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Vortrag am 13. Juni 2006 im Rahmen des *Vierten Methodenforums* der Sozialwissenschaftlichen Fakultät der Universität Wien: „Evaluation – Theorie und Praxis“

Evaluation wissenschaftlicher Forschung im internationalen Vergleich

Abstract zum Vortrag:

Das Referat wird sich im Wesentlichen auf drei Fragenkomplexe konzentrieren: (1) Zuerst gilt es, eine umfassendere konzeptionelle Positionsbestimmung von Evaluation universitärer Forschung zu versuchen. Dabei werden Indikatoren und Evaluation sowie, im Kontext von Evaluation, Peer-Review und Indikatoren gegenüber gestellt und spezifisch diskutiert. Epistemologisch wird dabei ferner der Frage nachgegangen, ob der Definitionsversuch von universitärer Forschung nicht auch durch die Evaluation universitärer Forschung unterstützt werden kann. (2) Empirisch werden kurz die Evaluationssysteme universitärer Forschung von vier europäischen Ländern gegenüber gestellt: Großbritannien, die Niederlande, Deutschland und Österreich. Großbritannien und die Niederlande gelten als Beispiele dafür, wie umfassende Evaluationssysteme auf nationaler Ebene eingeführt wurden. Das britische „Research Assessment Exercise“ ging dabei prototypisch („idealtypisch“) in die Diskussion ein – und das RAE 2008 soll auch etwas genauer betrachtet werden. (3) Abschließend gilt es, einige Thesen für sozialwissenschaftliches Forschen zur Diskussion zu stellen. Dazu gehören Strategien der Kombination von „lokal“ und „global“ sowie mögliche (positive) Effekte der Einrichtung einer „Fakultät für Internationale Beziehungen und Globalisierung“ im Kontext kontinentaleuropäischer Universitäten.

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Literaturhinweise:

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Zusätzliche Literaturhinweise:

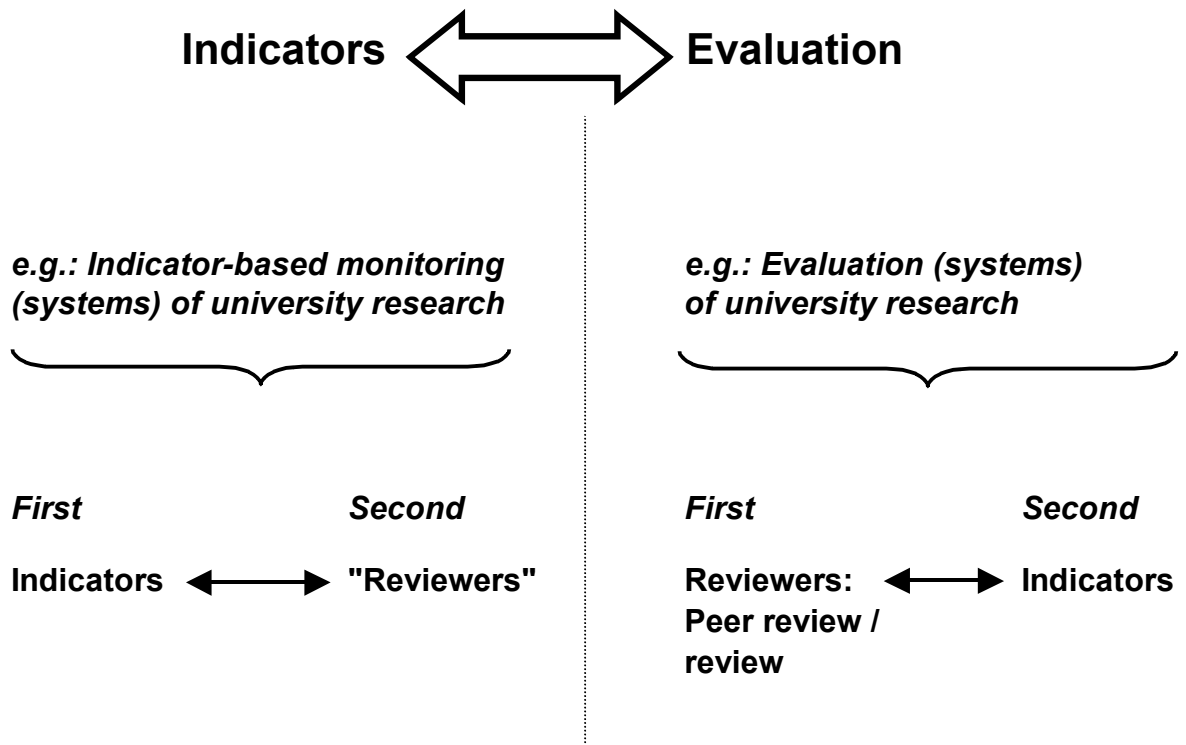
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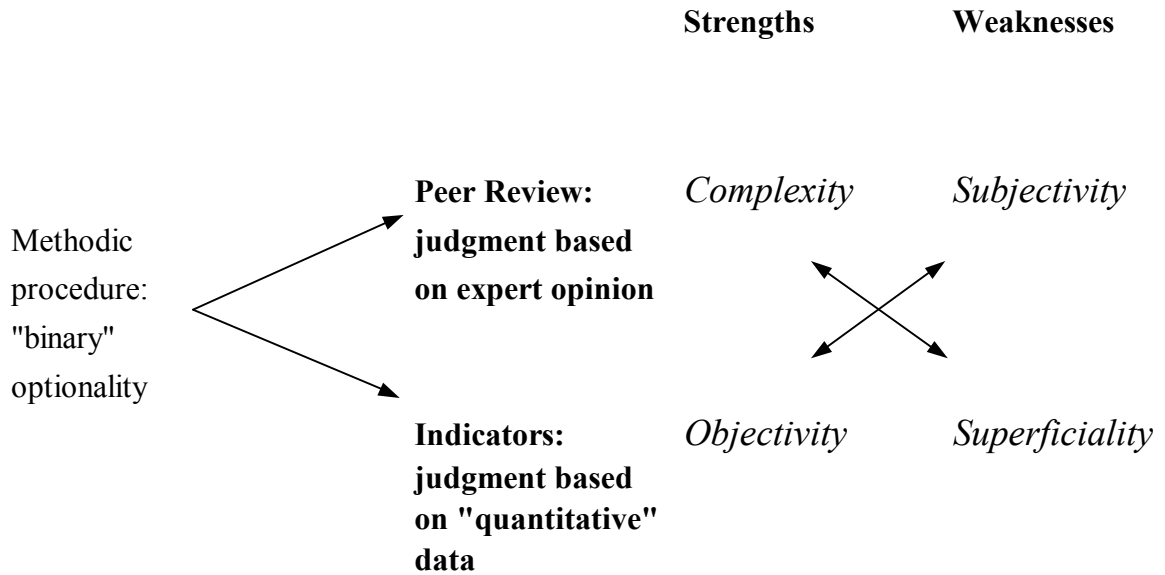
Gibbons, Michael / Camille Limoges / Helga Nowotny / Simon Schwartzman / Peter Scott / Martin Trow (1994). *The New Production of Knowledge. The Dynamics of Science and Research in Contemporary Societies*. London: Sage.

