

Why Interdisciplinarity turns everything
upside down

This talk will comprise of two parts:

- How Interdisciplinarity Works ('how did we get here?')
- How Interdisciplinary Work Works ('what's it like?')

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- *Transdisciplinary* (crossing boundaries, sometimes using knowledge from outside the university)
- *Multidisciplinary* (an additive process of consulting people in their specialities for separate aspects of expertise)
- *Interdisciplinary* (a synthetic process of creating a new type of knowledge by the interaction of experts)

Bear in mind that often these are actually used interchangeably.

Omnidisciplinarity²

- the ‘we just have to overcome issue X¹’ factor
- specialisation is a problem: ‘real life does not come in discipline-sized chunks’
- ‘we should build bridges’
- a shadow of encyclopaedic knowledge (ie disciplinarity an unfortunate necessity)
- Interdisciplinarity is a good thing and is the only way to overcome the limitations of disciplines
- NB problems are reliably urgent

¹Issue X is typically ‘not getting on’/‘a few minor details’/‘get a consensus – that will be straightforward’.

²I just invented this term.

Metadisciplinarity³

The creation of a new coherent body of thought or legitimised position: two broad types –

- Crossdisciplinary ‘Studies’
 - Marxism
 - Feminism
 - Cultural Studies
 - Critical Realism (etc)

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(the likely trajectory in Arts, Humanities and some Social Sciences)

- Leads to identification of entirely new discipline (the likely trajectory in Science)

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It's Always Urgent and Promising

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- if a discipline doesn't solve a problem then
- interdisciplinarity can promise to do so (hurray for interdisciplinarity) because it can overcome the limitations of the discipline.

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Thus interdisciplinary work rarely gets blamed (disciplinarity does) and disciplinary work rarely gets praised.

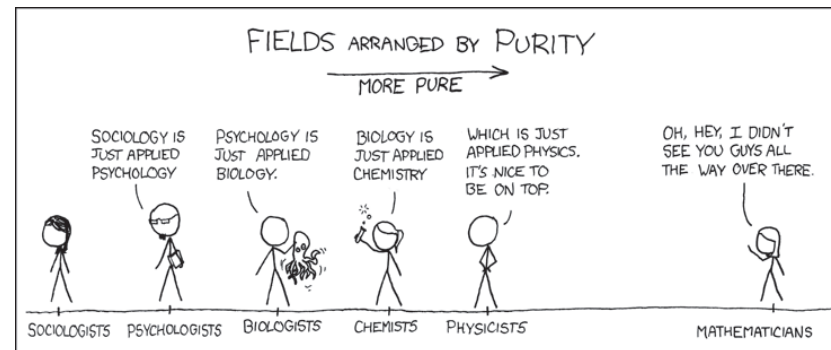
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How Interdisciplinary Work Works

Disciplines are:

- incommensurate by design
- frameworks for authoritative judgement
- generally counterintuitive and opaque to outsiders
- ways to normalise emphasis (values/content)
- ways to know stuff for sure (or know what you don't know, for sure) by disciplining people into thinking in a *distinctive* way (normalising ground rules)

Disciplinary Imperialism



Source: xkcd.com

Disciplinary Imperialism

When one discipline tries to make another the object of its study or to demand its methodology and values be given priority, you get resistance. . .

Consider:

- accounts of scientific discovery that use psychoanalysis or similar ('Einstein was a genius because of his family background or childhood')
- calls for subjects in Arts and Humanities to be 'more rigorous', 'scientific' or 'empirical' (note in particular opposition to 'revisionist/relativising histories')

... more Disciplinary Imperialism

- calls for translations to be ‘completely accurate’ instead of ‘reinterpretative’
- an insistence that disciplines are ‘socially constructed’
- the claim that someone working in one field is actually following the methodology of another (eg the claim that a historian of religion is ‘actually’ ‘being Bayesian’ or that an academic in a literary field ‘lacks proof’).

How Can Interdisciplinary Work *work*?

Given that:

- disciplines are *fundamentally* incommensurate
- to be expert in a discipline is to be accustomed to having authoritative judgement
- disciplined experts work in environments with a deeply embedded set of rules of engagement (which is lacking in interdisciplinary contexts).

Why should we expect anything to be possible? And what happens when you mix them?

