

Pôles  
d'Expérimentation et  
de Progrès de Rhône Alpes



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SCIENCE & IMPACT



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# A method combining sociological and biotechnological approaches to study agroecological transitions

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# Introduction

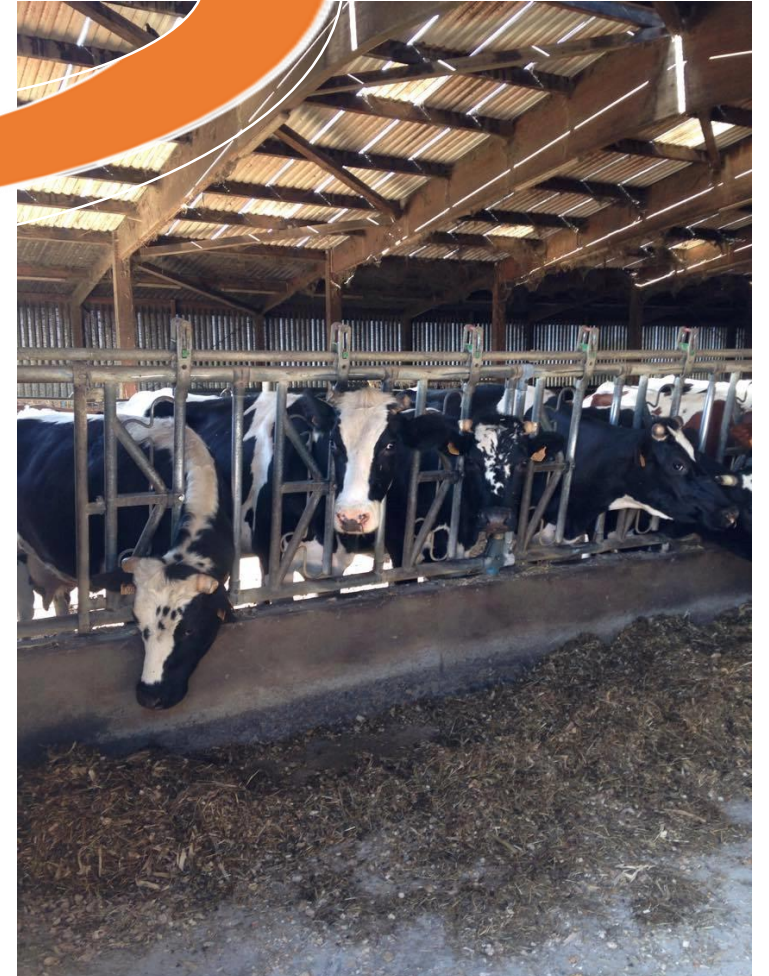
**Context of specialization  
and global changes**

**Transition towards more  
sustainable systems**

**Agroecology**

**Mixed Farming-  
Livestock systems (MFL)**

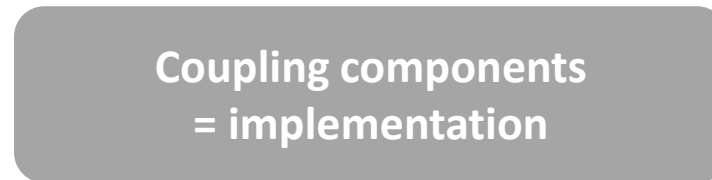
**Are MFL systems a pathway  
to agroecological transition?**



# Objectives



***How do farmers express the sustainability of their system?***



***How these sustainability concerns are reflected  
in the coupling of production  
components?***

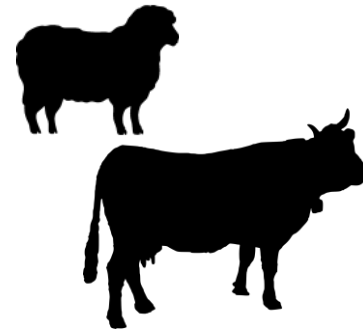
***without coupling of production  
components?***

***How do they fit into the agroecological transition?***

# Methods

- Semi directive survey in (MFL) Mixed Farming Livestock systems vs (S) Specialised Systems