Figure 01: What is the (conceptual) relationship between indicators and evaluation?



Source: Author's own conceptualization.

Figure 02: Standardized comparison of the strengths and weaknesses of "peer review" and indicators.



Source: Campbell (1999).

Figure 03: Why to evaluate university research?
(And: Should evaluations of university research have consequences?)

An enumerative list. (Conceptual challenge: Where to end the list?)

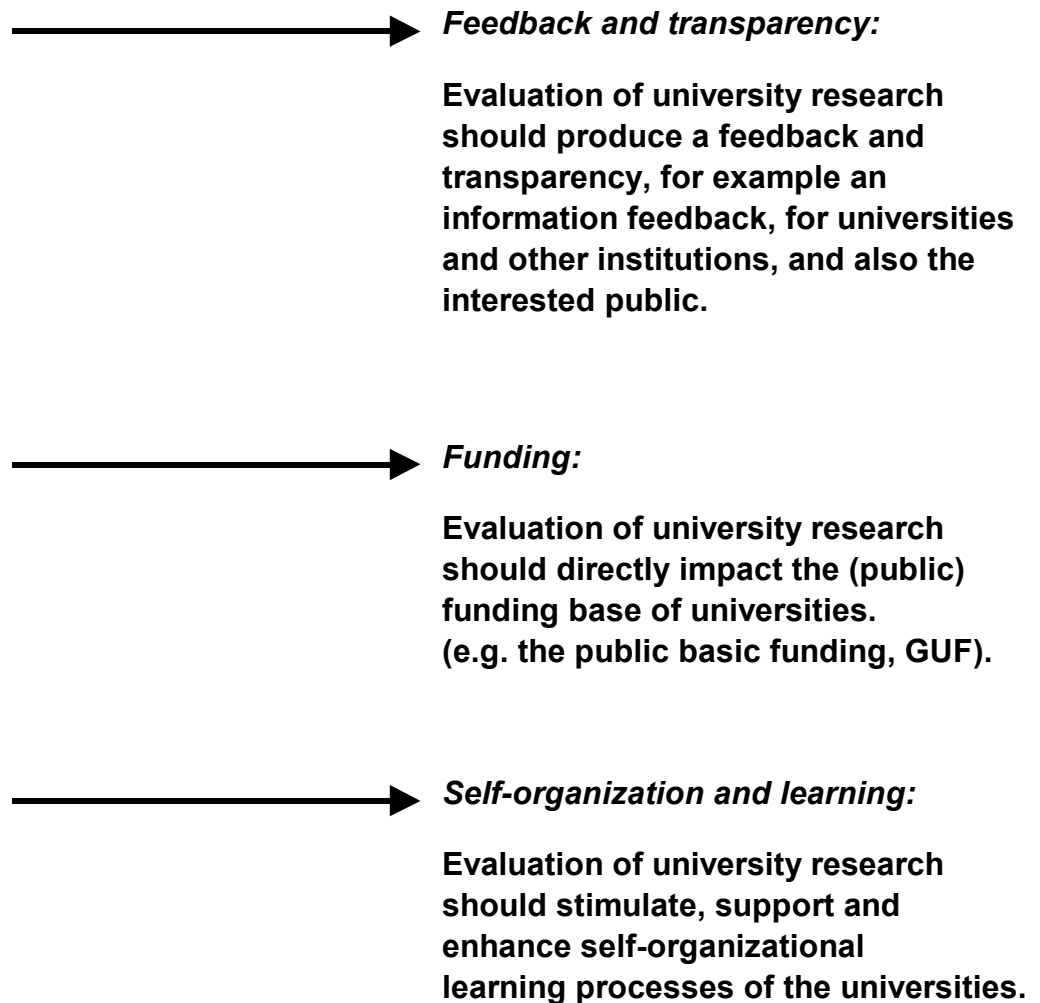
- **Feedback:**
Feedback (mechanisms) for university systems
 - **Transparency:**
Transparency about university systems
 - **Rationality:**
E.g. rationality for university systems (their decision-making)
 - **Markets:**
Creation of "academic markets" (or emphasizing market-similar principles)
 - **Legitimation:**
E.g. legitimation of the use of public resources (particularly of public basic funding, the GUF)
 - **Learning:**
Support of learning processes of university systems
 - **"Quality criterion":**
Evaluation of university research as a form of institutional/organizational "quality accreditation" for research? (An analogy to teaching and education?)
-
- **Consequences:**
Should consequences of evaluation be regarded as a reason for evaluation?
-
- **Epistemology:**
What is university research?

