



AALBORG UNIVERSITY
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Territorial Knowledge Dynamics and Alternative Food: The case of Bornholm

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Defence of PhD-thesis
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Disposition

1. Introduction to the thesis:

- Topics and debates adressed
- Bornholm Food

2. Design and results of the thesis

3. Responses to Reviewers' comments

Introducing the topics and areas of research

Knowledge Dynamics

Creation, diffusion and use of knowledge
Innovations in firms and regions in the global knowledge economy

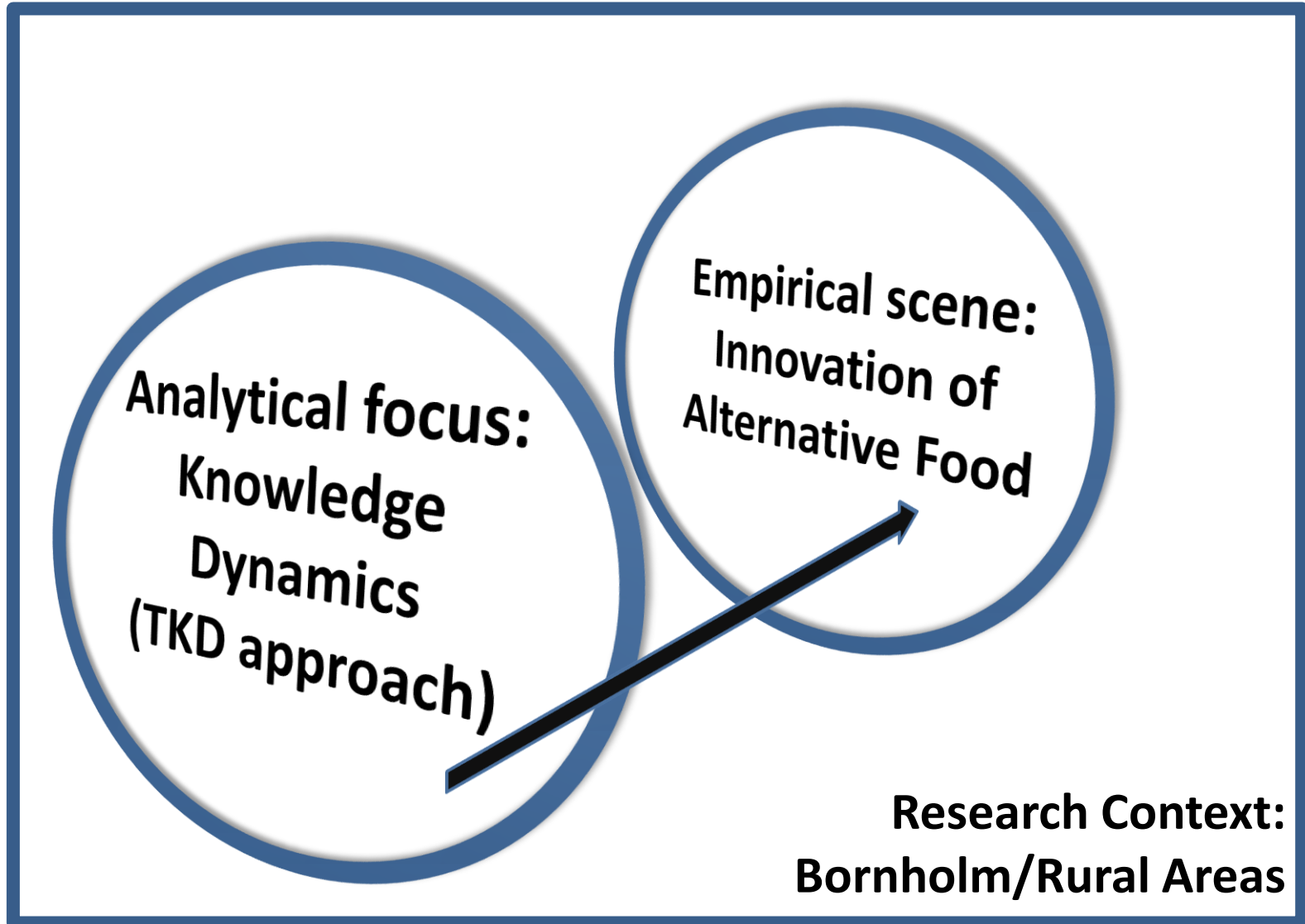
Food

The 'turn to quality'
Conventional and Alternative food models
New producer-consumer relations

Rural Development

Re-valorisation of local natural/cultural resources
Branding and place-making of rural areas
Rural policy

The research design for case studies (EURODITE)



Focus of research

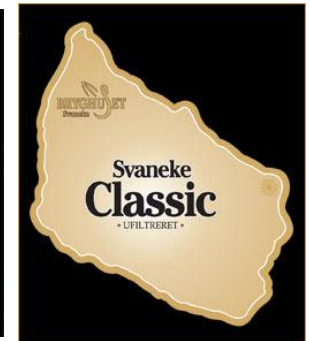
Empirically, one specific study case: the knowledge dynamics that enabled the innovation of Bornholm culinary productions, networks, marketing and governance systems.