Plains of Isère and Ain  
Diversity of systems



**Conventional**

16 MFL chosen systems, with large components:

> 50 LU and > 20ha crops for market et > 30% UAA

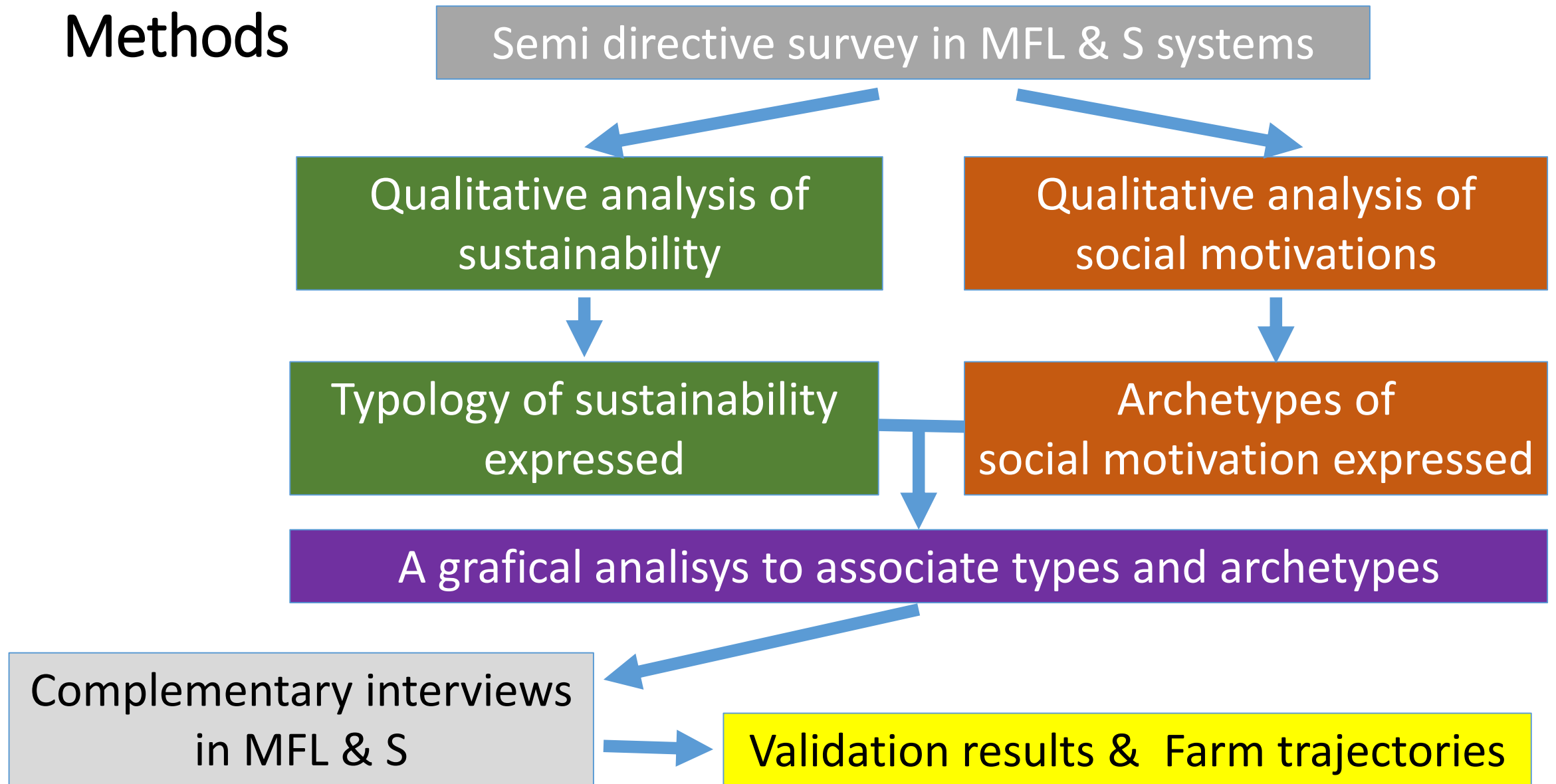
14 S systems, with recently ended MFL

Sampling by «snowball methods» : to get more diversity

- Complementary interviews : 7 MFL and 4 S systems



# Methods



# Methods : focus on social analysis

Modernity (*as considered at the end of 20th century*) =  
commercial word + industrial world + relation to the control of nature



Profitability,  
generate profits...



Technical performance,  
productivity, efficiency,  
scientific validity...

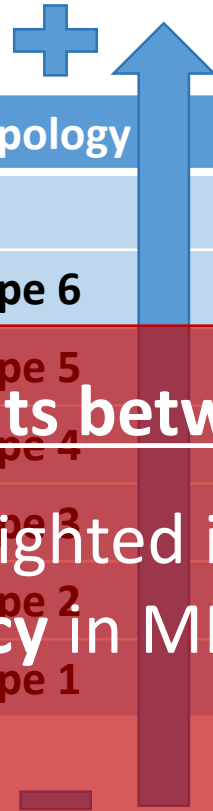


Zero grazing, mineral fertilizers,  
no change of the look on nature  
entities...

# Results: typology of sustainability expressed

MFL systems			Typology	S systems		
Economical	Environnemental	Social		Economical	Environnemental	Social
+++	+++	+++	<b>Type 6</b>	+++	++	++
+++	++	+++	<b>Type 5</b>	+++	+++	+
+++	++	+	<b>Type 4</b>	+++	++	+
+++	++		<b>Type 3</b>	+++	++	+
+++		++	<b>Type 2</b>	+++	+	+
+++			<b>Type 1</b>	+++		