Source: Author's own conceptualization.

Figure 04: What are possible consequences of the evaluation of university research?

Different possible options.

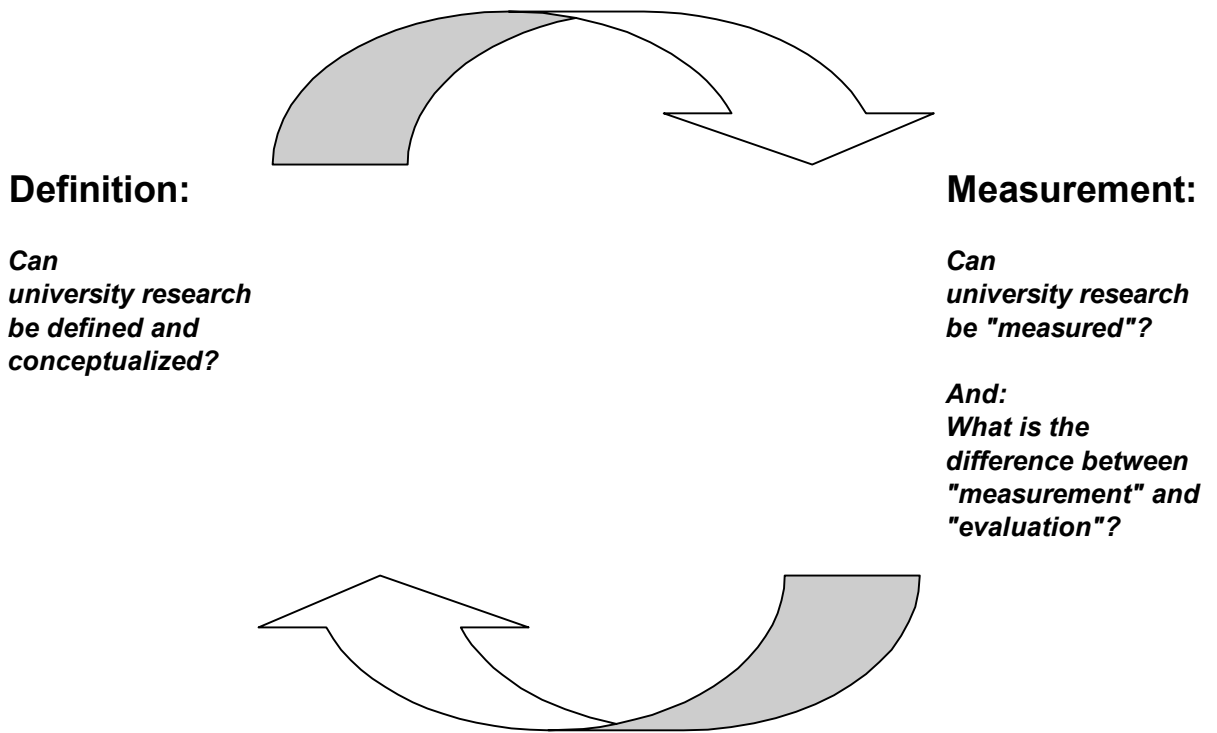
Conceptual challenge: How to distinguish consequences of evaluation from "reasons" for evaluation?



Source: Author's own conceptualization.

Figure 05: What is university research? (The epistemic reason.)

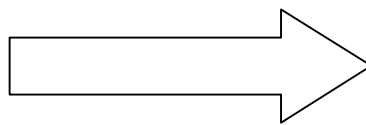
The epistemic challenge of university research and the evaluation of university research.



.....

"Mode 1" approach:

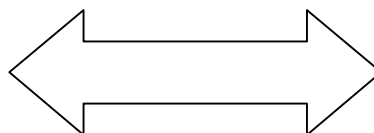
Definition and conceptualization of university research



Evaluation (indicators) of university research

"Mode 2" approach:

Definition and conceptualization of university research



Evaluation (indicators) of university research

(Note to the two approaches: also an analogy to "democracy theory" and "democracy audit" for "democracy quality".)

Source: Author's own conceptualization (also referring to: Gibbons et al. 1994; O'Donnell et al. 2004).

Figure 06: What are the "Mode 1" and "Mode 2" definitions of success for university research?

"Mode 1" definition of success -- excellency of university research:

“Success in Mode 1 might perhaps be summarily described as excellence defined by disciplinary peers” (p. 33).

