

UNIVERSITY OF OSLO

Ethics and integrity in high-impact research

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My background

- Postdoc at TIK
- Philosopher and ethicist, but I work empirically
- Doctoral thesis on how the responsibility for research integrity and ethics is best distributed among researchers, research organizations and the government
- My current work is on how research ethics and integrity can be maintained when researchers are increasingly integrated with the rest of society

Is research impact
always good?

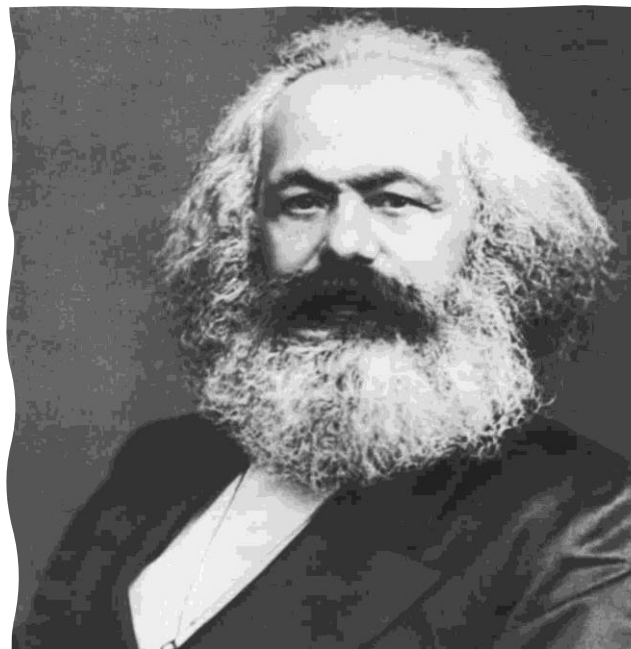
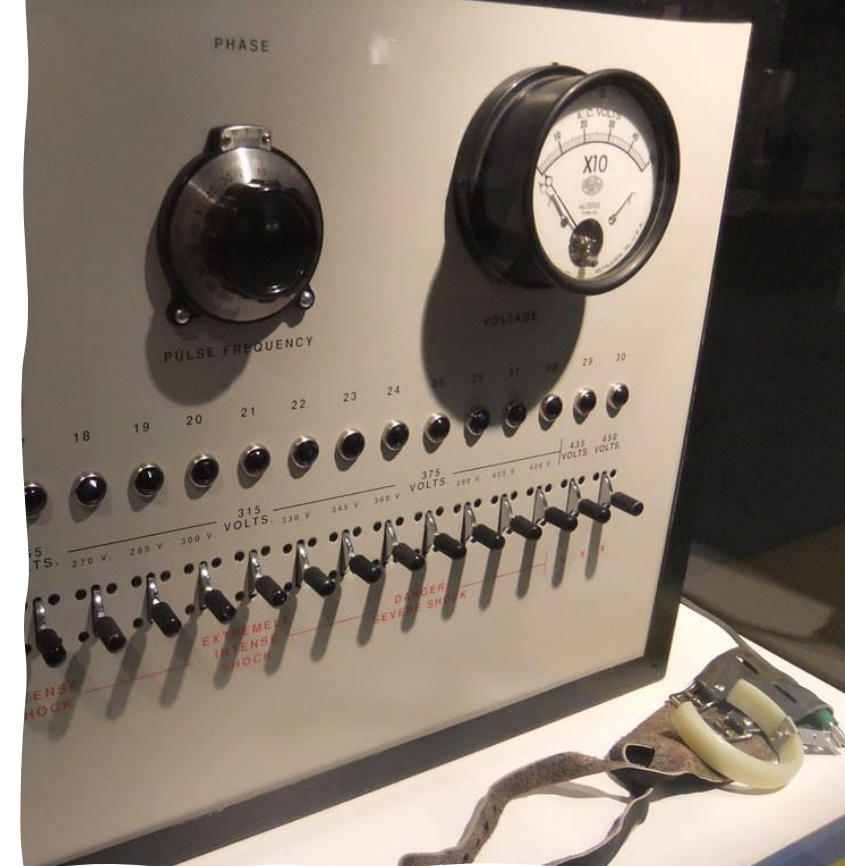
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always good?



Is research impact in
the social sciences
always good?



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Can research integrity prevail in the market?
Lessons from commissioned research
organizations

Knut Jørgen Vie

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What is research ethics and integrity?

