

17-18 October 2019, Washington DC

Patrons Lounge, 1.45 - 3pm

Institutional assessment systems

David Sweeney (Chair)

Jane Zavisca

Diana Hicks







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Executive Chair, Research England





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Jane Zavisca

Associate Dean Research & Graduate Studies, College of Social & Behavioral Sciences, University of Arizona



Advancing and Assessing the Impact of Social Sciences: Perspectives from a STEM-Focused U.S. Research University

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FOCAL QUESTIONS

- How does the NSF broader impact framework enable and constrain social sciences* in a university context?
- How can/should social science impact be assessed in a university context?

^{*} Note: This presentation uses "social science" as shorthand for social, economic, behavioral, cognitive, economic, educational, and policy sciences.

WORKING DEFINITIONS

- Broader impact: "Potential to benefit society and contribute to achievement of specific, desired societal outcomes." –NSF merit review criterion
- Research impact: "An effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond** academia." –UK Research Excellence Framework, 2014

3 ROLES FOR SOCIAL SCIENCES IN NSF BROADER IMPACT FRAMEWORK



STEM fields with impact

Supporting

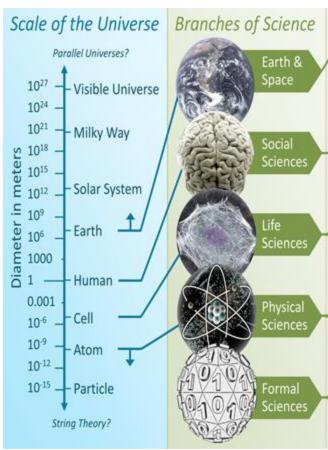
"Do" BI for other scientific fields

Integrated

Interdisciplinary convergence with impact

FUNDAMENTAL ROLE: SOCIAL SCIENCES ARE STEM FIELDS WITH IMPACT





SUPPORTING ROLE: SOCIAL SCIENCE EXPERTISE ADVANCES B.I. OF OTHER FIELDS

NSF B.I. goals focus on human/social phenomena

- Full participation of underrepresented groups in STEM
- Improved STEM education and educator development
- Increased public scientific literacy and engagement with STEM
- Improved well-being of individuals in society
- Development of diverse, globally competitive STEM workforce
- Increased partnerships between academia, industry, and others
- Improved national security
- Increased economic competitiveness of the United States
- Enhanced infrastructure for research and education

CHALLENGES

Low legibility Beyond social sciences

Secondary agenda, poor resources

Fundamental

STEM fields with impact

Supporting

"Do" BI for other scientific fields

Integrated

Interdisciplinary convergence with impact

Ad hoc successes, not yet institutionalized

Social Sciences & Impact Priorities at the University of Arizona



INSTITUTIONAL CONTEXT

- Flagship, public, land-grant university
- Hispanic & Native American Serving Institution
- Deep cuts in state budget support
- Strategic priority on STEM and Health Sciences
- Core metrics for impact (the usual suspects)
 - Research expenditures / financial ROI
 - Publications & citations
 - Disciplinary rankings

STATE CONTEXT



Header image from AZ Board of Regents website on research impact

"Research at Arizona's public universities infused more than \$1.2 billion into Arizona's economy in 2017, drawing the enterprise closer to the board's strategic goal of \$1.6 billion by 2025. This aggressive goal significantly **impacts Arizona's economy, competitiveness and growth**. It also helps **attract more businesses** to Arizona and **impacts the tax base** for the state."

