

# EXPERT JUDGMENT

Carlo Martini

Summer Semester 2011



Except where otherwise noted, this work is licensed under  
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

# RECAP FROM LECTURE 1

- What is expert judgment? Expert judgment is analyzed as different from statistical or model-based judgment.
- The example of celestial navigation provides a case for a type of judgment that is based mostly on models and statistical data.
- In celestial navigation, little or no use of so-called tacit knowledge is used (at least with respect to theoretical, and not how-to knowledge).
- The case of celestial navigation, however, is not the norm. Numerous examples can be given, where tacit knowledge plays an essential role in the judgment of experts (e.g. assessing a patient's reaction to a drug, or the safety of a nuclear plant).
- Given the characteristics of tacit knowledge, we can derive a number of issues that expert judgment poses for epistemology, the issues that will be discussed from WEEK 2 to WEEK 6.

# LECTURE 2

## Epistemology of Testimony



Except where otherwise noted, this work is licensed under  
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

## ...FROM THE GENERAL PICTURE TO EPISTEMOLOGY

✓ We can run some calculations, and find the mathematical solution to a problem, but how can we believe the solution that the expert gives us? This is the problem of **testimony**.

(WEEK 2)

✓ When we are thinking and acquiring knowledge in isolation we need only be worried about being deceived by evil demons, but in a social setting we can be deceived by the so-called experts as well. This is the problem of **trust**. (WEEK 3)

✓ When we are asked to rely on expert judgment, whose judgment should we select? Who are the experts and how should we discriminate between experts and laymen? This is the problem of **selecting experts**. (WEEK 4)

✓ When the judgment we are relying on is our own, the epistemology we refer to is often the one of the “analytical tradition”. But viewing knowledge from the point of view of the many *may* imply that we need to change our theoretical framework as well. This is one of the problems of **social epistemology**. (WEEK 5)

✓ Finally there is a difference, in practice, between sitting at a table and using our own judgment in order to resolve a problem, and using expert judgment(s) to do the same task. What does talk about expert judgment changes, in practice, for our problem-solving practices? This is the problem of the **application** of expert judgment. (WEEK 6)

# The Scylla and Charybdis of Testimony

Two main positions in  
the Epistemology of  
Testimony

REDUCTIONISM

VS.

DEFAULTISM  
(default rule)



Johann Heinrich Füssli. *Odysseus in front of Scylla and Charybdis*. 1794/6.

# REDUCTIONISM

VS.

# DEFAULTISM

## ORIGINS

David Hume, *An Inquiry Concerning Human Understanding*, Sec. X: On Miracles

Thomas Reid, *Essay on the Active Powers of Man*, Sec. V: On Morals

## PRINCIPLES

all testimony-based beliefs receive their justificatory status from non-testimony-based beliefs

testimony-based beliefs have an independent justificatory status

# Hume (REDUCTIONISM)

- Hume has just argued against our capacity to see with certainty into the necessary connection that we expect to find in nature between a cause and its effect. Our reasoning cannot establish a connection between a cause and its effect.
- What is left, according to Hume, is a *correlation* between a cause and its effect, which must be investigated in accordance with ‘probability calculus’. “A wise man [...] considers which side is supported by the greater number of experiments: to that side he inclines, with doubt and hesitation; and when at last he fixes his judgement, the evidence exceeds not what we properly call probability.” (EHU, X-88)
- In the section about the topic of miracles, Hume faces those who claim that the truth of miracles conforms to the truth of reasons. That is, we ought to reasonably believe in miracles because there are witnesses whose testimony supports the view that miracles are true occurrences.
- In order to proceed to his argument *ad absurdum*, against the rationality of miracles, he needs to first address the question of how testimonial beliefs can or cannot be justified.
- From there, Hume enunciates his **reductionist thesis on testimony**: “[...] our assurance in any argument of this kind is derived from no other principle than our observation of the veracity of human testimony, and of the usual conformity of facts to the reports of witnesses.”

## Reid (DEFAULTISM)

- Thomas Reid about the faculties of the human mind. “The operations of the human mind may be divided into two classes, the solitary and the social.” (Reid, *Essay on the Active Powers of Man*, Section V: *Of Morals*\*)
- ‘Social operations’ are those which, in order to be performed, I must be in a relation with some other intelligent being. Such operations are, in Reid’s words “the gift of God” and are given, at least so it seems, to some animals as well (*Ibid.* p. 333).
- There are two operations which animals do not share with humans: “They [animals] can neither plight their veracity by testimony, nor their fidelity by any engagement or promise.” (*Ibid.* p. 333)
- After a number of steps in his argumentation (see pp. 333-334, Reid concludes that:

⟨454⟩ From these observations it follows, that if no provision were made by nature, to engage men to fidelity in declarations and promises, human nature would be a contradiction to itself, made for an end, yet without the necessary means of attaining it. ~~As if the species had been~~
- Reid makes a number of very interesting further considerations on the importance of trust and reliance on testimony for human society (see *Ibid.* p. 333 ff.). His conclusions are that a prerogative for the existence of human society is the existence of testimony and reliable testimony: “Without fidelity and trust, there can be no human society.” (*Idem*)

\*All references are to *The Edinburgh Edition of Thomas Reid* (2010) Edinburgh University Press.