Theoretically, the Bornholm case is conceptualized and studied from two different research perspectives:

- 1) Research on regional innovation and learning
- 2) Restructuring of markets and producer-consumer relations

Introduction to Bornholm Food

- Breaking new paths in Danish food culture
- Since 1990'ies 40 new small-scale firms (400 jobs), a few old niche producers
- All emphasizing the Bornholm origin of production
- Diversified and not 'regional' products as opposed to Mediterranean food
- Cross sector (Food, Tourism, Restaurants, Arts and Crafts)
- Two business models: 1. niche production and distribution via retail, and 2. experience elements and direct sales
- Typical example of alternative regional food –and yet?



Research questions

1) Research on regional innovation and learning:

In which specific terms should we conceptualize and methodologically study the complex, 'combinatorial' knowledge dynamics underlying the realization of innovations, in particular socio-cultural innovations such as the development of regional culinary food?

Is the notion of 'Territorial Knowledge Dynamics' useful, and if so, in which ways?

2) Restructuring of markets and producer-consumer relations:

a. How can we conceptualize the ongoing changes of markets and producer-consumer relations in the food sector in order to explain the innovation efforts and knowledge processes observed in the Bornholm case studies of alternative food? The thesis applies and discusses two conceptualizations:

- The *Worlds of Production* model

- The *experience economy* and *Territorial Staging Systems*.

b. How may the applied knowledge concepts contribute to the research on alternative food?

Territorial Knowledge Dynamics (TKD)

(the EURODITE project and Crevoisier and Jeannerat 2009):

The notion of TKD questions the proximity paradigm underlying the differing Territorial Innovation Models (industrial districts, regional innovation systems, clusters etc.) prevailing within economic geography

A new approach for studies and policies on regional innovation and development emphasizing the multi-scalar, combinatorial nature of knowledge

Three specific dimensions of knowledge compositeness are highlighted:

1) interaction at multiple ***territorial scales*** e.g. local/regional, national, international; Transfer, re-circulation and anchoring of external, mobile knowledge is crucial.

2) combination of different ***types of knowledge*** and learning: the Differentiated Knowledge Bases typology (Asheim 2007): analytical, synthetic and symbolic

3) interaction across varying ***institutional contexts*** for knowledge creation: the spheres of Production and Consumption; Firm, Market/Network, Science/Education, Policy/Governance and Society/Culture.

Findings and conclusions regarding the TKD approach

Territorial scales: interaction of several scales:

National and international levels (external, mobile knowledge) important for development of products/technologies, e.g. via collectively organized study tours abroad and individual producers' search for knowledge.

Regional level important for conceptualization and branding of 'Bornholm food' (symbolic knowledge).

The role of brokers (consultants, policy actors) for transfer, re-circulation and anchoring of external knowledge.

Knowledge types: the three knowledge approaches have been combined in the entrepreneurial processes of developing businesses, products and technologies. Mainly synthetic and symbolic knowledge dynamics have been important. In contrast, research-based analytical knowledge only has played a limited role.

Institutional contexts: knowledge dynamics across the spheres of Production and Consumption; Firm internal processes, Market and network based interaction, Policy initiatives, and activities at the overall level of Society/Culture.

I will focus on knowledge types in the following

Different types of knowledge – The three Differentiated Knowledge Bases

Analytical - Synthetic - Symbolic

- Epistemological defined: differing ways of questioning, answering and validating knowledge ('epistemic practices')

Analytical-Theoretical – Is it true?

Synthetic-Instrumental - Does it work?

Symbolic-Socio-cultural - Does it give meaning?

- Ideal-types (but observable)

- Micro-level learning processes (sub-parts of innovations), not entire innovation processes, firms, innovation systems, regions etc.

- Main advantage of the typology is the inclusion of symbolic knowledge as an value-creating knowledge type alongside analytical and synthetic

Example from Bornholm case study to illustrate the relevance of the three knowledge types for value-creation

The three main phases/parts of the life-span innovation of 'Lehnsgaard rape seed cooking oil':

1. 1991-1995 (EU research project of the Bioraf organization):

Analytical knowledge dynamics of universities and large companies aiming at developing chemical, bio-refinery models for exploiting farm crops such as rape plants for non-food purposes and for improving the health aspects of rape seed oil.