Key metrics

- Research expenditures
- Licenses and options executed
- Inventions disclosures received

CHALLENGE: CENTER FUNDAMENTAL ROLE OF SOCIAL SCIENCES IN IMPACT ASSESSMENT AT UA



STEM fields with impact

Supporting

"Do" BI for other scientific fields

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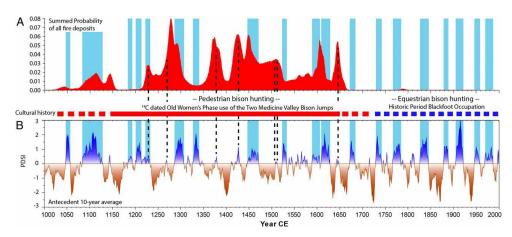
CHALLENGE FOR HUMANISTIC INQUIRY

- My efforts/incentives to define social sciences as STEM draws boundaries against arts & humanities
- Privileges method over object of study: we are all studying human phenomena
- US federal agency organization reinforces this
 - NSF vs NEH
 - more national resources and university attention to NSF

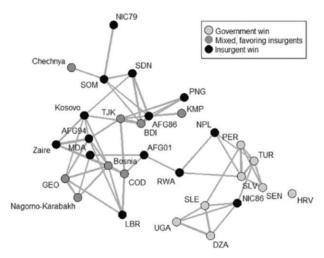
IMAGES OF IMPACTFUL UA SOCIAL SCIENCE RESEARCH



<u>Documenting endangered languages</u> (Linguistics)



<u>Human and climate impacts on fire</u>, 1000-2000 AD (Anthropology)



Network of insurgencies (Sociology)



<u>Agrivoltaics in school gardens</u> (Geography & Development)

BASIC SOCIAL SCIENCE IMPACT: THE CASE OF INDIGENOUS LANGUAGE RESEARCH

- 2019: UN Year of Indigenous Languages
 - UNESCO: "Indigenous languages matter for development, peacebuilding and reconciliation." https://en.iyil2019.org/
 - About half of 7,000 languages in use are endangered
- Two key federal research programs
 - Documenting endangered languages (DEL): NSF-NEH partnership
 - Linguistics (NSF): Leveraging DEL corpuses for basic science research

EXAMPLES OF IMPACTFUL TRIBAL-UA COLLABORATIVE RESEARCH

- <u>Coeur d'Alene preservation project</u> (UA PI: Amy Fountain)
 - Grassroots, community-based approach
 - Online documentary resources with utility for heritage and scholarly communities
 - Advancing research on preservation standards and practices
- Analyzing Siriano and Desano to determine universal principles of language change (UA PI: Wilson de Lima Silva)
 - Collaboration between researchers and speaker communities
 - Reference grammar and corpus of recordings archived in US and Brazil
 - Scientific discoveries on linguistic ecology and language change through contact with other languages
- <u>Mutsun-English English-Mutsun dictionary</u> (UA PI: Natasha Warner)
 - Help revitalize language whose <u>last fluent speaker died in</u> 1930
 - Supported creation of community-based teaching materials
 - Scientific discoveries on metathesis (transposition of syllables or sounds)

IMPACT ASSESSMENT: BEYOND \$ AND CITATIONS

Unit of Analysis	Data source	Result
Faculty	 Annual evaluation reports ("UA Vita") Narratives on accomplishments & goals Reported activities 	 Failure uneven reporting on impact beyond impact on own academic field not an explicit expectation
Project	PI reporting to sponsors in award abstracts and public outcomes statements	 Partial success Timeline -> more reporting on potential than outcomes Limited data available to institutions
Community stakeholder	SBS study of community assessments of UA impact • Ethnographic interviews • Surveys	Design stage

SUPPORTING IMPACT

- Institutions should support what they assess.
- Most UA internal grants programs evaluate impact in terms of \$ ROI (leveraging for external grants)
 - For exception requiring and supporting authentic partnerships: see <u>Haury Program in Environmental and Social Justice</u> (endowed for UA)
- Central impact support mainly limited to STEM learning
- Much more pre-award than post-award support
- VPR considering creation of central impact office

CONCLUDING QUESTIONS

- Do all social science & humanities faculty need to "do" broader impact work?
- What should be the timelines and units of analysis for assessing impact?
- What should be role of metrics in driving vs. reflecting impactful work? How to mitigate risk that quantifying impact incentivizes "thin" BI approaches?
- How to support what we assess?
- What can we learn from the UK and EU models? What would be consequences of adopting such models?
 - Potential vs. tangible impact
 - Focus on external stakeholders



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Institutional assessment systems

Diana Hicks

Professor of School of Public Policy, Georgia Institute of Technology





A cartography of philosophy's engagement with society

Diana Hicks¹ and J. Britt Holbrook²

¹Georgia Institute of Technology, ²New Jersey Institute of Technology

This material is based upon work supported by the National Science Foundation under Grant No. 1445121. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.