Research integrity:

Concerned with ensuring the trustworthiness of the research process and research results


It is about following and promoting good research processes, while preventing questionable research practices and misconduct such as fabricating and falsifying data, and plagiarizing the work of others

Research ethics:

Research has a potential to cause harm, and causing harm is unethical and must be prevented. Harm comes in two forms: harming research participants and harming society

Research ethics and integrity often overlap in practice, and there are continuous discussions about their definition and content. Questions regarding research quality are also often entangled with integrity and ethics

The relationship between ethics, integrity and impact



In order to have a positive impact on society, research must be truthful and trustworthy. False or flawed research can at best be wasteful, and at worst cause significant harm. If research is not deemed trustworthy, it will not be implemented

Misconduct and fraud leads to untrue and potentially harmful results
+ Unethical research is detrimental to trust in research

Therefore, research ethics and integrity are enablers of impact.
Unethical research, fraud and other forms of misconduct are barriers to impact, or enablers of negative impact

The higher the impact, the higher the risk

The changing nature of research standards

- Randomized controlled trials were introduced in the 1960s
- Peer review was not standard practice until the 1970s
- Today there is an increased demand for open access to publications and data, reporting of conflicts of interest, replication, pre- registration of research protocols, and so on
- Researchers are also increasingly measured on their citations, number of publications, public engagement, and impact

The norms of research are undergoing continuous development. What it means to be a researchers is changing as well. Do we have the skills and the systems we need to cope with these changes?

A short history of research ethics and integrity

Research integrity:

- In 1942, Robert Merton claimed that research is virtually free from fraud, on account of the mutual policing of researchers
- A handful of American researchers were discovered to have engaged in fraud around 1970. Congress investigated. Researchers were in denial
- The Americans introduced regulation. Most of the world followed suit, partially after discovering fraud themselves
- Integrity is now regulated throughout the world

Research ethics:

- Became a concern in the wake of abuses of human research subjects during WW2. Led to the Nuremberg principles
- Further abuses, such as the Tuskegee syphilis experiments, led to further regulation
- New and emerging technologies have the potential to cause significant harm to society, and the ethical aspects of such developments receive much attention and is subject to regulation

A lesson



Regulation tends to follow in the wake of researchers doing bad things. If we want to avoid increased regulation of research practices, we must ensure responsibility



Many researchers lack training and experience in bringing research into society

What can go wrong in high-impact social science?

- Undue influence from external actors
- Conflicts of interest
- Fraud and other forms of misconduct
- Low quality research
- Abuse and misrepresentation of research findings

Undue influence from external actors

- When selling research services, collaborating with societal actors, or engaging in innovation, there is a risk that users and other groups will attempt to subvert the research process to promote their own ends
- Undue influence on the research process is covered by codes of conduct, and allowing it is a form of misconduct
- Undue influence can be unconscious and subtle, and is not just a matter of taking a stand on behalf of the truth

One should be very careful not to get on the lap of the client and lose sight of the fact that they often can want to pull the project in a particular direction [...] and from time to time you get too close [...] We have seen that sometimes when people have approached new topics they can rely too much on the client when they describe the problem

Conflicts of interest

- Impact-oriented research can lead to conflicts of interest
- Failing to report such conflicts can lead to accusations of misconduct and retraction of papers
- Working for or with societal actors can narrow the scope of your work

You can get burned you know. You can write in a way that makes a client uninterested in financing you

Well, you cannot, in a way, be an institute researcher with a very critical fundamental agenda. You know, you can have critical conclusions in projects about how things are done and the like. But, you know, when I started at [the institute] I became an inclusion researcher. Before I started at [the institute], I was an oppression researcher. And that is the price you pay

Fraud and other forms of misconduct

- Money and incentives can lead to fraud, misconduct and bias
- In commissioned research and innovation, these risks are enhanced
- Are we doing enough to mitigate these risks?

Low quality research

- High quality research is more important in high-impact research
- However, focusing on impact can come at the cost of academic rigor
- Low-quality high-impact research can be functionally equivalent to fraud, and it can cause harm or waste limited resources

Well, sloppiness can glide over into the unethical [...] it is sold as research, as science. And bad science can be fraudulent, but it is not done in bad faith. It is just incompetence, sloppiness, or tight deadlines

Much of the interesting things you have to ... You have to do that in your spare time, you know. As I was told by a leader [...] Reading, you know, research literature – that is something we do in our spare time

