



**“Europeanisation of Innovation”
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Explicit and implicit knowledge and the Logics of appropriation

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1) Innovation processes:

a) Addressing the unknown (probably the unknown unknown) by innovation management

b) Importance of a risk perspective: emergence of "assessment-regimes" (Kaiser et al. 2010)

c) Expansion of Innovation politics for stimulating innovation

d) Lowering the barrier to copy knowledge goods

→ Selection of usefull and valuable knowledge is getting more difficult

Kaiser, M.; Kuratz, M.; Maasen, S.; Rehmann-Sutter, Chr. (eds., 2010): Governing Future Technologies. Nanotechnology and the Rise of an Assessment Regime. Dordrecht etc.: Springer



2) Regimes of Innovation and the Authorisation process:

a) Co-Evolution of innovation and environment following stabilised configurations of rules: Regime as “Grammar” (Rip 2010).

b) One key aspect of the “Grammar”: governance of intellectual property

→ Understanding the construction of knowledge claims and the aligning process of appropriation of knowledge goods

→ Appropriation is associated with authorisation, which reflects the complex dynamic of knowledge construction in innovation processes.

Rip, A. (2010): Processes of Technological Innovation in Context – and their Modulation. In: Steyaert, C.; van Looy, B. (eds.): Relational Practices, Participative Organizing. Bingley, UK: Emerald, S. 199-217.

Outline of the presentation



- 1) Theoretical Starting Points**
- 2) Cultures of authorisation: a typology**
- 3) Transgenic crops as an example**
- 4) Policy Implications**

1. Theoretical Starting Points

1) Heterogeneity versus homogeneity of orders of appropriation

a) Homogeneity:

- **homogenisation of Intellectual Property Rights**
- **Orientation towards explicit knowledge**
- **Global convergence**

b) Heterogeneity: Varieties of Capitalism

- **Dissimilarity of industrial sectors**
- **Different modes of innovation**
- **Heterogeneity of knowledge cultures**
- **Different interests in IPR**

→ Fragile balances full of conflict

1. Theoretical Starting Points

2) Authorisation versus appropriation of knowledge goods

a) Appropriation (Standard economic theory):

- economic incentives
- causal connection between innovation and property

b) Authorisation (Sociological perspective)

- identification of author and knowledge claim
- responsibility for validity and utility
- accountability for non-trivial side-effects ("risks")
- recompensation in form of honour and/or pay

→ Innovation process as process of authorisation

1. Theoretical Starting Points

3) Implicit versus explicit knowledge

a) Explicit and diffusion:

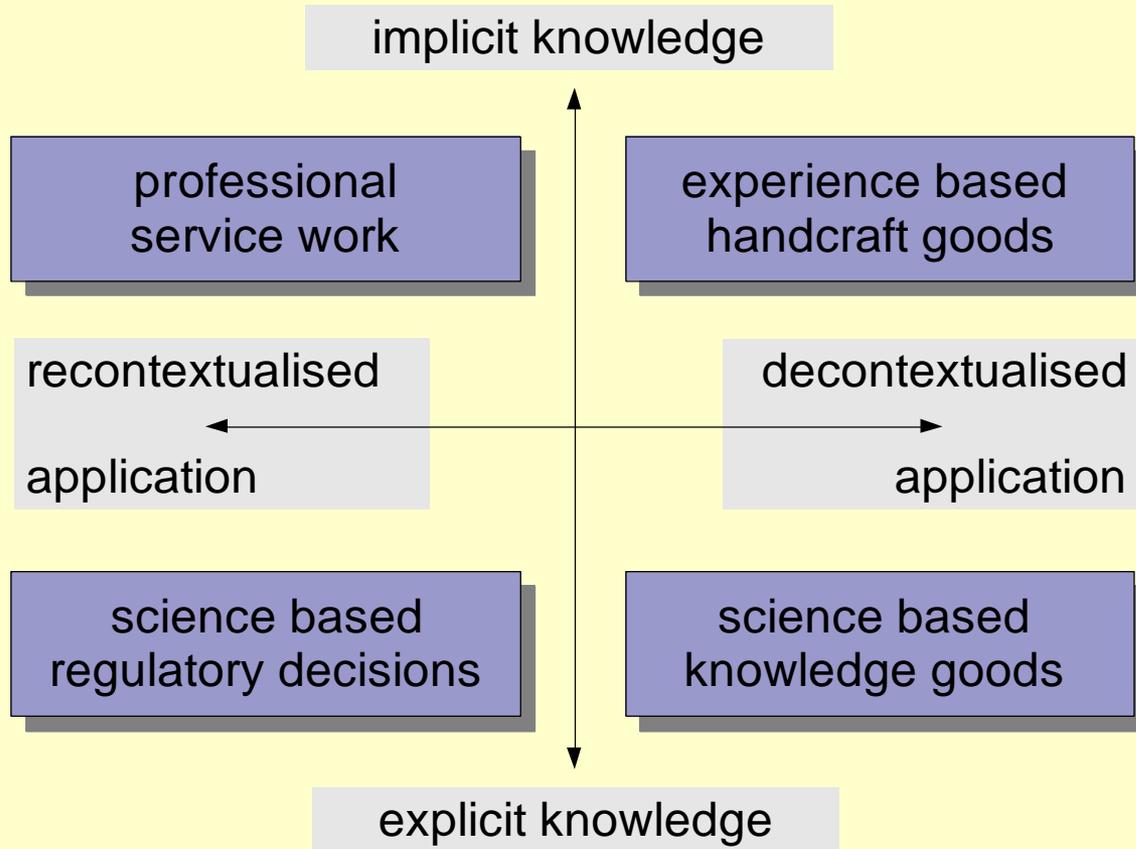
- explicit knowledge is more easy to copy
- diffusion of explicit knowledge generally unlimited