US and European approaches differ

US – public engagement has intrinsic value as good philosophy

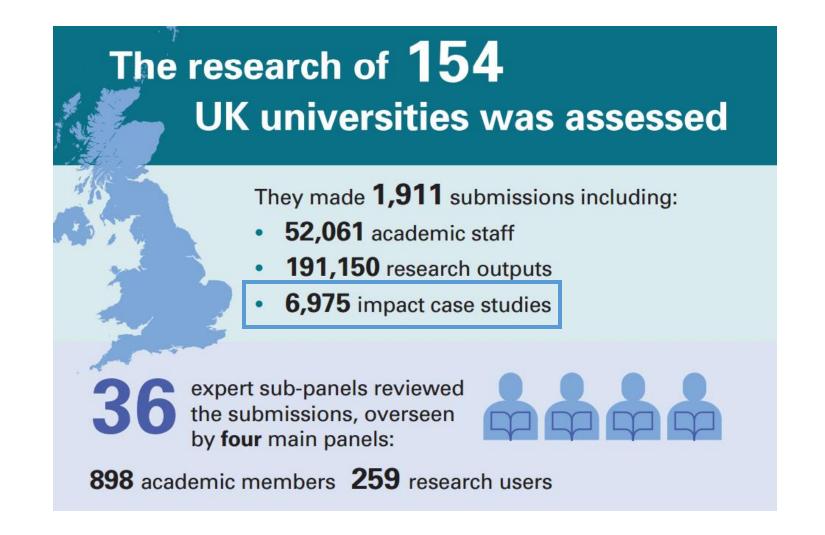
- American Philosophical Association (APA) Committee on Public Philosophy
- Public Philosophy Network (PPN)
- Society of Philosophers in America (SOPHIA)
- Institute for the Advancement of Philosophy for Children (IAPC)
- Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE)
- Society for Philosophy of Science in Practice (SPSP)
- Center for Public Philosophy at UC Santa Cruz
- Philosophy in the Public Interest program at Northern Arizona University
- Sewanee's Community Engaged Learning Program

Europe – conversation in the evaluative context

- comparatively difficult to see impact from humanities scholarship
- methods used to evaluate impacts inadequate for the humanities
- process of achieving broader impacts non-linear
- informal interaction central in this process
- The conversation is a response to:

clearly legitimate demands that a liberal and democratic society properly makes of its university researchers to be at the beating heart of our contemporary public sphere - Belfiore

Societal impact – UK 2014 REF impact case studies



REF Definition of Impact

"Any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia."

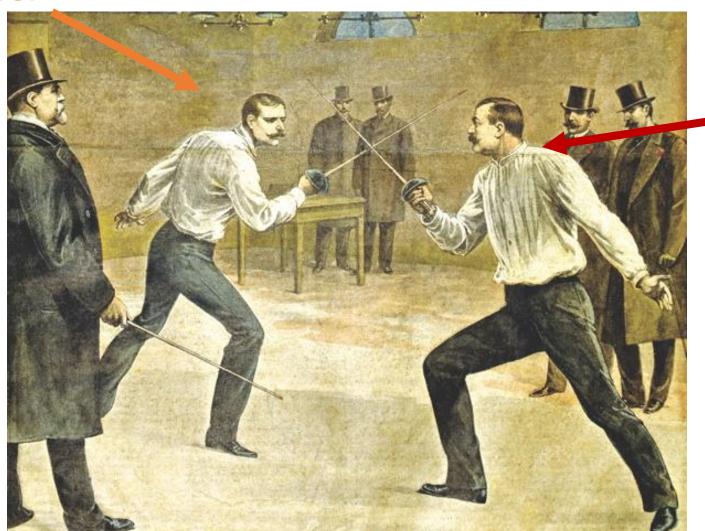
The humanities panel customized their taxonomy of impact to include: civil society, cultural life, economic prosperity, education, policy making, public discourse, and public services.