2. 1995-1999 (Bioraf organization):

Synthetic engineering research aiming at developing technologies for gentle peeling of rape seeds and cold-pressing of the kernels.

3. 1999-2004: (Allara and Lehnsgaard)

Final phase of commercialization and branding consultancy (synthetic and symbolic).



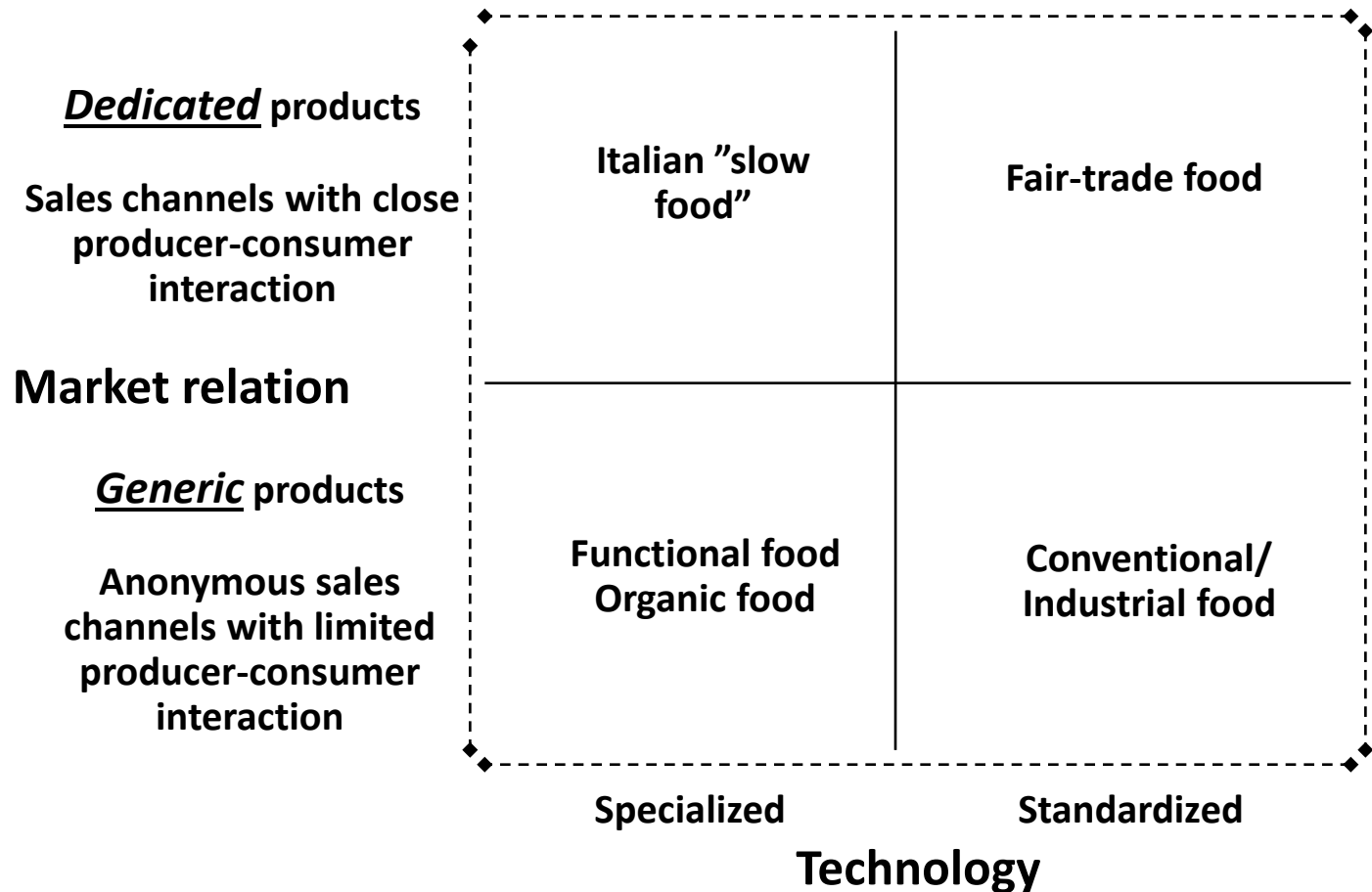
The knowledge biography of Lille Gadegaard Vineyard