# Results: typology of sustainability expressed



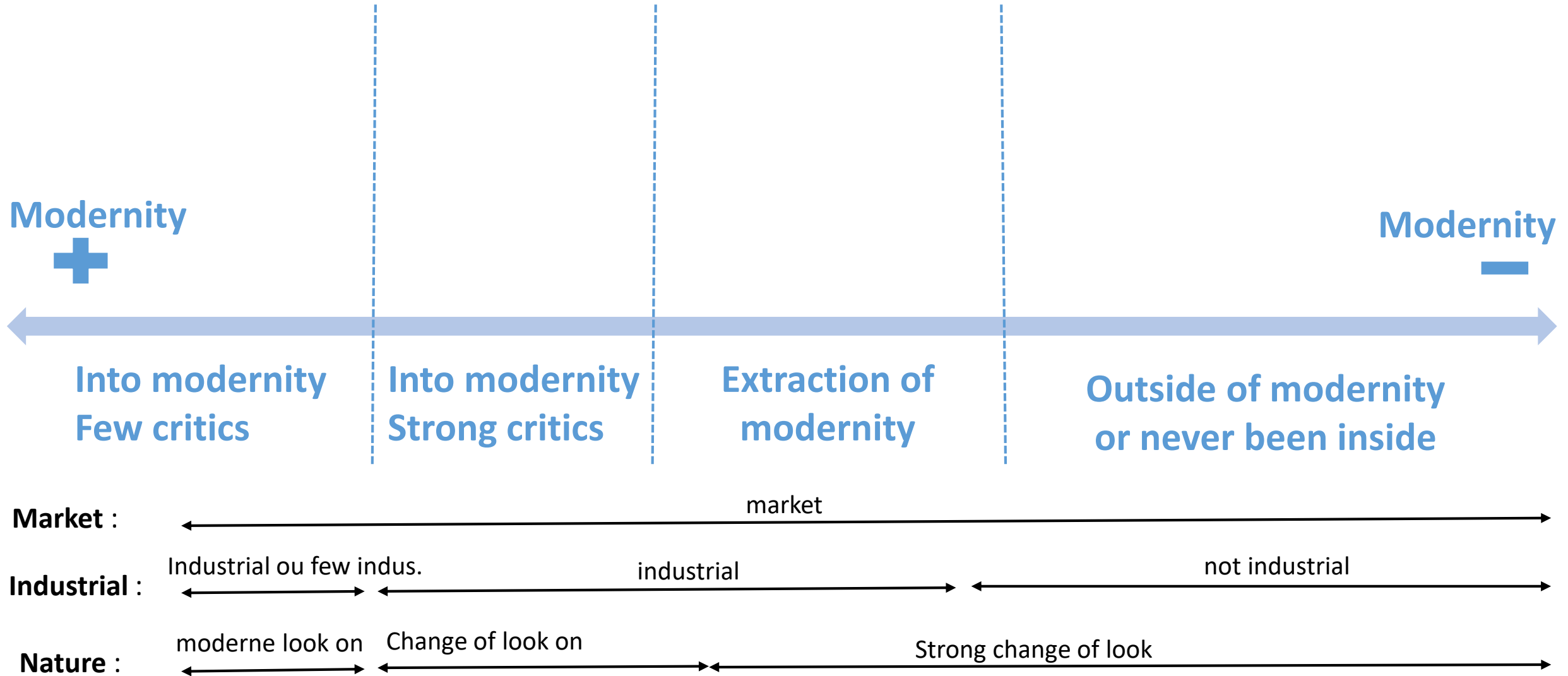
MFL systems			Typology	S systems		
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+++	++	+++	Type 5	+++	+++	+
+++	++	++	Type 4	+++	++	+
+++	++	++	Type 3	+++	++	+
+++	++	++	Type 2	+++	+	+
+++	++	++	Type 1	+++		

## Common traits between all farmers:

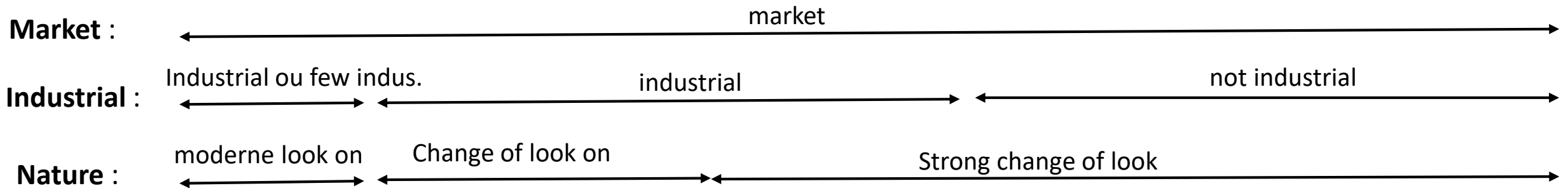
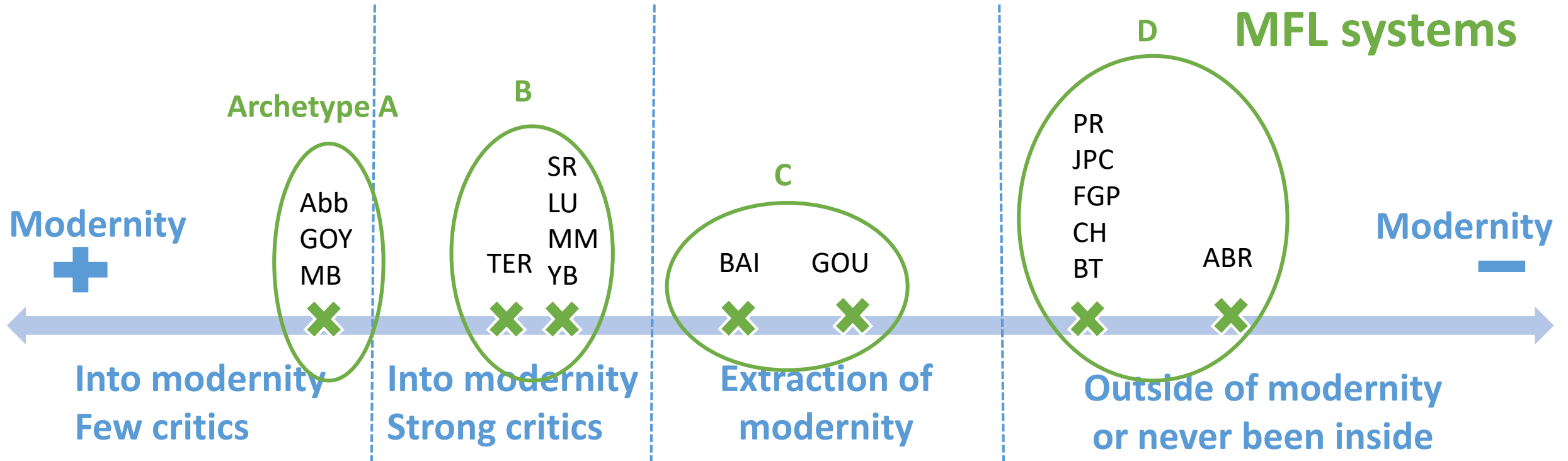
- **Economic sustainability** highlighted in all types by different ways
- Search for **food self-sufficiency** in MFL and specialized systems
- **Decrease of inputs**
- **Differentiation according to the expression of social and environmental sustainability**