# Scylla and Charybdis?

- Defaultism and Reductionism are called ‘Scylla’ and ‘Charybdis’ in Pritchard’s paper because *strong reasons* seem to lead us to a choice for either one or the other, both of which have very *unreasonable* consequences.
- PROBLEM: What are the initial assumptions when analyzing the problem of testimony? The “base camp” of much analysis of testimony is the null position (‘null setting’ in *SEP - Epistemological Problems of Testimony*).
- LIST OF IDEALIZING CONDITIONS FOR THE ANALYSIS OF THE PROBLEM OF TESTIMONY (from *SEP - Epistemological Problems of Testimony*):
  - brief assertions
  - corroboration and convergence is set aside
  - belief is sustained, not only originated, from testimony
  - attributions of expertise are set aside
  - the hearer does now know the speaker
- RESEARCH QUESTIONS: what interesting cases are the ones in which all conditions are met? How can the problem of testimony be resolved in those cases?

*questions?*

*discussion session...*

# WI - ASSIGNMENTS I - Coady

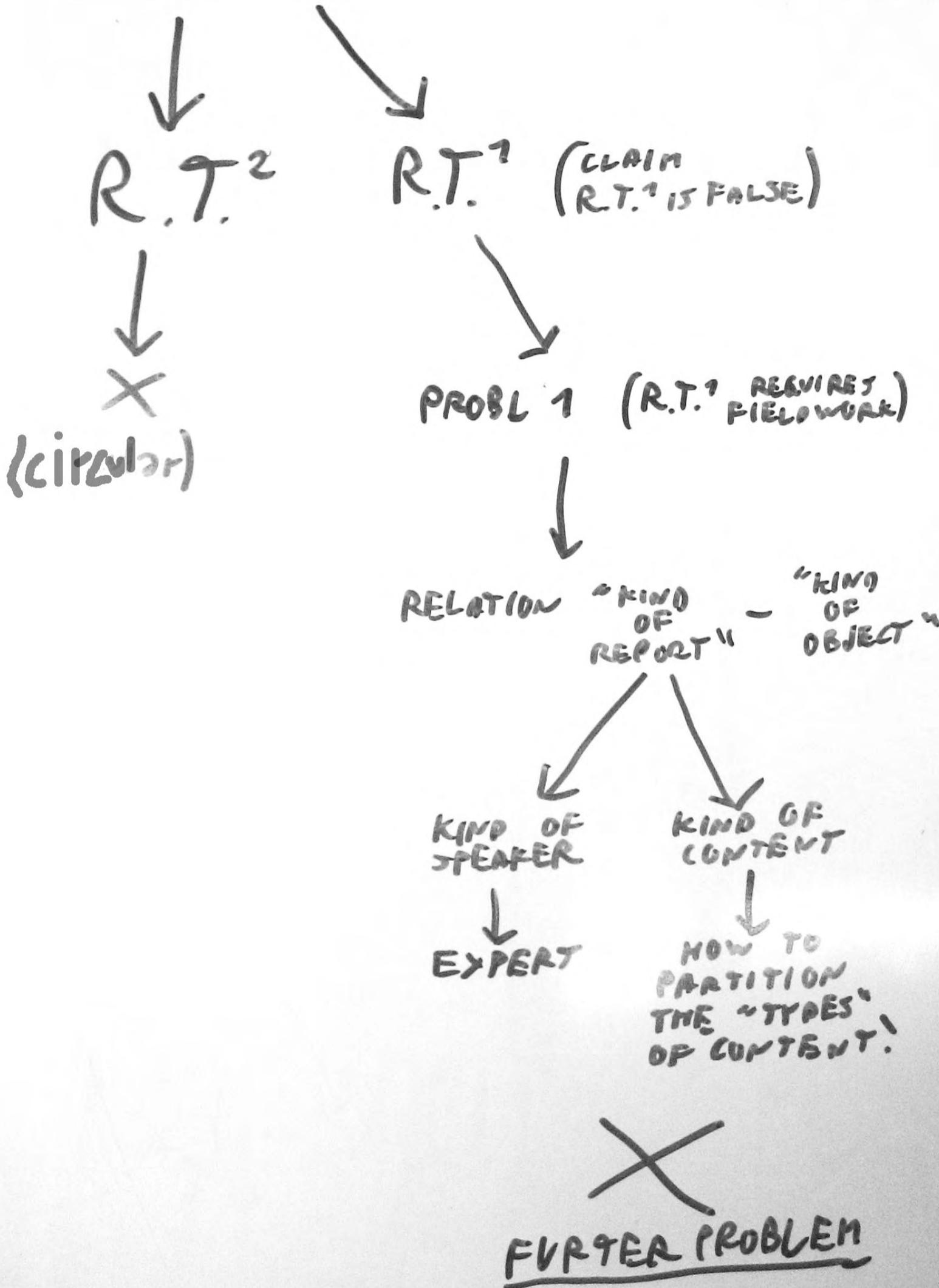
- What is Hume's Reductionist Thesis, according to Coady?
- What are the terms of the two-horn dilemma, which Coady highlights with respect to Hume's Reductionist Thesis?
- In replying to one of the possible rebuttals of his criticism of Hume's thesis, Coady claims that one can interpret Hume's words "kind of report" as indicating either the "kind of speaker" the report comes from, or the "kind of content" (see p. 151, right-hand column). Why is the former interpretation still problematic, for Hume's Reductionist Thesis? Why does Coady argue that we cannot define testimony on the concept of 'expertise'?
- Describe the Martian world that Coady hypothesizes. Why, in such a world, could there be no assessment of the relation between a report and its real-world occurrence?
- To reach his conclusions Coady formulates Hume's thesis and then provides a number of possible interpretations of it, showing how each runs into problems. Can you draw in a tree-like structure the various arguments and passages Coady goes through in his paper?
- What are Coady's conclusions? That is, what is the thesis that, in the end, Coady is trying to support?