b) Explicit and appropriation

- explicit knowledge correlates with a stronger IPR-Regime than implicit knowledge
- implicit knowledge allows a broader variety of strategies for the appropriation of knowledge goods

→ Analysing forms of knowledge and their corresponding cultures of authorisation

2. Cultures of authorisation: a typology



2. Cultures of authorisation: a typology

1) Experience based handcraft goods: authorisation through reputation / trade mark

Aspects:

- **Identification:** Through companies name or trade mark
- **Validity/utility:** Reputation of the trade mark. Standardisation of the product allows for more valid quality tests and surveys.
- **Risk:** Trade mark makes the producer adressable.
- **Recompensation:** Trade mark allows for a higher price.

2. Cultures of authorisation: a typology

2) Science based knowledge goods: authorisation through patents

Aspects:

- **Identification of patent holders and their knowledge claims**
- **Validity/utility: Corroborated with scientific citations and tested by the patent authority.**
- **Risk: Patent specification makes the technology more transparent; Sometimes additionally evaluated by other regulatory authorities**
- **Recompensation: monopoly for the patent holder**



2. Cultures of authorisation: a typology

3) Science based regulatory decisions: authorisation by legal authority

Aspects:

- **Identification: Relating the jurisdiction of the authority and the remit of the decision.**
- **Validity/utility: Validity is based on specific "safety" subdisciplines as e.g. ecology which focus on the side-effects in new contexts.**
- **Risk: Identifying the false and not identifying the actual risks.**
- **Recompensation: Higher value for knowledge goods on international markets. Protection of the domestic market against cheap competition.**

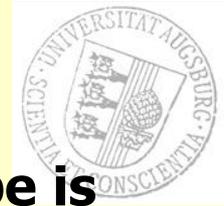


2. Cultures of authorisation: a typology

4) Professional service work: authorisation through guild

Aspects:

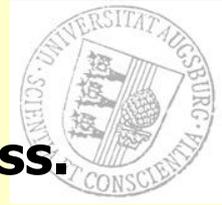
- **Identification of the service worker by guild symbols (clothing, language, instruments etc.)**
- **Validity/utility: Expertise results from the skill to recontextualise general rules to the particular context (and to impress the client)**
- **Risk: Professional ethos should protect the client against asymmetric information. But with implicit and contextualised knowledge, side-effects are quite unprovable.**
- **Recompensation: Professional scale of charges or personal agreement**



3. Transgenic crops as an example

1) Even a "high tech" product such as transgenic rape is not only a science based good, but result of multiple knowledge cultures. Aspects:

- **strong necessity for handcraft breeding**
- **up to now relatively safe due to strict administrative oversight**
- **viable only with the recontextualising work of farmers (and their agricultural advisers)**
- **"science based" only to a certain extend – repeatability based on the natural copying mechanism**



3. Transgenic crops as an example

2) Authorisation as a complex and interwoven process.

Aspects:

- **novelty claim as argument for patenting, naturalness claim as defence against risk attribution**
- **"utility and safety proven" - patents and regulatory decisions as benchmarks for research funding**
- **collection of "technology fees" from farmers within a framework of "friendly" service relations**
- **identity and visibility of the knowledge producer as the base for "genetic pollution" liability claims**



4. Conclusion

- 1) Authorisation is a complex process which has to be analysed with respect to the following aspects in the innovation regimes:**
 - Importance of different cultures of knowledge for the innovation and their forms of authorisation**
 - Configuration of different cultures of authorisation**
 - Institutional setting and the interference with the innovation process in different industrial sectors**



2) Making visible the cleavages on IPR in different industries:

- Stricter and more homogeneous IPR as propagated by the US and (partly) by the EU are not in the interest of all stakeholders in all industries.**
- But also the opposite, Open Source, is not necessarily a good fix for all, since it might neglect the "complex entanglements" of the authorisation process.**