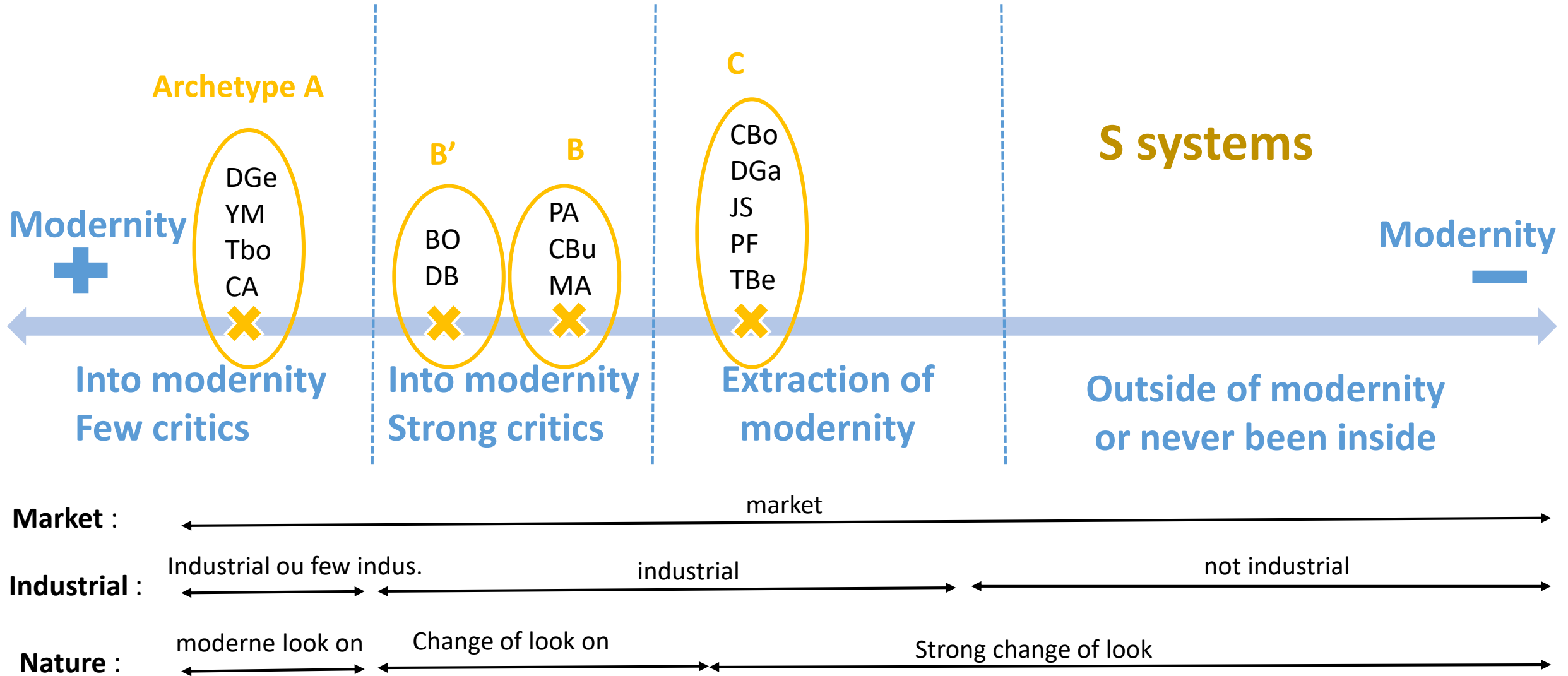
# Results: Sociological approach



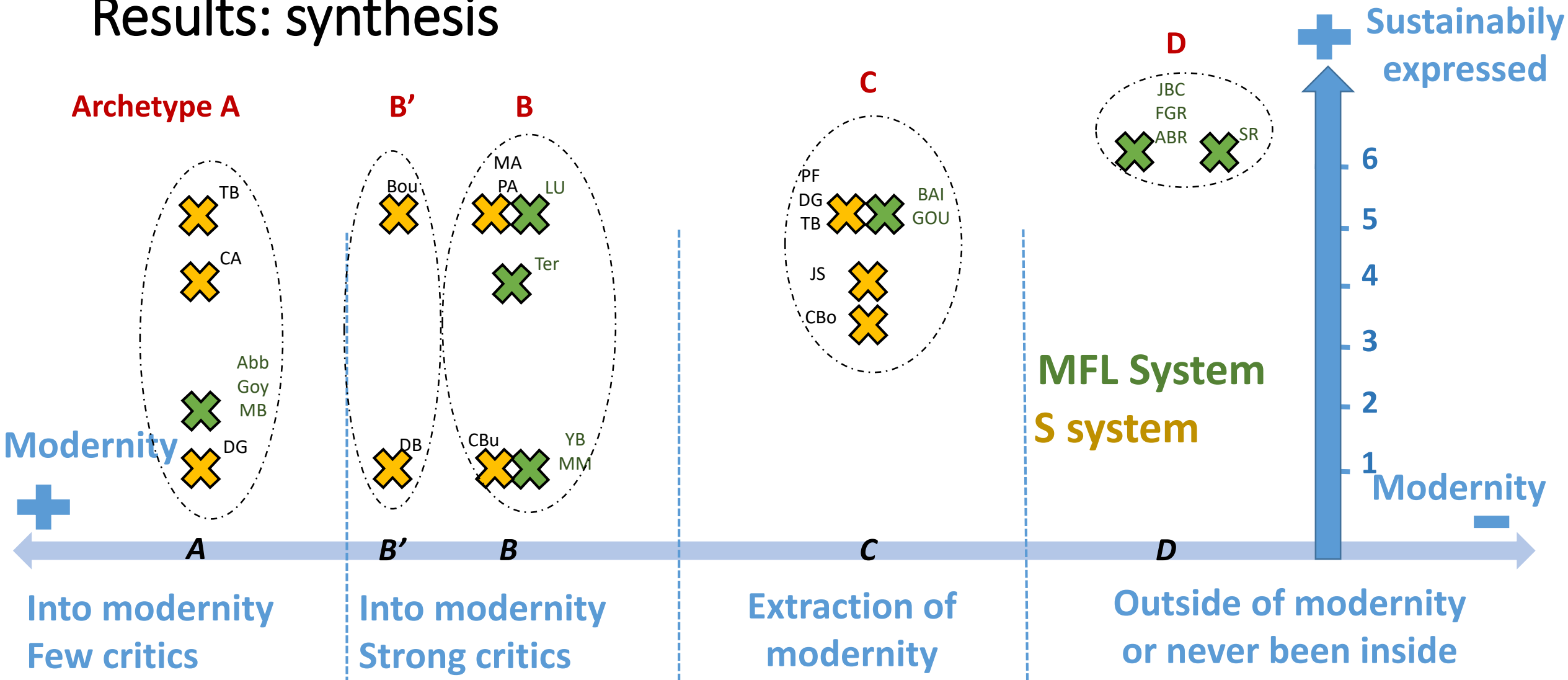
# Results: Sociological