# COADY

structure of Coady's argument

Hume's R.T.



N.B.  
IN NATURE  
THE RELATION  
IS BETWEEN  
KIND OF OBJ.  
AND KIND OF  
OBJ.

FURTHER PROBLEM

# WI - ASSIGNMENTS II - Pritchard

- In Pritchard's mind, there are two antithetic positions in current epistemology of testimony, which he calls Scylla and Charybdis. Can you outline what the essential claims made by the two positions are?
- After outlining the core of the two positions, Pritchard goes on claiming that both sides of the antithesis (both positions) run into different but equally counterintuitive grounds. What are the intuitions that would make us reject either position, in their simple formulation, because highly controversial?
- In order to get out of the choice between two equally undesirable theories, Pritchard reformulates both of the initial and antithetic theses. What is it necessary to give up, in Pritchard's mind, in order to get to two "plausible renderings" of the Reductionist and the Credulist positions?



# W2 - ASSIGNMENTS - Hardwig

- In *Part I* of his paper, Hardwig spends some time exploring a problem that classical theories of knowledge have, when they try to account for the practices of knowledge formation that are in use in contemporary scientific and mathematical communities. What is the problem Hardwig is concerned with? What is the paradoxical conclusion that Hardwig reaches, at the end of his explanation, and which prompts him to try to formulate a way out of such paradox?
- Can you state the *principle* that Hardwig formulates, in order to find a way out of the paradox presented in the first part of his paper? What is it that, at first impression and according to Hardwig, is strongly counterintuitive about that principle?
- For this question I would like you to compare Hardwig's claims with some of the previously assigned readings. On page 698, Hardwig makes claims to the effect that some times beliefs based on testimony are not only *not inferior* to beliefs based on evidence, but can be even *epistemically superior*. Who, among the authors of the papers so far analyzed in this course, makes similar claims?
- What are the two conditions that Hardwig imposes, on two ideal epistemic agents (A and B), in order for A to *have good reasons for believing* a proposition  $p$ , when her reasons for believing that proposition rely on B's knowing *that*  $p$ , as it is the case in the scientific scenarios on which Hardwig focuses.
- In the light of Pritchard's exposition of the internalism vs. externalism debate in epistemology of testimony (see Pritchard's paper, assigned for the previous week), would you classify Hardwig's account on testimony as an internalist or an externalist one?
- In what sense, according to Hardwig's account, does our epistemology rely on factors that are not in our control? Towards the end of his paper Hardwig makes the claim that we ought to accept the "odd" conclusions from his account, in order to avoid the worse alternative, which is ignorance. In other words, the alternative seems to be between an account that allows for a type of knowledge (and justification) that is "odd" because impersonal, and widespread skepticism. Do you agree, can you provide reasons in support of, or against Hardwig's view?