low frequency
Low rank	Protection (16, 1.56) Important (7; 2.45)	Study of nature (6, 1.16)
High rank	Recycling (7, 3) Responsible farming(12, 2,91)	Selective littering (5: 3.6) Water Saving (6, 4) Respect(4, 2.25) Bio fuel (5, 3.4)

This prototypical classification allows us to establish a core assumption of the need of protection with the word "protection" and “important” referring to the attitude reinforced by the word "respect", we see that this theme is reinforced by many terms referring to concrete actions "selective littering", "bio fuel" and parts specific to farmers “responsible farming”, “water saving", indicating the involvement or at least the awareness of farmers towards ecological topics. We also note a definition of ecological "study of nature."

Elected

We kept 12 evocations of a frequency greater than 4 and with average grade 3.17 and average frequency

of 5.75.

	High frequency	Low frequency
Low rank	Study of nature (8, 1.125) Protection (9, 2.11)	Respect (4, 2.75) All concerned (4, 3) Nature (5, 3.2) Global problem (5.2) Awareness (4, 2.25) Urgent (4, 1.5)
High rank	Selective littering (7,4) Behavioural change (6, 4.16)	Less waste (5, 4.4)

This prototypical classification allows us to establish an hypothetic core composed of "study of nature" and "protection". Ie first a definition of ecology, and evokes the attitude that it would be necessary to have stressed by the word "respect" and developed in a concrete way by the words "behavioural change", "selective littering" and "less waste". Finally, a more political aspect is discussed with the devices "all concerned", "global problem", "awareness" and "urgent"

Resident

We kept 11evocations of frequency greater than 4 and with average grade of 2. 9 and 6 as average frequency.

	High frequency	Low frequency
Low rank	Recycling (10, 2.7) Protection (11, 2.56) Important (9, 1.62)	Study of nature (6, 1) Cleaning (5, 2.6) Politics (4, 2.25
High rank		Less waste (5, 3, 2) Save the planet (6, 4.66) Necessary (5, 3) All concerned (6, 6) New energy (5, 3.6)

This prototypical classification allows us to establish an hypothetic core composed of "recycling", "protection" and "important", which underline the right attitude and behaviour to adopt, stressed by more concrete terms as "clean," less waste "," new energy". This then refers to political responsibility on this issue, with the words "politics", "save the planet", "necessary", and "all concerned ". Finally there is a definition of ecology "study of nature."

Social Representation of the environment

Farmers

We kept 9 evocations with a frequency greater than 4 and with average grade 2.81 and average frequency 7.33

	High frequency	Low frequency
Low rank	Water (19, 2.47) Nature (13, 2)	Ecology (5, 2) Air (5, 2.6) Country(4, 2.25)
High rank		Planet + (6, 4.33) Pollution (6, 3.16) River (4, 3) Around us (4, 3.5)

This prototypical classification allows us to establish a hypothetic core composed of "water" and "nature". Both terms refer to the natural environment and are reinforced by the words "air" “country" and "river". Then two opposite aspects of the environment are described with "pollution" and "ecology". Finally, a broader vision of the "planet" and everything which is
“around us”.

Local official

We kept 13 evocations with a frequency greater than 4 and with average grade 2.64 and 6.30 average frequency.

	High frequency	Low frequency
Low rank	Planning (7, 1.7) Nature (18, 2.05)	Important (6, 1.5)

	Around us (10, 1,165)	
High rank	City (7, 3.8)	Construction/ building (4, 4) House (4, 2.75) Responsibility (4, 3.25) Protection (6, 4.5) Human action (5, 3.2) Ecology (5, 2.8)

This prototypical classification allows us to establish a hypothetic core composed of the terms “around us”, "planning" and "nature", which evokes a large vision of the environment with at first the natural environment, but also a political and “planning” aspect reinforced by "responsibility", "human action", "important". The urban setting is also referred by the term "building", "house", "city". Finally evocations of "protection" and "ecology" reflect the necessary measures.