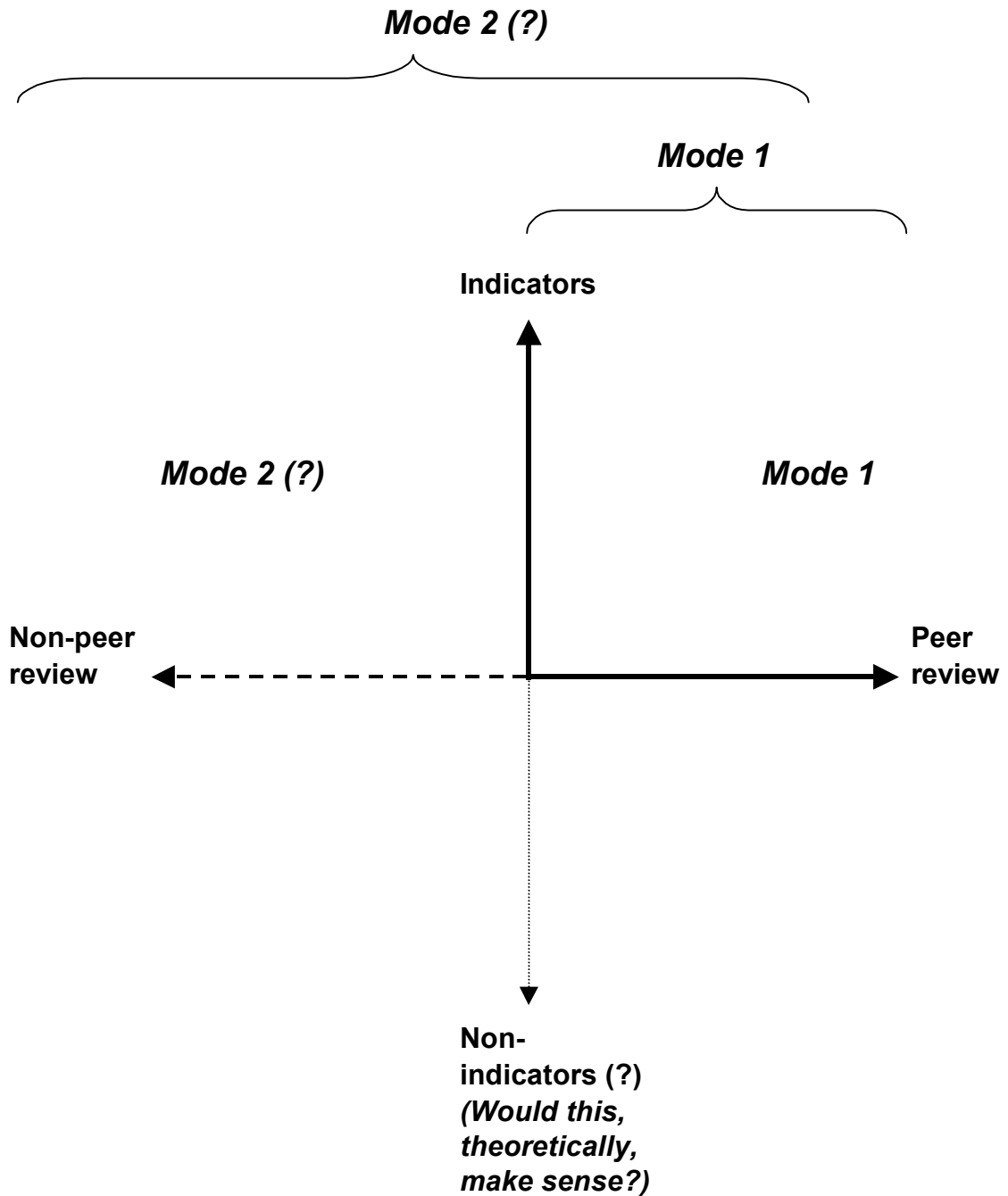
"Mode 2" definition of success -- efficiency or usefulness of university research for problem-solving:

“In Mode 2 success would have to include the additional criteria such as efficiency or usefulness, defined in terms of the contribution the work has made to the overall solution of transdisciplinary problems” (p. 33).

Source: Gibbons et al. 1994 -- "The New Production of Knowledge".

Figure 07: Possible "Mode 1"/"Mode 2" conceptual implications for the interrelation of peer review and indicators.

What would be further implications for the evaluation of university research?



Source: Author's own conceptualization (also referring to: Gibbons et al. 1994).

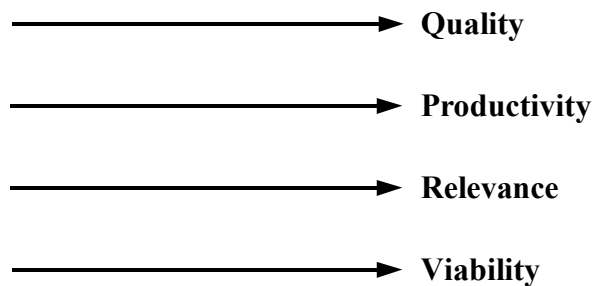
Figure 08: A typology of different conceptualizations of the dimensionality of university research quality.

The UK model of "ex post" evaluation of university research: one (comprehensive) dimension of quality.



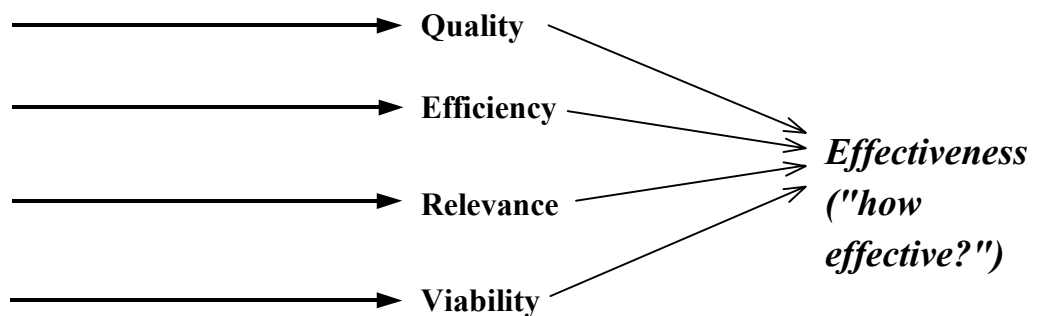
Source: HEFCs (1995, 1999).

The Netherlands model of "ex post" evaluation of university research: four dimensions of quality.



Source: VSNU (1994, 1998).

