

## Representations of pesticides and social practices: the case of French farmers and students

**B.Zouhri\***, **M. Feliot-Rippeault\*\***, **E.Michel-Guillou\*\*\*** & **K.Weiss\***

\*Université de Nîmes, [Laboratoire Chrome \(EA 7352\)](#)

\*\*Université de Martinique, [Groupe BIOSPHERES \(EA 929\)](#)

\*\*\*Université de Bretagne, [Centre de recherche en psychologie, cognition et communication \(EA 1285\)](#)

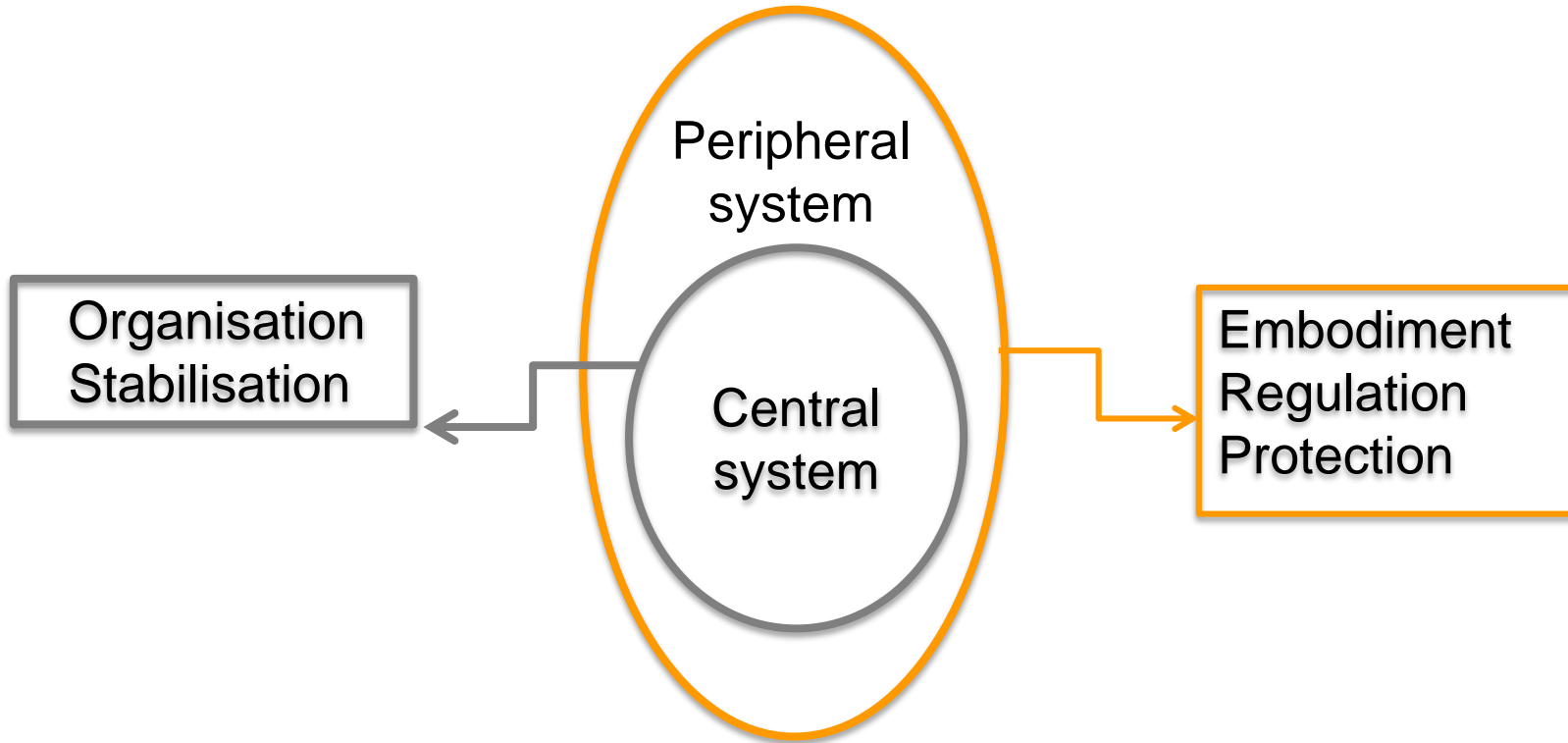


- 29 hectares of agricultural land and a turnover of 96 billion euros from agricultural production.
- France is the leading agricultural country in the European Union.
- This leading role correlates to significant use of phytosanitary products (PP), which are essential for maximum yield.
- The main aim of the Ecophyto plan which was the starting point of our research, is to 'reduce farmers » dependency on PP.

