

**HEA Students as Partners in Undergraduate
Research, 22 October 2013**

**Undergraduate
Interdisciplinary Research
and the Context of
Knowledge Production**

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Objectives

- To answer key question:
How can we make it possible for UG students and academic staff in the UK to achieve both integration and specialization in research?
- In answering key question, to draw on findings of a programme of research published as
Integrating Knowledge Through Interdisciplinary Research: Problems of Theory and Practice
(Routledge, 2013)

Overview

- What is integrative interdisciplinary research?
- What justifies the production of integrative interdisciplinary research?
- Why are established researchers still finding it difficult to produce integrative interdisciplinary research, despite policy makers' efforts to help them overcome this difficulty?
- What are the policy implications for UG students and academic staff interested in engaging in integrative interdisciplinary research?
- Conclusion

What is integrative interdisciplinary research?

- Different conceptions of interdisciplinary research
 - reflect differences in underlying philosophical theory (e.g. positivism, postmodernism, critical realism)
- Focus on *integrative* interdisciplinary research
 - Dominant conception in academic literature
 - Synthesis of knowledge from different fields of inquiry

What justifies the production of integrative interdisciplinary research as well as specialized disciplinary research?

- Critical realist theory of integrative pluralism (see Bhaskar 1986, 1993, 2010)
 - *Differentiation* of reality justifies **specialization** in research
 - E.g. different types of social (and natural) structure
 - *Interconnection* of reality justifies **integration** in research
 - E.g. interaction/interdependence of different types of social (and natural) structure (as in a totality)

Why are established researchers still finding it difficult to produce integrative interdisciplinary research?

- Complexity of intellectual conditions i.e. contradictory philosophical forms of thought
- Complexity of social conditions e.g. relationships between employment, science, peer review, and education
- Interdependence of social and intellectual conditions generates dominant tendency towards specialization in research
- HE policy makers have overlooked significance of causal effect of underlying socio-intellectual conditions

What are the policy implications for UG students and academic staff interested in engaging in integrative interdisciplinary research?

- Intellectual aspect
 - UG students need to be aware of problem of philosophical contradiction **➡** education in philosophy of science
- Social aspect
 - UG students can help staff to transform social practices in HE e.g. assist with redesigning curriculum

Conclusion

- Problem of integrating knowledge through interdisciplinary research reflects existence of dialectical contradiction
- Resolve dialectical contradiction to facilitate both integration and specialization in research and teaching
- Transform socio-intellectual conditions of knowledge production – with input from UG students – to resolve dialectical contradiction

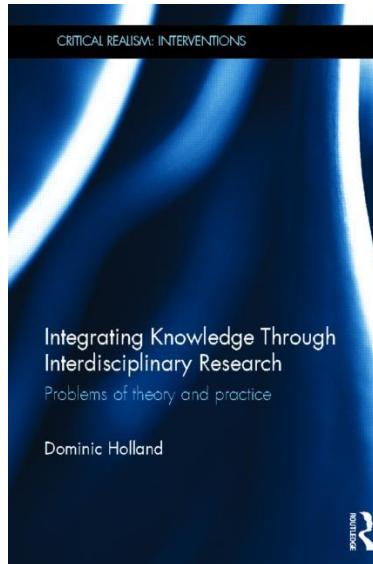
References

- Bhaskar, R. (1986) *Scientific Realism and Human Emancipation*. London: Verso (new edn Routledge 2009).
- Bhaskar, R. (1993) *Dialectic. The Pulse of Freedom*. London: Verso (new edn Routledge 2008).
- Bhaskar, R. (2010) 'Contexts of interdisciplinarity: interdisciplinarity and climate change' in Bhaskar *et al.* (eds) *Interdisciplinarity and Climate Change: Transforming knowledge and practice for our global future*. London: Routledge.

Finally, if you want to learn more...

- Read the book

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- Read my forthcoming article in the *Journal of Critical Realism*:

'Complex realism, applied social science and post-disciplinarity: a critical assessment of the work of David Byrne'