Resident

We kept the 13 evocations of frequency greater than 4 and with average grade 2.72 and average frequency of 5, 73

	High frequency	Low frequency
Low rank	Around us (10, 2.2) Nature (12, 2.25)	Everything (5, 1.6) Ecology (5, 1.4) Problem (5, 2) Water (4, 2.5) Country (5, 2.4)
High rank	Planet (7, 4) Awareness (6, 4.5)	Life (4, 4.45) Important (5, 3.6) Air (4, 2.75) Respect (4, 3.25)

This prototypical classification allows us to establish an hypothetic core consisting of "around us" and "nature". Referring to a broader aspect of the environment enhanced by the evocation of "planet", "everything", "life", and also the theme of the natural theme “water”, “country”, “air”. The political aspect is also discussed with the words "important", "awareness" "ecology" and "problem". Finally, the steps appear with the words "recycling" and "respect."

Social Representation of Wind Farm

Farmers

We kept 11 evocations with a frequency greater than 4 and with average grade 3.01 and 6.54 average frequency.

	High frequency	Low frequency
Low rank	Clean energy (11, 1.72) Electricity (9, 2.22) Economy (8, 2.3)	Progress (5, 2.6) Renewable energy (5, 1.8)
High rank	Use the wind (7, 3.42) Ecology (7, 3.28)	No pollutant (4, 5) Future (4, 4.75)

This prototypical classification allows us to establish an hypothetic core composed of "clean energy", “electricity” "and" economy ". "Energy" and "power" presents a definition of the wind turbines may have to add that "renewable energy" and "use of the wind" while the "economy" is one of the advantages listed strengthened by "not pollutant." The innovative aspect is referred to by "progress" and "future". Finally, the political aspect is shown by the term "ecology".

Local officials

We kept the 8 evocations with a frequency greater than 4 and with average grade of 2.56 and average frequency 7, 25.

	High frequency	Low frequency
Low rank	Electricity (14, 1.71) Clean energy (11, 1.36)	Renewable energy (6, 1.66) New energy (8, 2.25)
High rank		No nuisance (5, 4.2) Modernization (5, 3, 36)

		Use of natural resources (6, 3) Ecological progress (4, 3)

This prototypical classification allows us to establish an hypothetic core composed of "electricity" and "clean energy" that define the wind power reinforced by "new energy", "renewable energy", "use of natural resources". These evocations describe the modern aspect of this new technology with "modernization" and "ecological progress", stressing the positive aspect "no nuisance".

Resident

We kept 10 evocations of frequency greater than 4 and with average grade of 3.11 and average frequency 6.

	High frequency	Low frequency
Low rank	Clean energy (7, 2.28) New energy (7, 2.7) Not pretty (12, 2, 39) Nuisance (7, 2.57) No pollution (14, 2.9)	Wind (4, 2.9)
High rank	Electricity (11, 3.36)	Fashionable (5, 4) Destroy the landscape (5, 3, 8) Future (4, 3.5)

This prototypical classification allows us to establish a core assumption of several words, "clean energy", "new energy", "not pretty", "nuisance", "no pollution". These terms are involved first in the definition of wind power strengthened by "electricity" and "wind" while "no pollution" refers to the benefits of wind power. We note that the mention of the disadvantages are significant, demonstrating the presence of negative aspect "not pretty", "nuisance", "destroys the landscape" and even "fashionable" which moderate the evocation "Future" referring to progress made by the wind power and therefore part of its positive aspects.

Discussion

We can partly confirm our hypothesis (We assume that the content of social representations differ depending on the category of membership of the actors). Thus representations of ecology differed little between residents, elected officials and farmers with reference to common evocation of the term involved in the definition of ecology, with the reference "study of nature," an evocation of pro environmental attitudes "protection", reinforced by concrete example "less waste" and a political view of this issue with "political", "awareness", which is absent in the representation of farmers who show a strong awareness of their personal role (as farmers) in relation to ecology. Thus there is little difference despite the greater involvement of farmers.

As for the representation of the environment, we found in all groups the strong presence of the natural environment "nature", but also a broader vision "around us", the political aspect is also referred to " ecology ", but more pronounced among the elect who also mention the non-natural environment, with the words" city "," house "... While farmers insist on issues related to use habits as " water ", "river" and more generally "country" in leaving the subject of practical measures referred to by elected officials and residents" protection "," recycling ". Finally the social representation of wind farm are evoked in terms of definition of "clean energy", "electricity", we can see that if all mention of the positive aspects of wind energy with terms such as" future "," progress" "clean". The negative aspects of wind energy are stressed only by resident with "nuisance", "destroys the landscape" and even "fashionable".