Impact narratives by the numbers

- 4 pages,
- 1,350 words (500 for the research, 750 for the impact, rest for ref's)
- describing impacts that had occurred between 2008 and 2013,
- from research conducted in the prior 20 years,
- 1 case study for approximately every 10 staff
- Narrative had to be evidenced

A 2 year duel

A philosopher



David S.

What will the philosophers do?

To write a strong case study philosophers had to:

- provide a coherent and convincing narrative
- identify the issue addressed by the research
- link, with evidence, the research and subsequent impact
- define beneficiaries
- provide credible evidence to support the reach and significance of the claimed impact
- distinguish between the process of disseminating the research and the resulting impact

To satisfy our curiosity. How would the hardest case handle being evaluated on societal impact? We read the philosophy cases.

- Read 58 philosophy cases
- http://impact.ref.ac.uk/CaseStudies/
- Unit of assessment Philosophy
- Within that, research area Philosophy

Found 5 strategies

Dissemination Engagement **Provocations** Living philosophy Philosophy of X

6 Characteristics of a Field Philosopher

Goal: Examines philosophical dimensions of real-world problems

Approach: Begins with problem as defined by stakeholders

Audience: Engages non-disciplinary stakeholders

Method: Uses 'grounded' manner, rather than set method

Robert Frodeman and Adam Briggle

Evaluation: Employs context-sensitive means (indicators of rigor, success)

Institutional placement: Behaves as an institutional nomad

Our analysis

Hicks & Holbrook

- Dissemination
- Engagement
- Provocations
- Living philosophy
- Philosophy of X





Frodeman & Briggle

- Goal: Examines philosophical dimensions of real-world problems
- Approach: Begins with problem as defined by stakeholders
- Audience: Engages non-disciplinary stakeholders
- Method: Uses 'grounded' manner, rather than set method
- Evaluation. Employs context-sensitive means (indicators of rigor, success)
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Dissemination to the public

- A "determined campaign of public engagement"
- University's public lecture series
- Philosophy café
- Oxford continuing education program
- Lectures in local schools
- BBC4 program *In our Time*
- Philosophy Bites podcast
- Times Literary Supplement
- New York Times opinion section
- Lectures to school teachers

Alignment with field philosophy

Characteristic	Explanation	Alignment
Goal	philosophical dimensions of real-world problems	No, thinking people must be interested in what philosophers do
Approach	problem defined by stakeholders	No, traditional problems
Audience	Engages non-disciplinary stakeholders	Public invited to listen
Method	'grounded', rather than set method	Published in erudite books and philosophy journals
Institutional Placement	On the margins, institutionalize both in academia and communities of practice	Traditional

Engagement

- U Aberdeen conversations in prisons, with homeless, with unemployed youth
- Cardiff U booklet for schools, 3 views of Nietzsche's critique of morality
- Essex University Autonomy Project, best interests decision making

Characteristic	Explanation	Alignment
Goal	philosophical dimensions of real-world problems	Conversation to excavate, articulate and discuss philosophical dimensions of real world problems – teaching critical thinking, disputes in the Court of protection.
Approach	problem defined by stakeholders	yes
Audience	Engages non-disciplinary stakeholders	Teachers, students, judicial system
Method	'grounded', rather than set method	Mixed – both traditional philosophy papers and non disciplinary publications
Institutional Placement	On the margins, institutionalize both in academia and communities of practice	Traditional, with site visits

Provocations

- Oxford University's Julian Savulescu has advanced ethical arguments in favor of sports doping and human genetic enhancement, i.e. "designer babies"
- Nick Bostrom, of Oxford University, using conceptual and empirical considerations, argued that we are almost certainly living in a computer simulation