	Synthetic	Symbolic
Exploration (Search and research)	2. Search for product/technology knowledge	1. Maturing of idea for new business 5. Identification of value-basis of business 6. Consultancy analyses on visitor experiences, aesthetic/architectural designs etc.
Examination (Trialling, testing, standard setting, benchmarking)	3. Development of products by trial-and-error, learning-by-doing & taste panel	
Exploitation (Commercialization)	4. Implementation of production and sale	7. Development of vineyard experiences and facilities 8. Communication and branding in national medias 9. Enhancing coherence of business concept

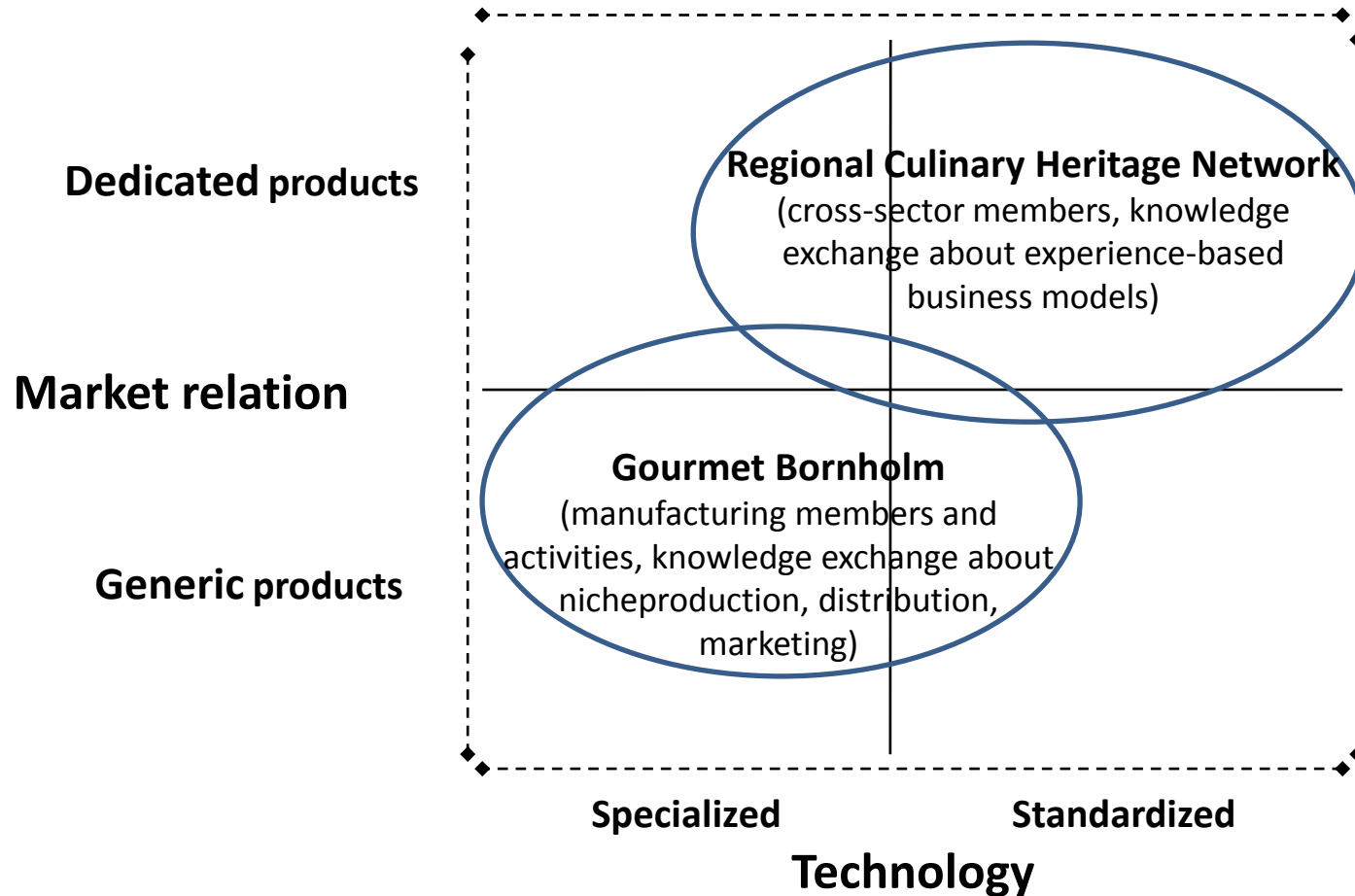


Restructuring of markets and producer-consumer relations:

Storper and Salais (1997) identify four *Worlds of Production* on the basis of the *technology* and the *market* dimensions of firms.