This shows that we could explain different group positions in this conflict by several differences in their social representation of the principal matter: perceived environment. Thus farmers and local official are aware of their own responsibility towards the environment by their use or planning activities, while residents stress the landscape aspect and seem to be more passive. This could help to understand local opposition to such land planning despite commitment of ecological concern.

Simple residents have a global vision of environmental issue and tend to stay passive, even if they are aware of the consequence s of this issue. That is why, in order to get them more environmentally friendly, we need to get them more involved in local issue as citizen by giving them more decisional power, in this

way they will have an higher perceived control of the situation.

Conclusions

The neo-rural form a particular group because of their systematic opposition to the wind farm setting, in fact they seem to have a specific approach to their environment, primarily concerned with conservation of landscape and quality of life. Thus they support the ecology in general, while denying the environmental measures: they are directly involved in NIMBY-phenomenon.

We could assume that a change of perception will occur once the turbines will be installed. However, we can influence the acceptability of the project before the setting by working on social representation of the environment in the direction of greater recognition of the built environment and environmental realities at the expense of landscaping aspect with the development of environmental practices in the municipalities. Similarly the social representations of wind farms can be modified by the involvement of residents in the project and education towards ecological issues.

References

Burnigham, K. (2000) Using the laguage of NIMBY : a topic for research, not an activity for researchers. *Local Environnement* 5 (1). 55-67

Deutsch, M., Coleman, P. (2000) *The Handbook of Conflict Resolution: Theory and Practice*. San Fransisco: Jossey Bass

Flament, C., (1994) *Structure, dynamique et transformation des représentations sociales*, Paris : Presses Universitaire de France.

Flament, C et Rouquette,M-L (2003) *Anatomie des idées ordinaires*. Presses Universitaires de France.

Guimelli, C., (1994) Transformation des représentations sociales, pratiques nouvelles et schèmes cognitifs de base. In : C. Guimelli (ed.), *Structures et transformations des représentations sociales.* Neuchâtel: Delachaux et Niestlé, 171-198

Garling, T. Golledge, R. [(Eds.) (1993) *Behavior and Environment: Psychological and Geographical Approaches.* Amsterdam: North Holland.

Kalaora, B., Savoye, A. (1985) La protection des régions de montagne au XIXéme siècle : Forestier sociaux et forestier étatiste. In A. Cadoreta, *Protection de la nature : histoire et idéologie. De la nature à l'environnement*, Paris : L'Harmattan. 6-23

Kaplan, S., Kaplan, R. (1982) *Cognition and Environment*. NY: Praeger

Le Bouedec, G. (1984) Contribution à la méthodologie d'étude des représentations sociales. *Cahier de psychologie cognitive*, 4, 245-272

Lynch, K. *The image of the City*, M.I.T press, Cambridge, Massachusetts, 1960

Stokols, D., Altman,I. (Eds.) (1987). *Handbook of Environmental Psychology*. New York: Wiley.

Torre, A., Filippi, M., coord. (2005) Proximités et changements socio-économiques dans les mondes ruraux. Paris : INRA Editions, Coll. Un point sur, 337 p.

Van der Horst, D., (2007). *NIMBY or not ? Exploring the relevance of location and the politics of voiced opinion in renewable energy siting controversies*. Energy Ploicy 35, 2705-2714

Vergès, P., (1992) L'évocation de l'argent : une méthode pour la définition du noyau central d'une représentation. *Bulletin de Psychologie*, numéro spécial : Nouvelles voies en psychologie sociale, XLV, n°405, 203-209.

Warren, C.R., Lumsden, C., O'Dowd, S., Birnie, R.V., (2005) Green on green : public perceptions of wind power in scotland and Ireland. *Journal of Environmental Planning and Management* 48 (6) , 853-875

Wohlwill, J.F. (1983) The concept of nature: a psychologyst's view. In J.F Wohlwill, *Behavior and natural environnement* New York: Plenum Press. 5-37

Woods, M., (2003) *Deconstructing rural protest : the emergence of a new social movement. Journal of*

Rural Studies 19, 309-325

Wolsink, M. (2000) Wind power and the NYMBY-myth : institutional capacity and the limited significance of public support. *Renewable Energy* 21, 49-64

Wolsink, M. (2006) *Invalid theory impedes our understanding a critique on persitence of the language of NIMBY*. Transaction of the Institute of British Geographers 31(1), 85-91.