Characteristic	Explanation	Alignment
Goal	philosophical dimensions of real-world problems	Yes, though somewhat exotic perspective
Approach	problem defined by stakeholders	No, nor central problems in philosophy
Audience	Engages non-disciplinary stakeholders	Yes, controversial, counter-intuitive claims about aspects of everyday life
Method	'grounded', rather than set method	Traditional philosophy journal publication, cited by non-philosophy papers
Institutional Placement	On the margins, institutionalize both in academia and communities of practice	Traditional, with visits – Davos, a play, websites

Living philosophy

- leverage one's own life scholarly work related to a person's life outside academia, creating a natural link to broader impacts
- Toby Ord of Oxford University investigated consequentialism, arguing that long-term commitments, not individual acts, should be assessed. He also founded the organization Giving What We Can dedicated to fighting poverty in the developing world. "Its members pledge to give at least 10% of their income to aid and to direct their giving to the organisations that have a demonstrated ability to use their incomes most efficiently. [As of 2013] The most significant impact of his research is the amount of money pledged by the 326 members of this organisation: over US \$130,000,000"

Living philosophy 2

- Labour Councillor and Professor Beverley Clack's work, which includes reflections on religion as a form of ethics and providing intellectual support for an ethical socialist vision as part of the Labour Party think tank, Labour Left
- Rai Gaita of King's College London, whose distinctive conception of good and evil were brought "to bear on a range of central and abiding moral questions" in a narrative form. In particular, his biography of his father was made into a film. Both the book and film were well received in Australia

Characteristic	Explanation	Alignment
Goal	philosophical dimensions of real-world problems	Yes
Approach	problem defined by stakeholders	Not really
Audience	Engages non-disciplinary stakeholders	Yes
Method	'grounded', rather than set method	Non traditional publications
Institutional Placement	On the margins, institutionalize both in academia and communities of practice	Exemplars of this, institutionalize work outside the academy

Philosophy of X

- Luciano Floridi philosophy of information has led to consulting for Capgemini, Google and the European Commission
- E.J. Lowe arguments for a four-category ontology influenced designers of information systems
- Peter Millican developed a program to perform stylistic analysis and comparison of texts to identify authors, useful in cases of disputed authorship
- Barry C. Smith philosophy of wine, in particular objectivity of taste, led to consulting for large drinks firms, public lectures at wine industry conferences, contributions to popular books on wine, press coverage, an experiment at a high end restaurant, and contributions to a film and app produced by a drinks firm.
- Matthew Kieran philosophy of art, a virtue approach to artistic appreciation and creativity – putting character at the center of understanding human engagement with the arts, workshops at the Tate, International Miami – Basel art fair, Crunch Art Festival, Hay on Wye, National Centre for Craft and Design, the Henry Moore Institute and the Leeds City Art Gallery & TV program

Characteristic	Explanation	Alignment		
Goal	philosophical dimensions of real- world problems	Yes, by definition - perceptions of the taste of wine, art appreciation		
Approach	problem defined by stakeholders	? Not enough information to know		
Audience	Engages non-disciplinary stakeholders	engage with industry (information, wine), service providers (health) or cultural institutions (art) in the area of interest		
Method	'grounded', rather than set method	Mixed – philosophical & field journals and books		
Institutional Placement	On the margins, institutionalize both in academia and communities of practice	Yes, shuttling between the academy and the larger world – consulting for the wine industry, training prison staff, teaching in art galleries, curating exhibitions		

Conclusion

	Goal	Approach	Audience	Method	Institutional placement
Dissemination	×	×	\checkmark	×	×
Engagement	\checkmark	//	\checkmark	\checkmark	×
Provocation	\checkmark	×	\checkmark	×	\checkmark
Living philosophy	\checkmark	×	\checkmark	\checkmark	√ √
Philosophy of X	\checkmark	?	\checkmark	\checkmark	✓



The Impact of Social Sciences and Humanities on Society

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Panel discussion and Q&A

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Executive Chair, Research England

Challenging academics to work with external stakeholders on both design and implementation of impact frameworks is the way forward







The Impact of Social Sciences and Humanities on Society

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Up Next

3pm Coffee break

3.30-5.15pm Plenary contributions and interactive debate

Rasmuson Theater



