The role of collective action at a territorial level in promoting agroecological practices. A case study of a deliberation process between farmers and consumers.

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Study area

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Situation

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Agronomical
- Longer crop rotations => Decreased pressure of pests
- Optimization of natural nitrogen flows (symbiotic plant)
- Supporting soil biodiversity
- Solubilization of phosphorous...

Environmental
- Greenhouse gas emissions are reduced ...
- ... as pesticides and nitrogen fertilizers,
- Less consumption of non-renewable energy
- Improvement of biological diversity...

Societal & territorial
- Creation of jobs in the territory (new agrofood chain)
- Improvement of landscape diversity
- Local food consumption offer
- Integration in collective catering ...

Economical
- Fertilizers can be saved during two cultural cycles ... more yield to the next crop,
- Pesticides saving...
- Better resilience to aleas because off the longer crop rotation and the crop diversification...

Nutritional
- Vegetable protein source
- Low glycemic index
- Low fat
- Antioxidant
- Satiating effect...

Legumes & pulses’ interests

Pulses
(chickpeas, beans, lentils)
Challenges

- Financial motivation
- Nutritional motivation
- Territorial motivation
- Agronomic motivation
- Environmental motivations
- Societal concerns

**REASONS FOR ACTION**

- Going beyond a paradigm centered on production
- Reconsider the meaning of the profession

**Market, public policies**

**Institutional change** (Hodgson, 2006)

**Agroecological transition**
“In what way social interactions (studied within the GIEE) could favor the institutional change materialized by the agroecological transition, and more specifically its expression represented by the introduction of pulses in the rotations.”
Theoretical framework

**SOCIAL INTERACTION**
- Bromley (2008): role of social interactions to update the actors’ reasons for acting
- Dewey (1938): a way to “investigate”
- Commons (1934): “Negotiating rules for future activities”

**DELIBERATION**
- Commons (1934): transactional activity fostered by an interactive debate
- Sen (2005), Del Corso & al. (2015, 2017): deliberation and its ability to trigger a confrontation of actors’ interests
- Dewey (2011), Kenter (2016): expression of common values to foster agreement towards a desirable goal, particularly “transcendental” values

**SOCIAL LEARNING**
- Reed (2010): occurs a change in understanding
- Grainger & Stoeckl (2019): deliberation facilitates the valuation of goods that generate a range of benefits for a wide range of people
Values motivate action

Value: everything that has such authority that we refer to it to lead our lives (Dewey, 1929)

Values are related to affects. They guide, motivate the action of individuals or groups of individuals (Schwartz, 2006)


Dynamic underpinnings of the universal value structure

Theoretical framework

Use of a « mediation artifact » in deliberation to provoke reflexivity on the practices in the light of societal issues

Dewey, 1929 : reflective knowledge as a means of regulation and as instrumental value
Commons, 1934 : the role of the meaning and the evaluation, from which people build its ideas

We have used the « cultural-historical psychology » approach to further explore this concept

Vygotski (1934), Engeström (1987), Rabardel (1995) : using of mediating artifacts to enable the actors to update their initial positions

Vygotski, 1934 : Human beings have the ability to control and transform their behaviors by involving an external cultural artifact, a symbolic form to which they confer meaning
Engeström & Sannino 2013 : Artefacts must be embodied by the participants as an instrumentality to resolve their conflicts and invest in agentive initiatives to transform their activities
Theoretical framework: the mediation artifact

From Vygotski, 1934
The artefact « quality »

A territorial notion
(Mollard, Pecqueur, 2001, 2008)

An open-ended concept, with wide range of meanings
(Stanziani, 2005)

Farmers done a strong link between quality of the product and their practicies (survey)

A very common notion in the cooperative and for the farmers. Also familiar to public.

The emerging concerns modify the representations of quality (Allaire, 2010)
**METHODOLOGY**

First step: an inventory about farmer’s perceptions

- Perceptions about pulses
- A questionnaire to the 300 pulses’ producers
- 239 replies

**STATIC OBSERVATION**

R analysis (descriptive statistics...)

Textual analysis (IRaMuTeQ)
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METHODOLOGY
Second step: deliberations between farmers and citizen-consumers

Organic farming. Secteur de « Lauzerte »

Organic farming. Secteur de « Monfort »

Conventional farming Secteur « Saint-Paul d’Espis »

7 to 10 participants by discussion groups
Equal numbers farmers/citizens-consumers
METHODOLOGY

Focus groups between citizens-consumers and farmers

+ 5-6 days

Short questionnaire

+ 1 year

Results restitutions

Several steps to take into account the effects of time

The artefact in abstract context

Collective definition of quality

Debate on the interests of pulses... Any links with quality ?

Concretes links with the artefact

Deliberation about the practices needed to preserve quality

Association with Schwartz values

3 questions : Did anything surprise you during the discussion ? Do you envisage short-term practices evolving ? Do you have medium-term projects about these topics ?

Feedback, comments, local actions and projects...

DYNAMIC OBSERVATION
Methodology: data analysis

Focus groups between citizens-consumers and farmers

Collective definition of quality

Debate on the interests of pulses... Any links with quality?