Abuse and misrepresentation of research findings

- When striving for impact, researchers find themselves in systems with more actors than just themselves. These actors can use findings in unethical ways, or misrepresent research to promote their own ends
- To what extent are researchers responsible for misuse?
- We need to think more about responsibility in multi-actor innovation systems – research ethics today is too myopic, as it tends to focus only on the perspective of researchers

I got hold of the summary from a journalist who had received it. And there was a presentation of our report which did not fit what we believed was in the report, so [the ministry] got a completely different picture of our research than we had presented in our summary

Mitigating the risks of high-impact research

- Experience
- Teamwork
- Mentorship and socialization
- Supportive leadership
- Good contracts

Experience

- Doing the right thing is not just a matter of knowledge and choice, it is also a matter of skill and experience
- Knowing the difference between undue influence from external parties and legitimate feedback can take a trained eye
- Taking a stand on behalf of integrity and ethics can require courage and authority

I think if you are experienced, you learn how to [...] Yeah, you just have to handle the financier's expectations in some way. And I feel that ... With time, I feel like we have a handle on it

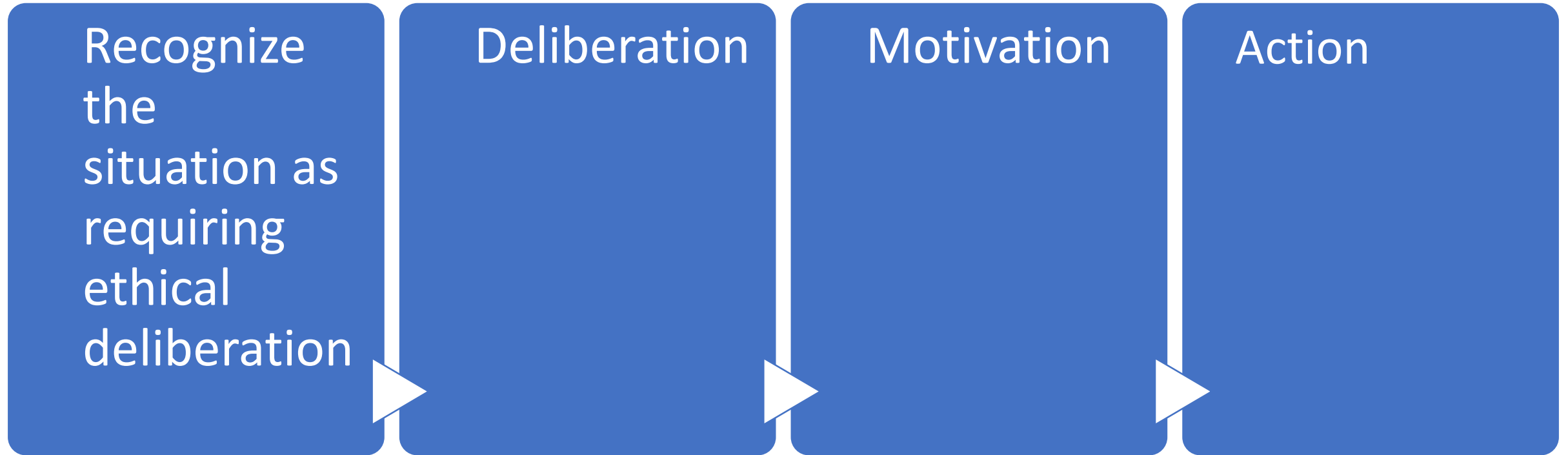
How to act ethically

Deliberation

Action



How to act ethically (Rest/Jones)



Teamwork

- Fanelli et al. (2019) have shown that working in teams reduces the risk of misconduct. It increases social control and makes bad practices more difficult
- Standing up to external pressure is hard to do alone
- Focusing on impact can come at the cost of academic excellence, but teamwork can compensate

I think that it is important to close ranks internally, that we have each other's back and everything. That is very important, especially in commissioned research [...] you can stand in very difficult situations. And then we must, in a way, be loyal towards each other internally, and we must find ways to handle things externally. Because if you do not have that security at home [...] then it is simply quite dangerous to go out there

Mentorship and socialization

- Experience with difficult situations can be hard to come by, and it is perilous to acquire
- However, experience can be transferred through mentorship and socialization

Yeah, we are doing teaching. Training. Of the young. We are doing it. You know, in the way that we put them in projects with those with experience [...] And that is a kind of learning process about - how should you approach clients? How should you approach the client's organization – the work place he represents? The others you meet there? And how should you disseminate the results?