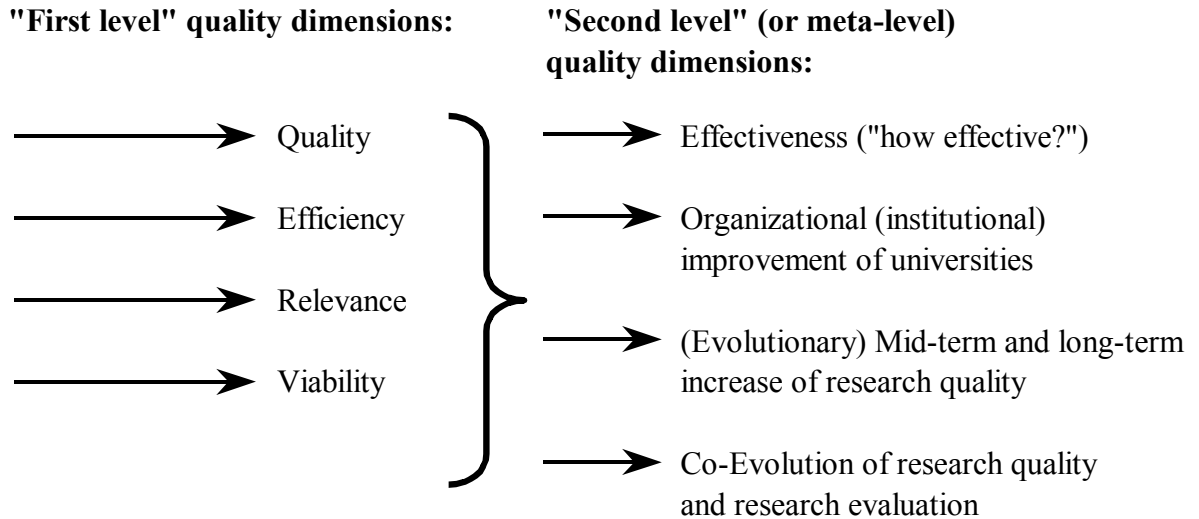
The integration of the concept of "effectiveness" in a model of "ex post" evaluation of university research: four to five dimensions of quality.



Source: Campbell (1999).

Figure 09: A typology of different dimensions of quality of university research (continuation of Figure 08).

Conceptual typology of quality dimensions of university research:



Empirical typology of quality dimensions of university research:

"First level" quality dimensions in the UK and the Netherlands:

The UK model of institutional "ex post" evaluation of university research: one (comprehensive) dimension of research quality.

→ Quality

The Netherlands model of institutional "ex post" evaluation of university research: four dimensions of research quality.

→ Academic Quality

→ Academic Productivity

→ Relevance

→ (Long-term) Academic Viability

Source: Campbell (2003).

Figure 10: A comparative typology of university research evaluation in Europe with regard to the comprehensiveness of institutional "ex-post" evaluations.

Type A countries (nations)

United Kingdom (UK)

Netherlands

Systematic and comprehensive evaluations, at national level and across all disciplines, with explicit references to grading scales: "systemic and comprehensive approach"; disciplinary-based institutional "ex post" research evaluations.

Type B countries (nations)

Germany

Austria

[Finland (1990s)?]

[Switzerland (1990s)?]

Individual and disciplinarily independent evaluations, and without (frequent) references to explicit grading scales: "pluralized and situational approach".

Source: Campbell (2003).

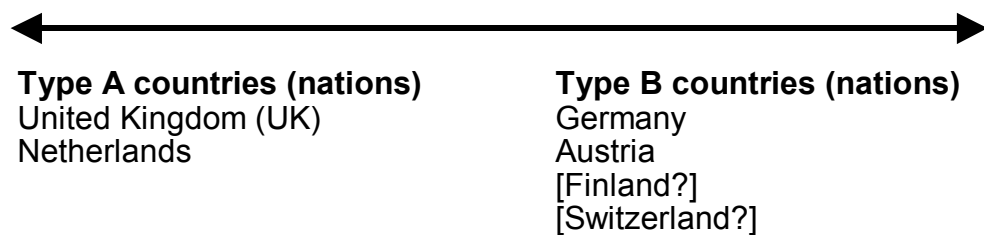
Figure 11: A typology of different scenarios concerning the further development of university research evaluation in Europe.

Different possible scenarios:

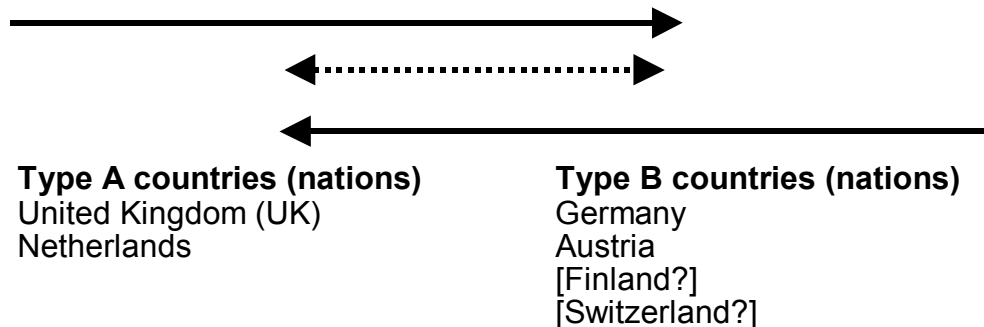
Scenario One: Functional needs of advanced societies.



Scenario Two: Cultural and/or societal pluralism.