approach



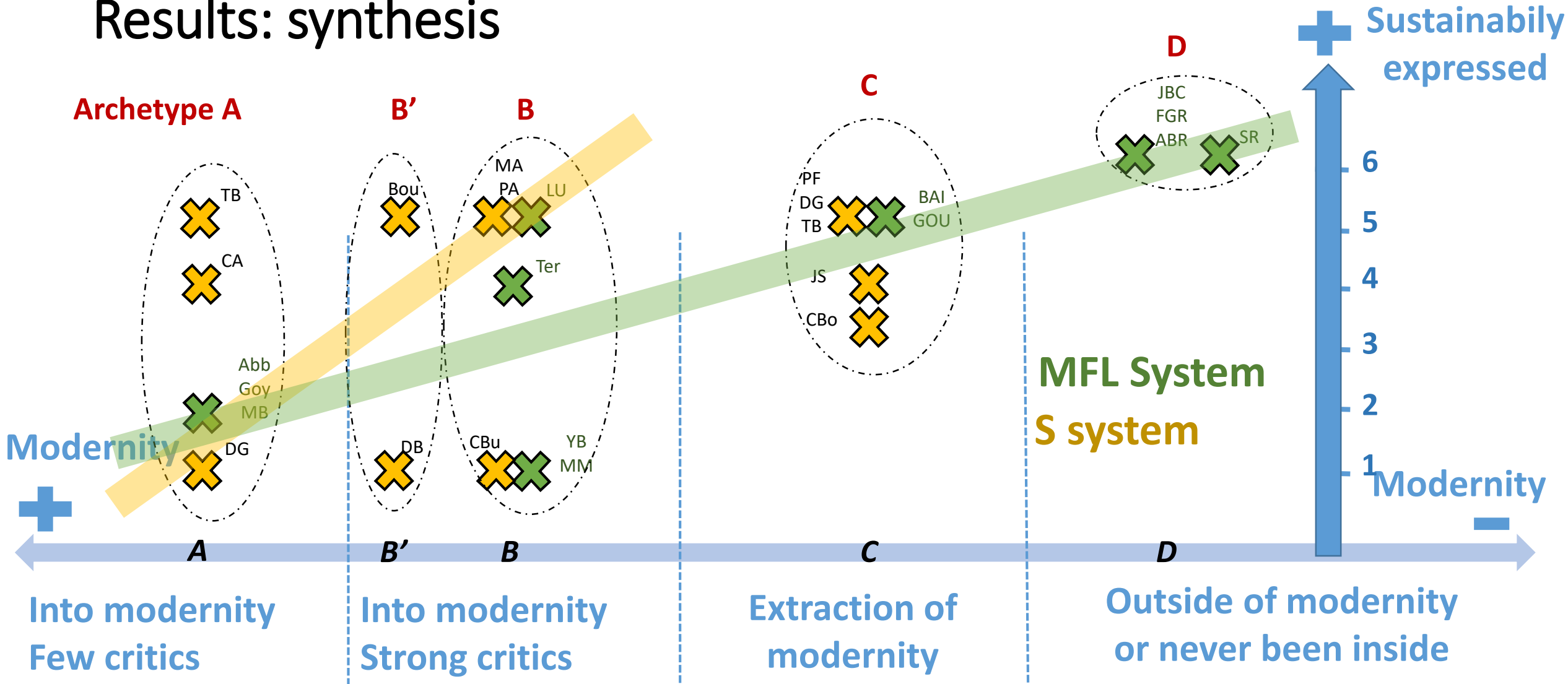
# Results: Sociological approach



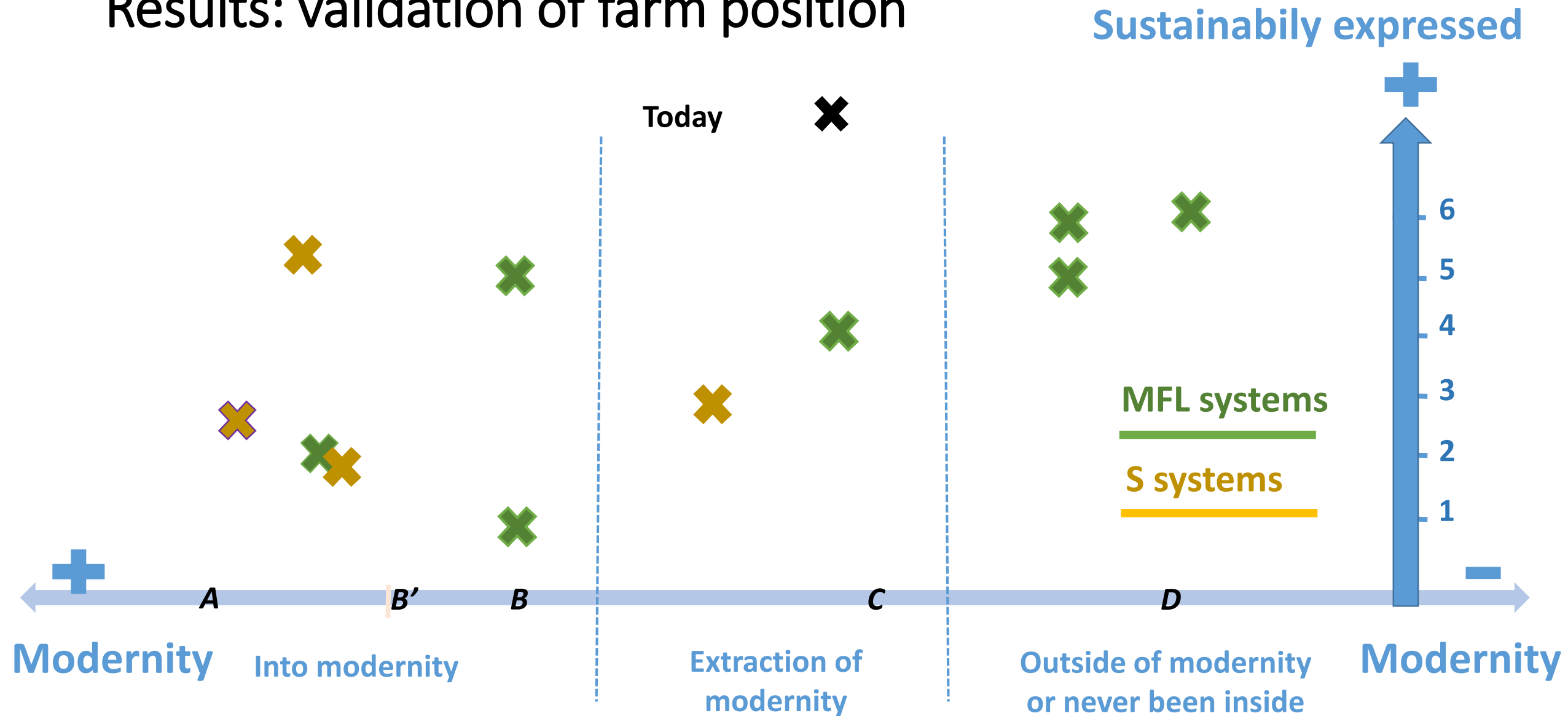