Thing you might think in an
interdisciplinary context

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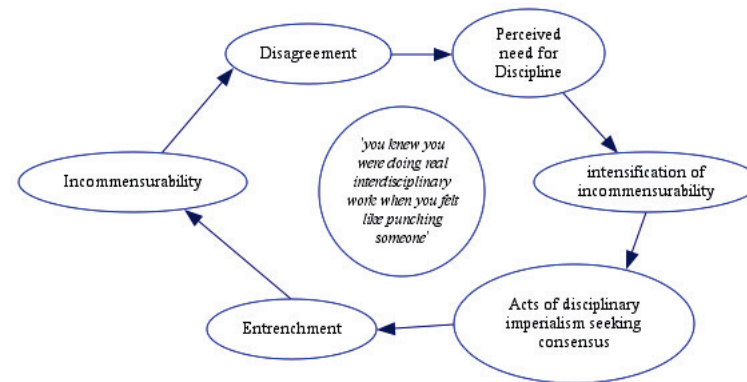
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- That's really obvious, why does it need so much explanation?
- Why can't they do their research *properly*?

With One Discipline Leading...

- The speaker is explaining something
- Someone asks a 'simple question'
- They inadvertently pick out a threshold concept
- The speaker faces going back to basics or the questioner has to be somehow shrugged off
- If they go back to basics, you hit the same process and begin an infinite regress of explanation
- ... until you reach the point of wondering what an explanation *is*
- Frustration builds as this spirals ...

Interdisciplinary Groups (or 'On Punching Your Colleagues')



Interdisciplinary Inversion

In interdisciplinary settings what is likely to trip you up is:

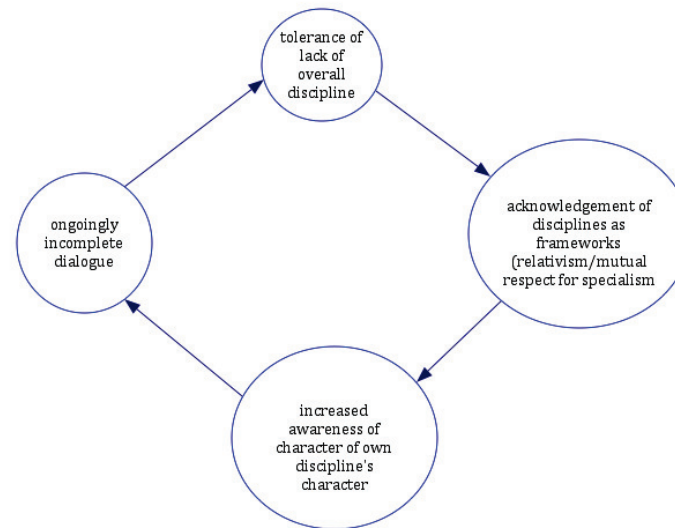
- the things you take *most* for granted
- a lack of consensus about what matters
- a lack of consensus about what constitutes a successful outcome
- a lack of consensus about whether consensus is what is sought



Ways Out

- Give up
- Refocus your attention on the nature of your own knowledge

The Zen of Interdisciplinary Work



Barely Justified but
Certified-as-Interdisciplinary Joke

A man in a hot air balloon realized he was lost. He reduced altitude and spotted a woman below. He descended a bit more and shouted, “Excuse me, can you help me? I promised a friend I would meet him an hour ago, but I don’t know where I am.”

Barely Justified but
Certified-as-Interdisciplinary Joke

The woman below replied, “You’re in a hot air balloon hovering approximately 30 feet above the ground. You’re between 51 and 52 degrees north latitude and between 0 and 1 degrees east longitude.”⁶

⁶Tunbridge Wells.

Barely Justified but
Certified-as-Interdisciplinary Joke

“You must be an engineer,” said the
balloonist.

“I am,” replied the woman, “How did you
know?”

Barely Justified but
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“Well,” answered the balloonist, “everything you told me is technically correct but I’ve no idea what to make of your information, and the fact is I’m still lost. Frankly, you’ve not been much help at all. If anything, you’ve delayed my trip.”

Barely Justified but
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The woman below responded, “You must be
in Management.”

“I am,” replied the balloonist, “but how did
you know?”

Barely Justified but
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“Well,” said the woman, “you don’t know where you are or where you’re going. You have risen to where you are due to a large quantity of hot air. You made a promise which you’ve no idea how to keep, and you expect people beneath you to solve your problems.”

Barely Justified but
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“The fact is you are in exactly the same position you were in before we met, but now, somehow, it’s my fault.”