Deliberation about the practices needed to preserve quality

Analysis of individual and collective votes

Recording of the exchanges

Transcription

Iramuteq: Analysis of similitude correspondence factor analysis CFA Descending Hierarchical Classification DHC

Textual analysis (IRaMuTeQ)

Discourses analysis (Nvivo)
RESULTS

Questionnaire: motivations to introduce pulses

Economic and agronomic motivations

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RESULTS

Organic farmers are more open to social dimensions

Motivations to introduce pulses in crop rotations

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What about the impact of deliberation process using quality artefact on preferences transformation?
A transactional process has been revealed
### Five dimensions of quality

<table>
<thead>
<tr>
<th>Security/origin, traceability, label…</th>
<th>Security/health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• tracé, traçabilité, info/traçabilité</td>
<td>: Lauzerte, Monfort, SPE</td>
</tr>
<tr>
<td>• circuit-court</td>
<td>: Monfort, SPE</td>
</tr>
<tr>
<td>• certifié, labellisé, origine</td>
<td>: Monfort</td>
</tr>
<tr>
<td>• Confiance, traditionnel</td>
<td>: SPE</td>
</tr>
<tr>
<td>• sain, naturel, nutritif</td>
<td>: Lauzerte</td>
</tr>
<tr>
<td>• produit sain et brut, nutritif</td>
<td>: Monfort</td>
</tr>
<tr>
<td>• naturel, produit brut</td>
<td>: SPE</td>
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</tbody>
</table>

### Taste properties

| • goûteux                              | : Lauzerte       |
| • de saison, goût                      | : Monfort        |
| • goûteux, de saison, bonne maturité   | : SPE            |

### Ethical dimensions

| • responsable/environnement, durable  | : Monfort        |
| • diversité, bonnes pratiques         | : SPE            |
| • Équitable                           | : Lauzerte       |
| • Juste pour le producteur            | : SPE            |

### Pedagogical dimensions

| • communication, éducation            | : SPE            |

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### Results: example of association between terms of quality and Schwartz value

<table>
<thead>
<tr>
<th>Category</th>
<th>Terms</th>
<th>Verbatims (example)</th>
<th>Schwartz value</th>
</tr>
</thead>
</table>
| Ethical dimensions | Responsible for the environment, durable | « As a producer, I would like to impact as little as possible the environment, to transfer the farm to my daughter ."  
"Sustainable is that we can produce during long time. » " | Universalism/ Self-transcendence |
|                  | equitable                            | "A good product is a good that can be produced for everyone and not just in very few quantities.«  
"It is also a good that respects humans. For example a fair distribution." |                              |
|                  | Fair for the producer                 | "The right price and the right quality of work. It means that they [the farmers] are not modern slaves."  
"The income, the fair price for the producer". |                              |
Results: a transactional process that favored social values

- Security/origin, label, relations...
  - Traceability, short-circuit, trust

- Security/Health
  - Healthy
  - Nutrient

- Ethical dimensions
  - Durable
  - Equitable
  - Fair for producer
  - Responsible for environment

Social values (Schwartz, 2006)
Universalism

Ethical dimensions (Schwartz, 2006)
Results: a transactional process that favored social values

Distribution of votes in points (%) attributed by category for all groups
Results: a transactional process based on trust

The trust

Securisation
- Origin, label
- Garanties
Consumption
- Purchase
- Use
Transaction

Textual analysis IRaMuteq
Results: artefact generated reflexivity about practices

From abstraction to concrete:

- The Attributes of Quality
  - The Pulses
  - The Territory

Reflexivity:

- Quality
- Practices

The Pulses

The Territory

Articulation:

Artefact generated reflexivity about practices
Results: artefact generated reflexivity about practices

THE TASTE: “If the product has been well cultivated, in the standards, it will be tasty and fragrant”

« It's also education, when you go shopping, you have to learn saying no when it's not the season »
« Of course, it is a product that can be grown without putting a lot of fertilizer or inputs like other cereals.
"These exchanges reinforce my choice to develop and to improve the production of pulses as well as to practice interventions that respect our soil and wildlife."
Results: local actions in process

Conventional farming
Secteur « Saint-Paul d’Espis »
No action plan explicitly defined. Probable communications on the website of the Community of Communes or in the municipal newsletter.

Organic farming.
Secteur de « Monfort »
Farmers interventions in school canteens about pulses (organizing with Community of Communes).

Organic farming. Secteur de « Lauzerte »
Group meetings to develop a local production offer to consumers.
Discussion: could an agronomic entry be more efficient for conventional farmers?

Which stage of concepts transformation for the different groups?
Discussion: quality artefact mediated a transactional process based on two poles.
Discussion: quality artefact mediated a transactional process based on two poles ofvalue.

**THE TRANSACTION**

<table>
<thead>
<tr>
<th>Personal focus</th>
<th>Self-enhancement</th>
<th>Conservation</th>
<th>Openness to change</th>
<th>Self-transcendence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety-based values</td>
<td>Prevention of loss goal</td>
<td>Security</td>
<td>Achievement</td>
<td>Power</td>
</tr>
<tr>
<td>Anxiety-free values</td>
<td>Promotion of gain goal</td>
<td>Conformity</td>
<td>Stimulation</td>
<td>Self-expansion and growth</td>
</tr>
<tr>
<td>Self-protection against threat</td>
<td></td>
<td>Tradition</td>
<td>Self-direction</td>
<td>Universalism</td>
</tr>
</tbody>
</table>

*Schwartz (2006, 2012)*

Expansion

Transcendental values (« the driving forces »)

The issue of the institutional change?
Discussion: the quality artefact has two functions

- Normative dimensions
- Imaginative dimensions

Artefact II

Artefact III

New possibilities

Wartofsky (1979), Cole (2019)
Conclusion: a transferable method on conditions

Several criteria are needed for using an artefact in deliberation. We think the artefact should:

- support meaning => contextual or societal links?
- support transcendental values (the driving forces)
- stimulate imagination (artefact III) => to support actor’s creativity
- be taken by the actor’s => what about governance? What about operational criteria? (artifact II)
Conclusion: using mediation artefact quality raised awareness, let expression of shared values, questionned practices regarding territory scale.
Thanks for your attention

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