# Results: synthesis



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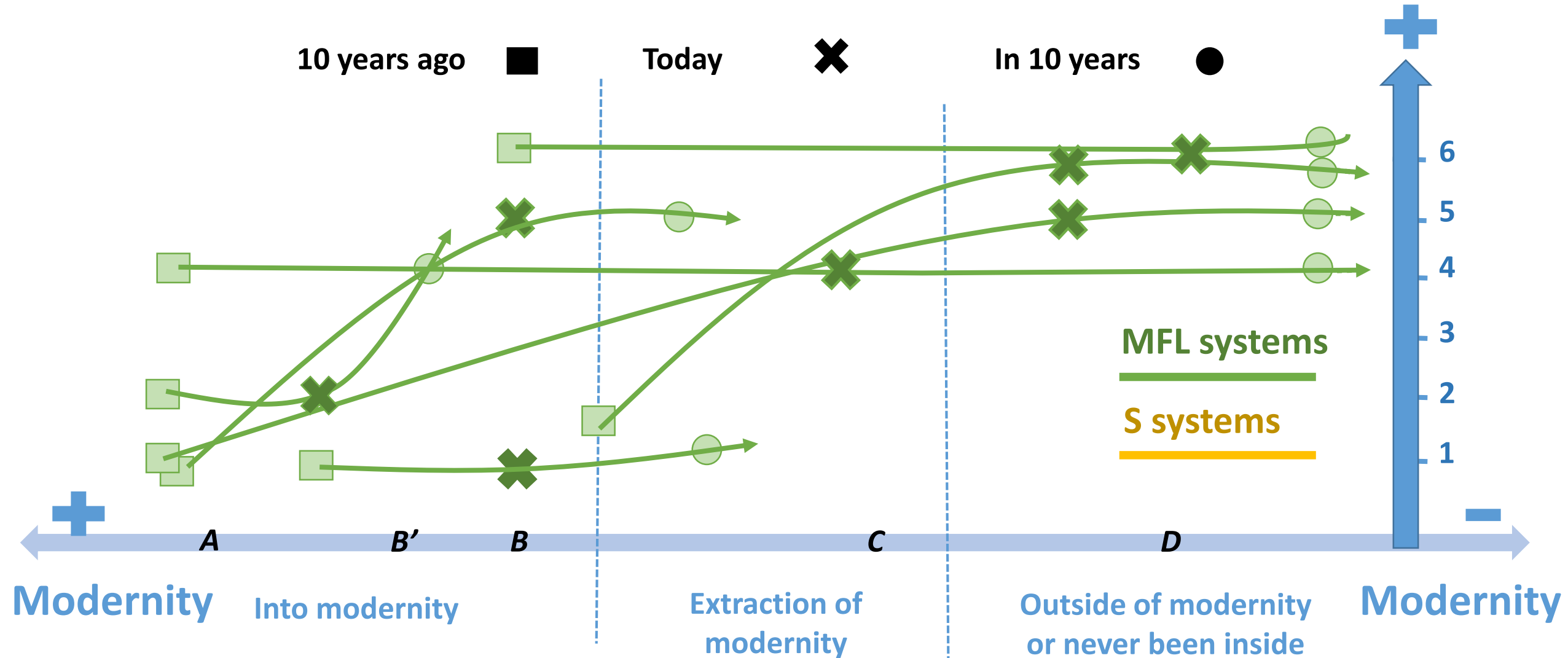
# Results: validation of farm position





