

# Why Double-Check?

Elise Woodard

Department of Philosophy  
University of Michigan, Ann Arbor

January 28, 2022  
Indiana University Bloomington

# My Research

**Aim:** Articulate our responsibilities as inquiring agents, especially in fraught environments.

1. Norms governing further inquiry
2. Relationship between moral & epistemic responsibility
3. Applying epistemology to social, moral, & political issues

# My Research

**Aim:** Articulate our responsibilities as inquiring agents, especially in fraught environments.

1. Norms governing further inquiry
  - Redeliberating, evidence-gathering, double-checking
2. Relationship between moral & epistemic responsibility
3. Applying epistemology to social, moral, & political issues

# Big Picture Question

## The Question

Can you rationally double-check things that you already know?

### Importance:

1. Everyday and scientific contexts
2. Balancing dogmatism vs. skepticism
3. Social implications

# One Answer: Antagonistic

*“If one knows the answer to some question at some time then one ought not to be investigating that question, or inquiring into it further or wondering about it, or curious about it, and so on, at that time” (Friedman 2017, 131).*



# One Answer: Antagonistic

*“There is something to be said for the claim that the person who knows they have turned the coffee pot off should not be going back to check” (Hawthorne and Stanley 2008, 587).*



# One Answer: Antagonistic

*“Any such cases [involving believing while inquiring] involve peculiarities (such as irrationality or fragmentation)” (McGrath 2020, 20n17).*



# One Answer: Antagonistic

*“[C]ontinuing this inquiry [after achieving knowledge] is like continuing to eat after being nourished” (Whitcomb 2010, 640).*





# My Aim

**Aim:** Convince you that inquiry and knowledge can be compatible.

- Inquiring further (e.g. **double-checking**) while knowing can be *normatively* and *descriptively* compatible.

# Outline

## 1. What is Double-Checking?

- Genuine Versus Ersatz
- Synchronic Versus Diachronic Compatibility

## 2. Why Double-Check?

## 3. Challenge #1: Inquiring Attitudes

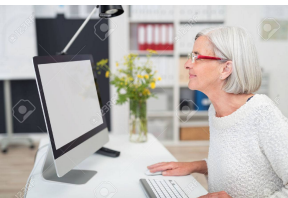
- The Argument from Suspension
- The Argument from Interrogative Attitudes

## 4. Challenge #2: Nature of Belief or Knowledge

- Belief is Strong
- Interest-Relative Knowledge

## 5. Is Double-Checking Ever Required?

# Ersatz Double-Checking

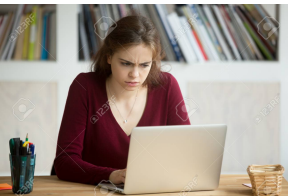


*Eliza is certain that she bought tickets for the movies next Wednesday.*

*She 'double-checks' to assure her anxious friend, Sandra.*

⇒ Eliza *ersatz* double-checks; she is not genuinely inquiring.

# Genuine Double-Checking



*Gwenyth thinks that she bought tickets for the movies next Wednesday.*

*On Wednesday morning, she wants to make sure—so she double-checks her inbox.*

⇒ *Gwenyth genuinely double-checks, for she is genuinely inquiring.*

# Ersatz Vs. Genuine: Summary

	<b>Ersatz</b>	<b>Genuine</b>
INQUIRING?	No	Yes
EXAMPLE	Eliza	Gwenyth
CAN KNOW & CHECK?	Uncontroversial	Controversial

Henceforth, double-checking = *genuine* double-checking.

# Double-Checking and Inquiry

- Double-checkers are inquirers
  - *Re*-inquirers
- What makes double-checking distinct?

# Checking Versus Double-Checking

1. To double-check that  $p$ , you have to already or previously think that  $p$ .

*“A check can only count as a re-check if you’re trying to confirm an answer you already think is right” (Friedman 2019, 3).*

2. May use a different method for the re-check.

# Double-Checking: Working Definition

DOUBLE-CHECKING:  $S$  double-checks that  $p$  at  $t_2$  if and only if:

- (a)  $S$  inquires into whether  $p$  at  $t_2$
- (b)  $S$  had a **doxastic attitude** toward  $p$  at  $t_1$  ( $t_1 < t_2$ )
- (c)  $S$  has not forgotten having formed an attitude toward  $p$



# What the Definition Rules Out

DOUBLE-CHECKING:  $S$  double-checks that  $p$  at  $t_2$  if and only if:

- (a)  $S$  inquires into whether  $p$  at  $t_2$ 
  - Rules out cases like Eliza's
- (b)  $S$  had a **doxastic attitude** toward  $p$  at  $t_1$  (where  $t_1 < t_2$ )
  - Rules out cases where one had no attitude
- (c)  $S$  has not forgotten having formed an attitude toward  $p$ 
  - Rules out cases where you believed that  $p$  in 2010 but forgot that you ever formed a belief

# The Central Question

## Our question

Can  $S$  simultaneously know and *rationally* double-check  $p$ ?