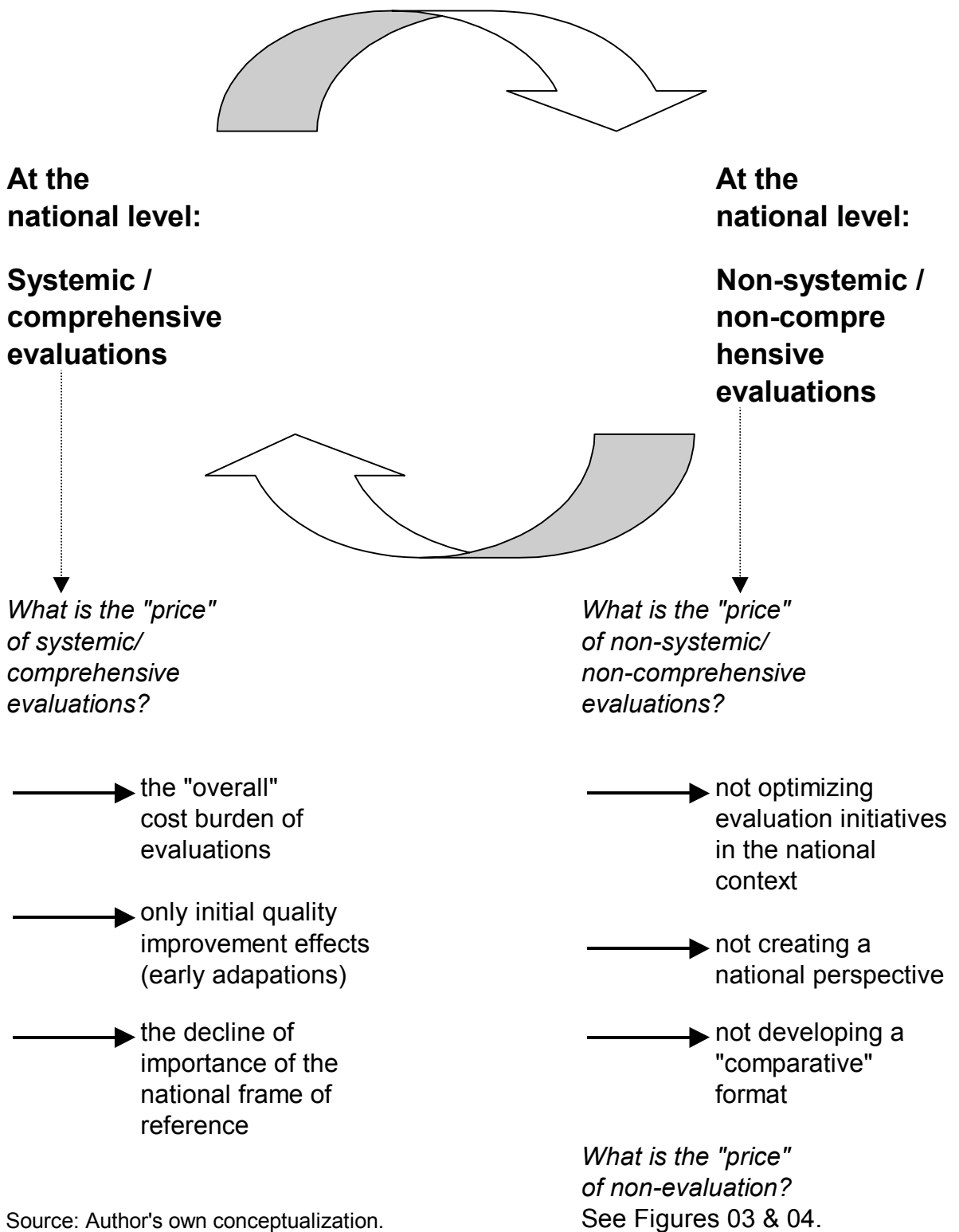


Scenario Three: Interaction (mutual overlapping and learning).



Source: Campbell (2003).

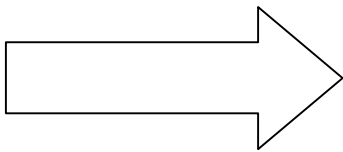
Figure 12: Future scenarios about the evaluation of university research -- is there also a possibility of "cyclicity" ("swings") with regard to the comprehensiveness of evaluations? (Continuation of Figure 11.) Can there be long-term policy swings?



Source: Author's own conceptualization.

Figure 13: The challenge of globalization for the evaluation of university research.

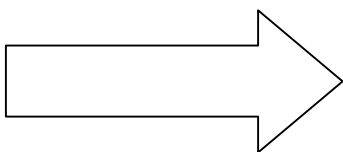
What is the primary comparative reference or benchmark for systemic/comprehensive systems of evaluation of university research in a nation-state context?



Within the context of the nation-state:

Comparing university research of the same discipline, but at different institutional (organizational) university sites.

E.g. in the context of the UK RAEs (Research Assessment Exercises): Comparing university research of university departments within the same disciplinary field, but located at different universities.



Within the context of transnationally integrating (e.g. EU) and/or globalizing nation-states:

?

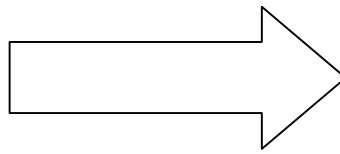
What should now be regarded as the appropriate comparative reference or benchmark for systemic/comprehensive systems of evaluation of university research in a nation-state context?

Source: Author's own conceptualization.

Figure 14: Possible effects of transnational integration and/or globalization for research systems and the evaluation of university research.

Small/Medium-sized national research "systems"

*Research systems:
More homogenous systems*

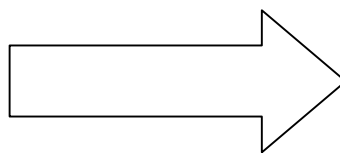


Large-sized national or trans-national research "areas"

*Research areas:
More heterogenous systems*

Small/Medium-sized national research "systems"