Bornholm food producers in the WOP model



New producer-consumer relations - The Experience Economy

Closer relations between producers and consumers exemplifies more general trends in economies

The Experience Economy (Pine and Gilmore 1999):
“Work is theatre and every business a stage”

Staging of experiences constitutes a new source of value creation and represents (final stage in the development of economic value:

Extract commodities – Make goods – Deliver services – Stage experiences

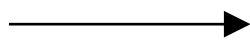
Experiences are intrinsic/personal to the consumer and cannot be ‘produced’
- new production-distribution-consumption models

The Territorial Staging System of Experiences (Jeannerat & Crevoisier, 2010).

e.g.
cultural heritage,
natural environment and
amenities, culinary products,
productions and knowledge

e.g.
knowledge,
income, mobility,
cultural heritage, social capital,
sensitiveness to sustainable
dev., etc.

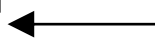
Production
resources



Stage setting

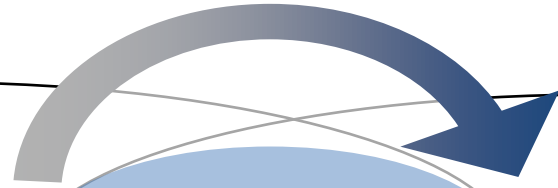
STAGE

Experiential
engagement

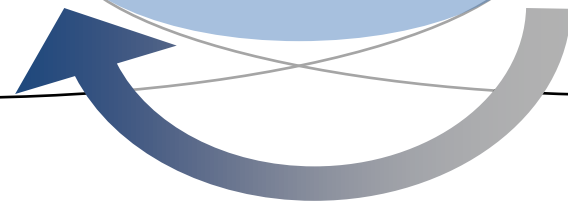


Consumption
resources

Stage setting as an
experiential resource



Experiential engagement as an
economic resource



*Contexts for staging of
Bornholm Food:
Firm
Network
Policy/Governance*

*The role of cooks in food discourses
Consumers' pre-understanding of
Bornholm through tourism*

Contributions to research

Empirical:

The thesis has contributed in

- Balancing the bias within economic geography and innovation research on high-tech industries, scientific/technological knowledge, and urban centres
- Documenting the role of socio-cultural innovation and symbolic knowledge in a traditional manufacturing rural sector
- Closing the gap in the research on alternative food and rural development regarding the innovation, knowledge and learning aspects (especially symbolic knowledge)

Theoretical:

- Tested and validated the TKD approach (in a rural setting)
- Clarified the content and implications of the DKB typology and its interconnectedness to other constructs (the WOP, the Experience economy)

Methodological:

- Explored the Knowledge Biography method

Responses to Reviewers' comments

1. Knowledge Biography Methodology and I how reached conclusions
2. Knowledge and quantitative data
3. Territorial Knowledge Dynamics (TKD) vs. Territorial Innovation Models (TIM)

Responses to Reviewers' comments (I)

1. The Knowledge Biography Methodology and I how reached conclusions

New tool for cognitive and innovation studies (life-span of innovations)

Many challenges, e.g. in defining 'knowledge interactions' (sub-sequences), the DKB typology is a core tool

Large-scale research projects: need to define and discuss concepts among research teams

My conclusions mainly based on own observations from Bornholm case studies but also evidence from other EURODITE case studies and researchers

Future: need of more studies that can map the interconnectedness of knowledge dynamics and different knowledge systems

Responses to Reviewers' comments (II)

2. Knowledge and quantitative data

Difficult/impossible to describe intrinsic phenomenon of 'knowledge' (patents, R&D expenditures, etc.)

...but very important for policy-making (e.g. labour market and educational policy)

and for identifying interrelations/interaction of 'innovation knowledge' and 'routine knowledge'?

Translating DKB knowledge types into occupational, educational groupings?

Further refining/broadening Florida's three 'creative classes':

The creative core, The creative professionals, and the Bohemians

More knowledge biography case studies are needed

Responses to Reviewers' comments (III)

3. Territorial Knowledge Dynamics (TKD) vs. Territorial Innovation Models (TIM)

Bornholm case indicates importance of cognitive and relational proximity rather than geographical

TIMs seem less useful for rural areas

Focus on

- agglomerations of specialized firms
- local/regional interaction and institutional conditions
- scientific and high-tech knowledge dynamics
- production side, consumption overlooked

TKD provides more open perspective, more appropriate for rural areas:

- From cumulative to combinatorial knowledge
- From regional to multi-scalar
- From institutions to networks and epistemic communities



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Thank you for listening!