Supportive leadership

- Manage incentives
- Elevate ethical dilemmas by including leadership

Another challenge is when the client does not like what he gets. And we have experienced that. Either wanting us not to publish or asking us to reconsider. Things like that. We have experienced that. And a final variant is the one where there are results where ... Where we get a phone call from a lawyer [...] And then you have to take a stand and be sure that you have systems you can point to

Good contracts

- Settle expectations with clients and collaborators early on
- Get legal advice from professionals

Yeah, for me, the contract is the entire ... It is the lifebuoy [...] I have read it very closely, and I am, you know, very oriented toward what it says [...] I love the contract

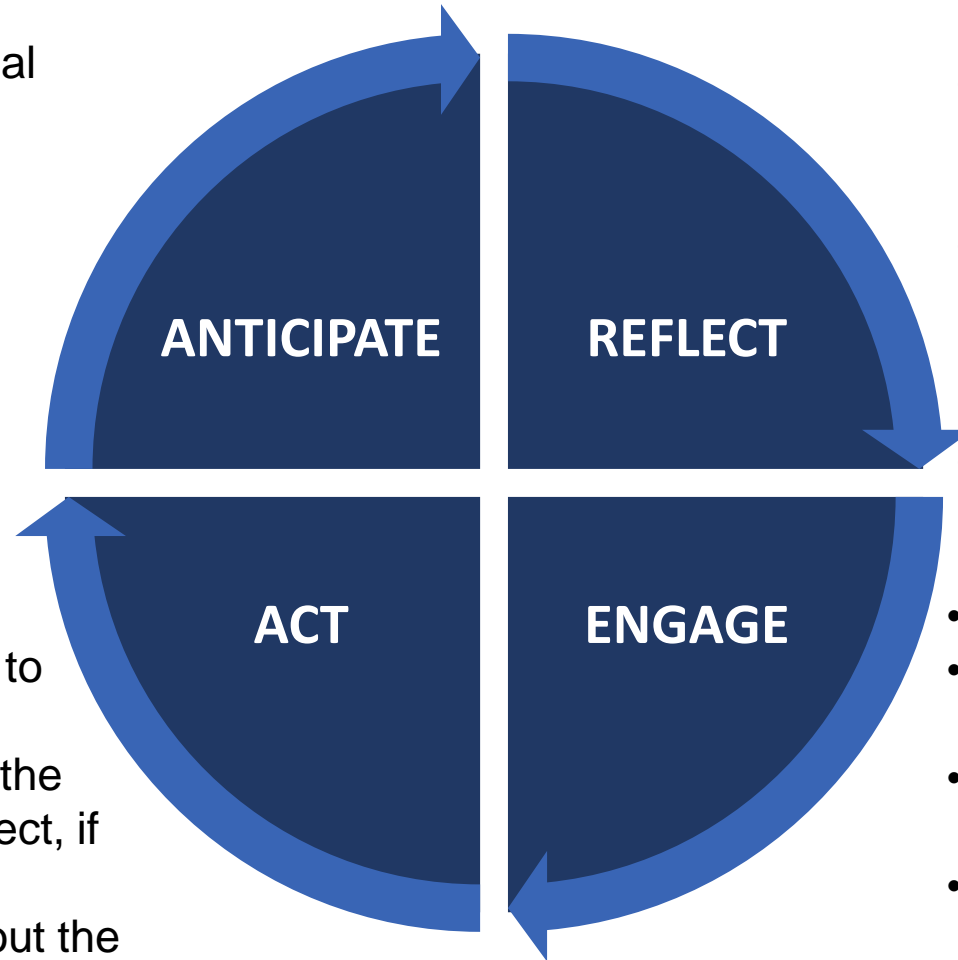
Aspirational research ethics

- Avoiding harm and fraud is not enough to be a good researcher
- Scientific authority is decreasing. Citizens question the motives of researchers, and can reject new technologies
- Being right is not enough to have an impact, if you are not trusted
- *Responsible research and innovation*: Ethics, Science Education, Gender Equality, Open Access, Governance and Public Engagement

(From the TERRAIN-project)

- improving foresight
- thinking about potential impacts
- not just technical outcomes...
- ...ethical and social implications too

- Being flexible
- Being responsive to wider views
- Consider altering the direction of a project, if raised
- Ongoing throughout the project lifecycle



- Looking at your own values...
- ...and values embedded in the project's governance
- What ethical, political, social and economic assumptions guide the research?
- How do we think/talk about uncertainty ?
- Talking *and* listening...
- ...between a wide set of stakeholders and publics
- Collective decision-making
- Ongoing throughout the project lifecycle