*Evaluations
(of university research)*



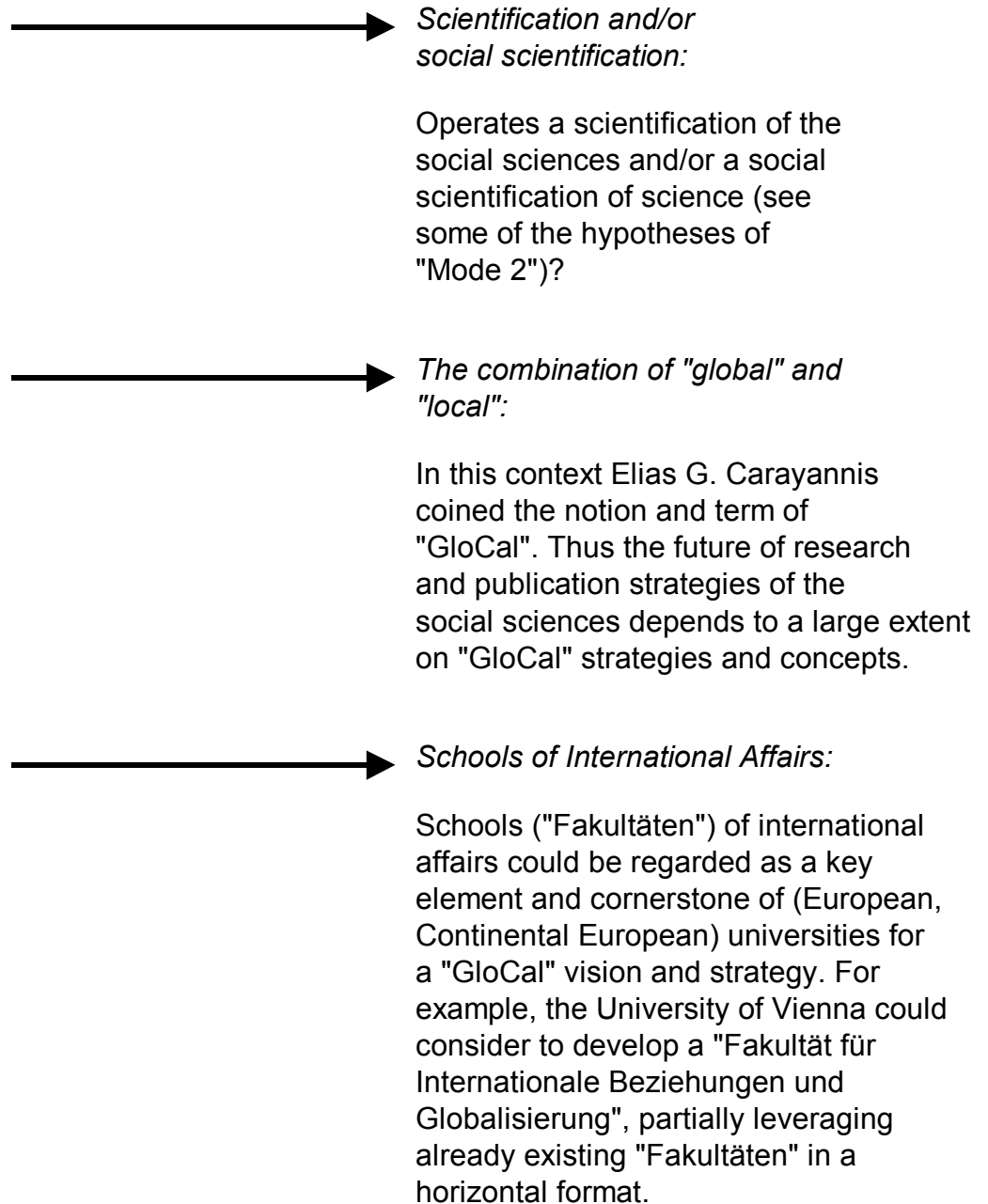
Large-sized national or trans-national research "areas"

*Reputation rankings
(of university research, including evaluations)?*

?

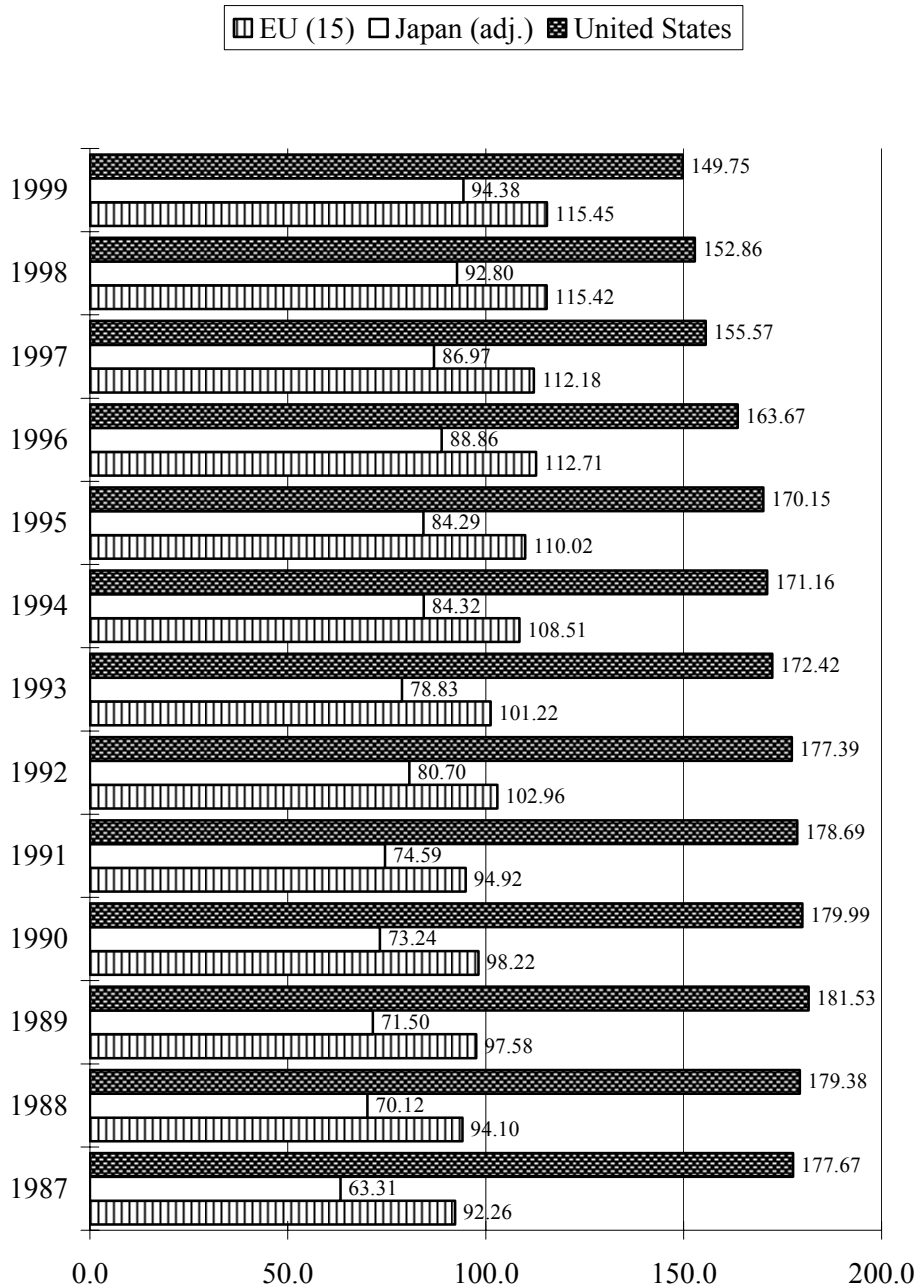
Source: Author's own conceptualization.