### Clarifications:

1. *Normative*—not merely *descriptive*—question
2. '*Rationally permissible*'—not 'required'

**My plan:** argue that the answer to this question is *yes*.

# The Synchronic Compatibility Thesis

## Synchronic Compatibility Thesis (SCT)

In some cases, knowing that  $p$  is compatible with double-checking that  $p$  at the same time.

**Normative Component:** Sometimes, it is *rationally permissible* to know that  $p$  and double-check that  $p$  at  $t$ .

**Descriptive Component:** Sometimes, it is *possible* to know that  $p$  and double-check that  $p$  at  $t$ .

# Why think that SCT is true?

- Motivated by cases where agents may seek to epistemically improve beyond knowledge
- Attractive & plausible picture of the relationship between inquiry, belief, and open-mindedness

# Diachronic Compatibility

My opponent denies SCT. They might instead endorse:

(Mere) Diachronic Compatibility Thesis (DCT)

Knowing that  $p$  is only compatible with double-checking that  $p$  at different times.

Normative vs. descriptive versions

# Why Diachronic Compatibility is Not Enough

- Requires reflective agents to do worse than their counterparts
- Fails to vindicate agents' desire to epistemically improve

# Why Double-Check?

- Series of cases: double-checking to attain further epistemic goods
- These cases challenge DCT.

# Cases: Deming



**Deming** is confident that she locked the door behind her when she left for work. *Indeed, she knows that she did.*

However, she decides to double-check that she locked it, **just to be sure.**

By double-checking, she comes to **know that she knows** that the door is locked.



## Cases: Riley



Riley is taking an algebra exam. One of the questions asks one to solve for  $x$ .

When they solve for  $x$ , they get the answer  $x = 15$ . *They thereby come to know that  $x = 15$ .*

After finishing the exam, Riley goes back to check their work, plugging in 15 for  $x$ .

Riley becomes **more confident** that  $x = 15$ .

## Cases: Sam



**Sam** remembers having packed his travel-size sriracha bottle on Monday.

This justifies .9 credence that he packed it.  
*This credence constitutes knowledge.*

Sam's memory has become less vivid. Although Sam's trip isn't until Saturday, he decides to double-check on Thursday.

By double-checking now, he increases the **resilience** and **stability** of his credence.

## Cases: Carla



**Carla** is researching dense bodies in red blood platelets. (Light microscopy)

**Carla and her colleagues know that dense bodies exist**, but they want to corroborate this result further.

They corroborate using transmission electron microscopy. (Different physical process & causal mechanism)

Performing these experiments makes their beliefs **more sensitive to different sources of error**.

By doing these further experiments, they also gain **greater justification** for their belief.

# Reasons to Double-Check

- (a) certainty
- (b) higher-order epistemic states (e.g. KK)
- (c) increase confidence or credence
- (d) increase resilience/stability
- (e) increase sensitivity to error
- (f) increase justification

ANTI-SKEPTICISM: Knowledge is not a *maximally* strong epistemic state. We have a lot of it!

# Theoretical Motivation

1. **Knowledge is sub-maximal:** there are further epistemic goods beyond knowledge.
2. **Inquiry aims at epistemic improvement:** a central role of inquiry is to improve one's epistemic position.

# Possible Responses from DCT

1. Deny that these agents *genuinely* double-check
  - **Response:** Seems *ad hoc*
2. Deny that they have knowledge
  - **Response:** Conflicts with ANTI-SKEPTICISM
3. Redescribe all the cases such that not inquiring about whether  $p$ 
  - **Response:** Not plausible for all cases.

# Objections to my View

## 1. Challenge from Inquiring Attitudes

- The Argument from Suspension
- The Argument from Interrogative Attitudes

## 2. Challenge from Nature of Belief or Knowledge

- Belief is strong
- Interest-relative knowledge

# The Challenge from Inquiring Attitudes

## The Challenge from Inquiring Attitudes

Double-checking while knowing is irrational, requiring contradictory states of mind.



# The Argument from Suspension

- (P1) Double-checking is a form of inquiry.
- (P2) All forms of inquiry require suspending judgment.
- (P3) Suspending judgment requires not believing.
- (C1) Therefore, double-checking requires not believing.
- (P4) Knowledge requires belief.
- (C2) Therefore, double-checking requires not knowing.

# Illustration

I'm suspended  
about whether  
my door is  
locked.

I believe that my  
door is locked.



# The Argument from Suspension

- (P1) Double-checking is a form of inquiry. ✓
- (P2) All forms of inquiry require suspending judgment.
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- (C1) Therefore, double-checking requires not believing.
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# The Argument from Suspension

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# Premise 2

## Premise 2

All forms of inquiry require suspending judgment.

Will argue that this is false.

To preview: Inquiry requires some type of **openness**.

- But, the openness in question does not require suspension.

# Why Accept Premise 2 (Inquiring $\rightarrow$ Suspended)

Premise 2 is supported by two claims:

1. Inquiring requires having an **open** attitude toward  $p$ .
2. Suspension best represents this attitude.
  - By contrast, belief is a **closed** attitude.