- Farmers and students agents for change and hence no longer consider them only as spectators.
- Injunctions whose consequences are contrary to the desired results.
- Necessary to capture information and knowledge amongst the farmers and students themselves by studying their social representation (SR) of pesticides (Nicourt & coll., 2011).
- SR can be qualified as forms of collectively produced knowledge, which « contribute to the processes that guide behaviour » (Moscovici, 1961, p. 54).
- Identify elements upon which to base a durable change in practice (Michel-Guillou & Weiss, 2007).

- For an individual to engage in one practice rather than another it has to be coherent with his/her group's values and norms (Abric, 1994).
- The circular relationship between SR and practices demonstrated the importance of apprehending representations both to better understand.
- Central core theory seems to provide a pertinent framework to grasp the dynamics between SR and social practices (Abric, 1994).

Each set of central or peripheral elements has a particular function within the representation



- Compares the SR of farmers (N: 124) and students (N: 150) in 3 distinct agricultural territories: Brittany, Martinique and Southern France.
- Different crops justify different choices in terms of pesticide use.
- 3 phases in this research :
  - 1) Hierarchical associations questionnaire (Vergés, 1992, 1994).
  - 2) Contexte Independance Test (Lo Monaco & coll., 2008).
  - 3) Interviews
- The aim of this phase was to validate the centrality hypotheses highlighted in hierachical associations questionnaire.

- This test (CIT) determines the structural status (central vs peripheral) of the elements that constitute a SR.
- The CIT is presented as a list of questions that focused on the independent or dependent characteristics of the studies items.

« In your opinion, are pesticides always and in every case a sanitary risk?

Scale from 1 to 4 (no, not really, generally yes and yes)

We calculated a *Dmax* index for an error probability of .05 following Kolmogorov-Smirnov's

Territories	Central elements	Rates of « yes » in comparison with <i>Dmax</i>
Farmers Southern France	Normative dimension Public authorities discourse	100 > 79,02 80,95 > 79,02 100 > 79,02 100 > 79,02
Farmers Martinique	Risks and dangers Regulatory aspects of their use	95,23 > 79,02 88,09 > 79,02 83,33 > 79,02 92,85 > 79,02
Farmers Brittany	Risks and dangers Perception of farmers by the population Economics dimension	95,12 > 78,76 82,92 > 78,76 80,48 > 78,76 82,92 > 78,76 87,8 > 78,76 90,24 > 78,76 80,48 > 78,76
Students Southern France	Normative dimension Public authorities discourse + school formation	91,66 > 80,38 81,25 > 80,38 89,58 > 80,38 87,5 > 80,38 93,75 > 80,38
Students Martinique	Risks and dangers + school discours+ effect of PP	80 > 80,77 88 > 80,77 86 > 80,77 84 > 80,77 92 > 80,77
Students Brittany	Risks and dangers + school discours+ effect of PP	84,61 > 81,15 94,23 > 81,15 100 > 81,15 88,46 > 81,15

Comparaion of *Dmax* to the rate of « yes » answers for the elements submitted to the CIT for the item « pesticides »



- The results reveal an impact of the « agricultural territory » variable on the representation of pesticides.
- Difference between farmers and student: the social practices related to PP are the key in the elaboration of social representations of pesticides (Flament, 1994).
- These results illustrate the contribution of social representation theory to the study of pesticides as a socially constructed object, as a total social fact (Mauss, 1973).
- The different anchors highlight specific preoccupations among farmers and student regarding their practice and use of pesticides.

# Gracias por su atención

**B.Zouhri\*, M. Feliot-Rippeault\*\*, E.Michel-Guillou\*\*\* & K.Weiss\***

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