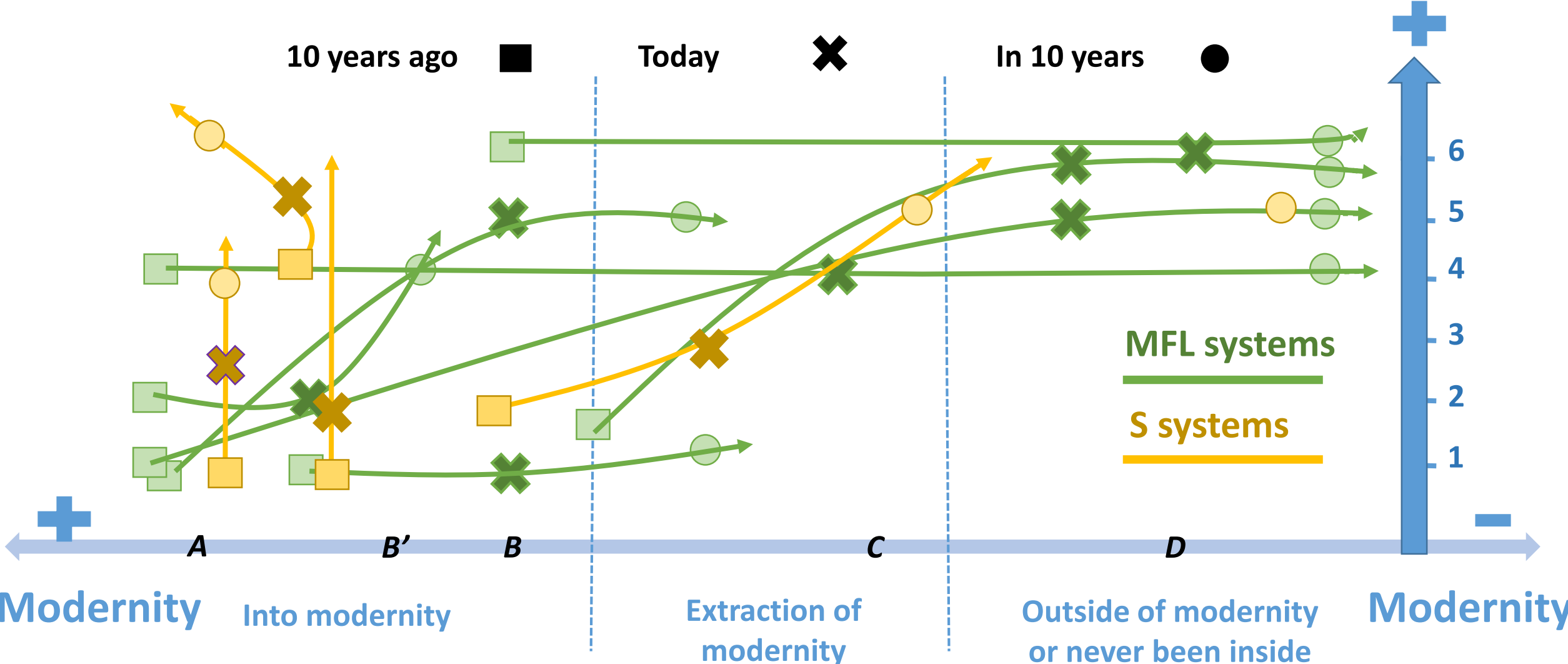
# Results: farm trajectories

Sustainably expressed

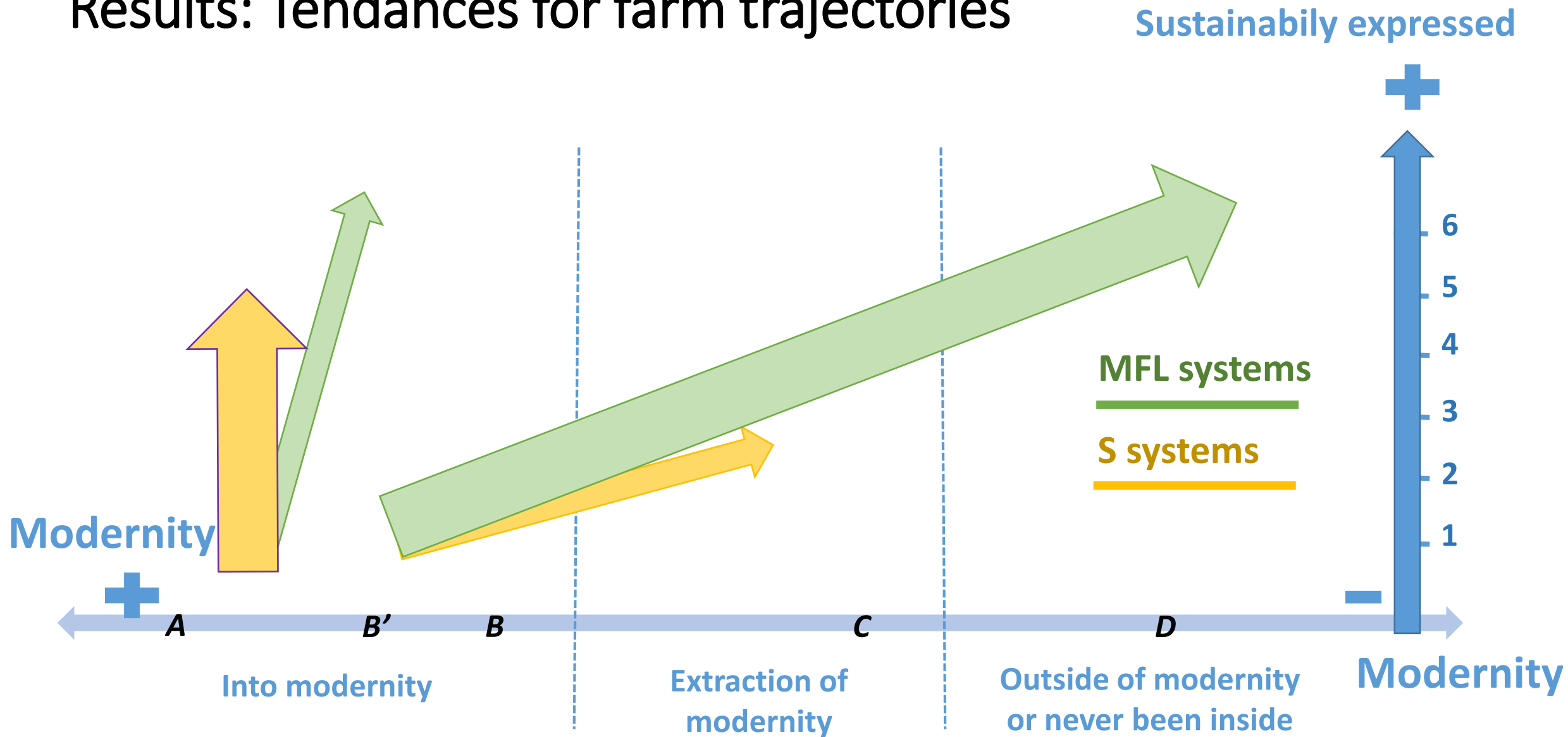


# Results: farm trajectories

Sustainably expressed



# Results: Tendances for farm trajectories



# Results: Tendances for farm trajectories

Sustainability expressed



# Conclusion

Agricultural systems are changing towards more sustainability with different strategies



Crisis situation: Diversity of attitude towards the change of values



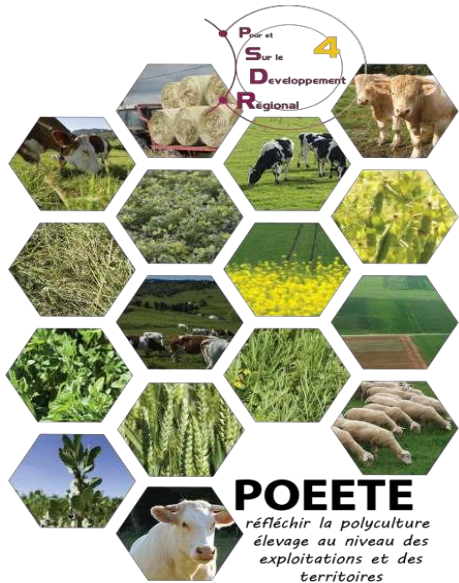
Farmers stay anchored into modernity



Farmers questioned modernity, modify their system for extraction

- **MFL = tool for more autonomy, safety, lower environmental impact**
- Maintain and / or increase anchorage in the modern model: and after that ?
- Incentives of partners could help

- **MFL = support for questioning modernity, a tool facilitating agroecological transition**
- specialized systems: mistrust, relative lack of perspective
- **Organic Agriculture as a new model**



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Thank you for your attention