Figure 15: What are possible implications for the social sciences?



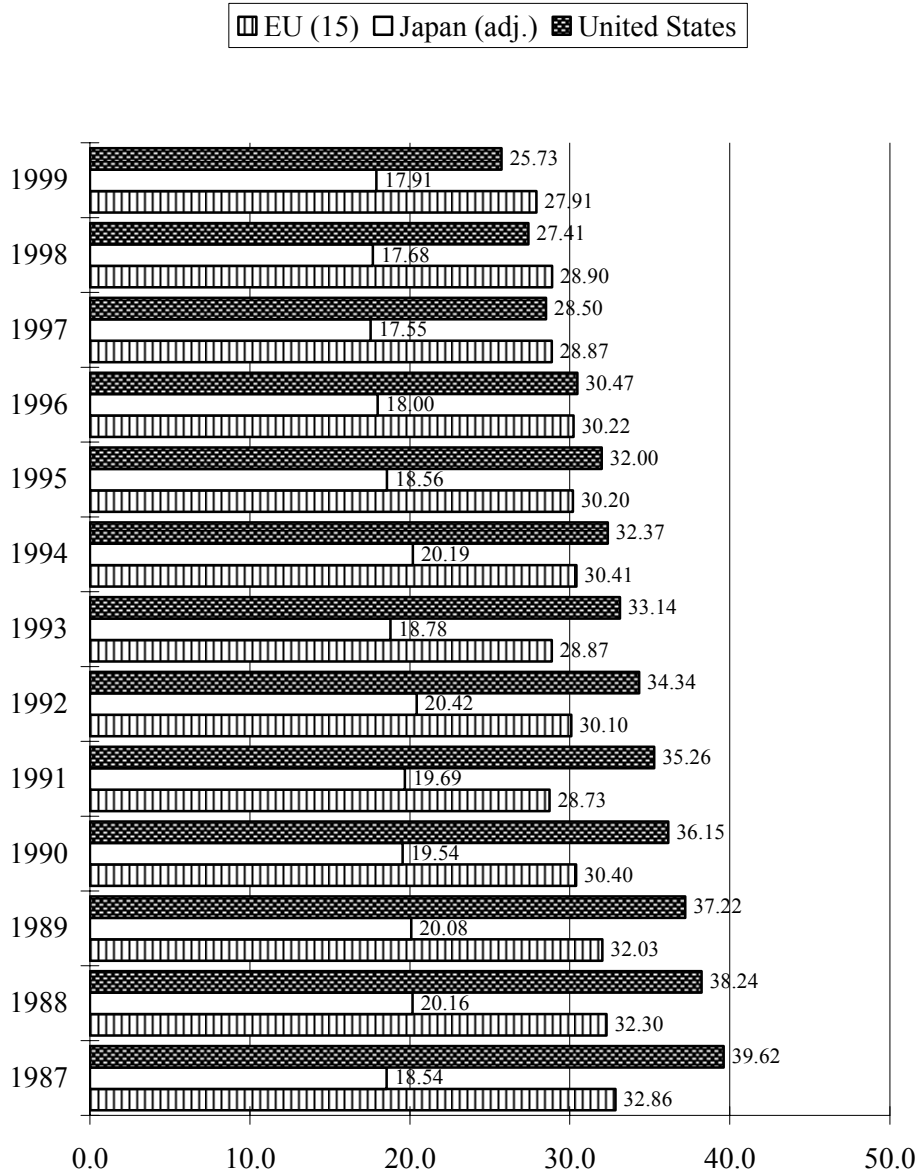
Source: Author's own conceptualization (also referring to publications of Elias G. Carayannis and to Gibbons et al. 1994).

Figure 5-5: Intensity of scientific publications (1987-1999): Scientific publications (SCI and SSCI) per a population of 250000.



Source: Campbell, page 83, in: Elias G. Carayannis & David F. J. Campbell (eds.) (2006), "Knowledge Creation, Diffusion and Use ...", Westport, Connecticut: Praeger.

Figure 5-6: Efficiency of scientific publications (1987-1999): Scientific publications (SCI and SSCI) per 5 million dollars (in constant prices and PPP of 1995) of university R&D.



Source: Campbell, page 84, in: Elias G. Carayannis & David F. J. Campbell (eds.) (2006), "Knowledge Creation, Diffusion and Use ...", Westport, Connecticut: Praeger.