

Japanese Fraud Highlights Media-Driven Research Ethic: A case study analysed by the method of Four Quadrant

Introduction

This case is about the Japanese archaeologist, Shinichi Fujimura whose fraudulent research practice raised questions about how archaeology research is conducted in Japan, and whether dazzling press conferences take precedence over reliable publication and dissemination of research results. Commentators are wondering whether “scientists bother to study artifacts once they are plucked from the ground”, and the extent to which scientific merits of claims are debated (Normile 2001, p. 34).

Description

In Shinichi Fujimura planted stone tools in an archaeological site northeast of Tokyo and after a few days invited journalists to unearth them. In what follows, this case will be analysed using the case analysis method of Four Quadrant (Jonsen et al. 2010; Schumann et al. 2008; Sokol 2008).

Analysis

STAGE 1: Initial Perception

- What are the morally relevant facts?

An amateur archaeologist, Shinichi Fujimura, secretly transported objects to excavation sites and fabricated archaeological discoveries in several cases. Fujimura was caught by a daily newspaper's reporters who were sceptical about the discoveries and videotaped his escape from the site. Subsequently, in October 2000, Fujimura confessed to committing fraud. Fujimura's discoveries were announced first to the media instead of scientific publications. The

scientific community criticized this “publication practice” as well as the “sloppy side of Japanese archaeology”.

- What are the ethical or moral issues at stake in this case?

Fujimura intentionally misled people, confessed to committing fraud, committed questionable publication practice, and bypassed scientific peer review.

- Who are the stakeholders?
 - Fujimura (an amateur archaeologist)
 - Mainichi Shimbun (a daily newspaper)
 - Takeoka, (an archaeologist who criticized Fujimura)
 - Sherizawa (a leading archaeologist)
 - Archaeologists
 - Scientific journals
 - The public
- What particular normative standards in pertinent regulatory documents apply to the case?
 - If we look at the European Code of Conduct for Research Integrity (ALLEA 2017), then:
 - Reliability
 - Honesty
 - Respect for colleagues
- What possible courses of action are available?
 - Punish Fujimura for fraud and prevent him from doing it again.
 - Launch an investigation into the validity of his earlier discoveries.
 - Address the questionable “publication practice” that seems to affect the whole field.
 - Raise awareness about the case and support work on preventive measures.

- What are the predictable effects of each action?
 - o Fujimuri will be alienated, and the research community will be more cautious in accepting his research results.
 - o Some further misconduct cases of Fujimuri might be discovered that could have a cleaning effect.
 - o The reputation of Japanese archaeology might be damaged, but as a consequence of higher awareness and the launched reforms it could recover and be strengthened in the long term.

- Which set of possible outcomes seemed to be relatively better?
 - o Proactively facing the issue seems to be the better alternative. Punishing Fujimuri individually, but also recognizing co-responsibility with attempting to address the issue at the level of the archaeological community. These are advantageous in the long run for strengthening the fields' integrity and building public trust.

STAGE 2: The Four Quadrant Analysis

- I. Relevant Facts: What are the most relevant facts concerning the situation?
 - An amateur archaeologist, Shinichi Fujimura, secretly transported objects to excavation sites and fabricated archaeological discoveries in several cases.
 - Fujimura was caught by a daily newspaper's reporters who were sceptical about the discoveries and videotaped his escape from the site. Subsequently, in October 2000, Fujimura confessed to committing fraud.
 - Fujimura's discoveries were announced first to the media instead of scientific publications. The scientific community criticized this "publication practice" as well as the "sloppy side of Japanese archaeology".

- II. Uncertainties: Which features of the situation are uncertain, lacking in clarity, or controversial?

- Fujimura has confessed to two fabrications. Questions remain with regards to his other discoveries.
- The publication practice of Fujimura has been questioned. Is it a common practice in Japan as well as other countries?

III. Courses of Action: What are the practically available options for providing a solution to the case?

- Fujimura's publications and discoveries might be investigated.
- Fujimura might be punished for the two counts of fraud to which he confessed.
- The publication practices of archaeologists might be investigated and assessed by the scientific community.
- The ways in which suspicious discoveries are reported might be investigated and revised.

IV. Contextual Features: What legal, financial and institutional policies and regulations apply to the case?

- Fujimura responsibility in fabrication of discoveries is certain, but what about the responsibility of his colleagues, his academic community? E.g., Miyagi, an archaeologist who worked with Fujimura and did not realize he was planting artefacts on the sites.
- Is Fujimura bound by professional duties or academic codes of conduct as an amateur scientist? Who can initiate a misconduct investigation in the case of amateur researchers?
- It seems that the Japanese Archaeological Association did not have a Code of Ethics at the time of these events. The development of a Code of Ethics was a result of these events, paragraph 7 reads: "In the conduct of investigation and research as well as in the publication of the results, JAA members must not engage in any fraudulent activity, such as fabrication or falsification of materials or records, or the plagiarizing of research results" (JAA 2006).
- Fabrication was clearly prohibited by a number of international documents, and Fujimura's act was an evident form of fabrication.
- Public announcement of research results or discoveries prior to scientific publishing is a controversial issue.

STAGE 3: *Casuistic Reasoning and Justification*

I. What is at issue?

- An amateur archaeologist made false discoveries and fabricated findings
- He announced his findings to the media
- He was caught by the media
- He confessed

II. Where is the conflict?

- The fabrication case is straightforward.
- However, the reporting practice shows conflicts between the goals of research and incentives of researchers (often researchers are incentivized to announce the next spectacular discovery, which compromise the tedious collection of reliable data).
- There is also a potential conflict between the goals and agendas of daily newspapers and academic journals.

III. What is this a case of?

- This is a case of research misconduct, specifically, fabrication, committed by an amateur archaeologist in several excavation sites.
- It is also a case of questionable publication practice, bypassing scientific peer review.

IV. What do we know about other cases like this one?

- The fabrication of research results with the researcher admitting to fraud is has been reported numerous times (see Kolb 2014 for more cases).
- The reporting of research results prior to academic publication and peer review might be more debatable, and might be prevalent and perhaps acceptable in some research areas, and in some circumstances they could be justified. Publication of intermediate research results via preprints is common in some areas such as mathematics but preprints cannot be considered as media.

V. How is the present case similar to the paradigm case?

- The case of fabrication is consistent with paradigm cases of fabrication as research misconduct.
- We have no knowledge about paradigm cases in researchers' reporting of research results to the media prior to peer-review. However, such practices are questionable.

Conclusion

Fujimura's fabrication of research results is consistent with numerous known and investigated cases of fabrication. This is paradigm case of research misconduct. The reporting of research results prior to academic publication and peer review might be more debatable and be prevalent and perhaps acceptable in some research areas. Potentially similar cases are highly variable and circumstantial and might be justifiable in rare instances. We have no knowledge of well-established cases that could be used as paradigm to evaluate this form of science communication. However, reporting of research results prior to peer assessment could be described as a problematic practice.

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