## Response to P2: Inquiry does *not* require suspension

Grant that inquiry requires *some* type of openness about whether  $p$ .

One can believe that  $p$  while displaying “an openness or even willingness to inquire further” (Friedman 2017, 307).

It's possible to believe that  $p$  while:

- seeking more evidence
- being open to being proven wrong

# The Argument from Interrogative Attitudes

- (i) Double-checking is a form of inquiry.
- (ii) Inquiry requires interrogative attitudes (IA's)  
(e.g. wondering, questioning, investigating, suspending).
- (iii) Knowing requires not having an interrogative attitude.
- (iv) Therefore, knowing requires not inquiring.



# Illustration

I know that the door is locked.

I'm wondering: is the door locked?



# Paradoxical Assertions and Premise (iii)

## (iii): Knowing and IA's Don't Mix

Knowing requires not having an interrogative attitude.

Support for (iii):

- (1) # I know that I locked the door, but I wonder whether I did.
- (2) # Deming knows that she locked the door, but she's wondering whether she locked it.
- (3) # I locked the door, but I wonder whether I did.

# Friedman on Paradoxical Assertions

*“[A] natural interpretation of these assertions has them describing unfortunate states of affairs and confused states of mind” (Friedman 2017, 310).*

# Options

**Option 1:** Deny (ii) (Inquiry requires interrogative attitudes).

- Option we'll pursue here!

**Option 2:** Deny (iii) (Knowledge requires *not* having an IA).

- Ask me about this option in [Q&A](#)

## Deny (ii): Inquiry does *not* require IA's

Some inquiries (e.g. double-checks) may only require **propositional inquiring attitudes**.

We double-check *that p*, confirm *that p*, corroborate *that p*, make sure *that p*, etc.

*Ad hoc* to deny that these can still be inquiries!

# Counterdata

- (4) I know that I bought the tickets, but I'm (currently/in the process of) double-checking that I bought them—just to be sure.
- (5) Although we know that dense bodies exist, we're corroborating the results to increase our confidence / remove sources of error.

Highlighting *the reasons why* they double-check removes any tension.

# The Challenge from the Nature of Belief/Knowledge

- Belief is strong
- Interest-relative knowledge

# Belief is Strong

## Strong Views of (Full) Belief:

- Belief requires credence 1 (Greco 2015; Clarke 2013; Wedgwood 2012)
- Belief requires practical certainty (Huemer 2007; Owens 2000)

On these views, full belief requires ruling out—at least for practical purposes—the possibility that  $\neg p$ .



# How this Challenges SCT

- When agents double-check, they often think that it's possible (in some sense) that  $\neg p$
  - Then they don't (fully) believe that  $p$ .
- ⇒ Challenges the *descriptive* possibility of knowing while inquiring.

# Rebuttal

1. Turn the objection on its head
2. Strong Views render beliefs problematically unstable
3. Distancing ourselves from our beliefs does not require giving them up (Cf. Leite 2018)

# An Irenic Response

- Suppose that full belief really does require either credence 1 or practical certainty.
- This would rule out some, but not all, rationales for double-checking.

# Interest-Relative Theories of Knowledge

## Interest-Relative Theories of Knowledge

Practical interests can affect whether one knows.

### **Intuitive motivation for the conflict with SCT:**

- We prefer to double-check when the stakes are raised or possibility of error is salient.
- But then you no longer count as knowing!

# Knowledge-Action Links

## Knowledge-Action Principle (KA)

$S$  knows that  $p$  only if  $S$  is rational to act as if  $p$ .

- “ $S$  knows that  $p$  only if  $S$  is rational to do whatever  $S$  is rational to do on the assumption of  $p$ ” (Fantl and McGrath 2007, 559).
- “An agent knows that  $p$  only if the rational answer to a question she faces is the same unconditionally as it is conditional on  $p$ ” (Weatherson 2017, 245).

# KA in Action

***LIRR:** LeBron is trying to get to NYC from Long Island.*

*He believes that Platform A goes to Manhattan.*

*Minor inconvenience to get on the wrong train; more minor inconvenience to ask someone.*

LeBron in fact prefers to double-check.

*But* conditional on his train leaving from Platform A, he prefers to not double-check (it'd be a waste of time!).



# The Upshot

While double-checking, one prefers to check, but would prefer to not check conditional on  $p$ .

So, double-checkers don't have knowledge.

# Responses

1. It's not obvious that all double-checkers would not prefer to check that  $p$ , assuming/conditional on  $p$ .
  - Ex: Riley, Carla
2. Cases of double-checking raise problems for KA, not vice versa (cf. Anderson & Hawthorne 2019, Goldberg 2019).
3. Instability of knowledge worries (Anderson 2015, Reed 2010)



# Taking Stock

I've argued for the **Synchronic Compatibility Thesis**.

I appealed to the many reasons why agents might try to **epistemically improve beyond knowledge**.

I defended this view from challenges from **constraints on inquiry** and **the nature of belief/knowledge**.

# Bigger Epistemological Picture

- **Picture of inquiry & belief:** We can both believe that  $p$  and inquire further into whether  $p$ .
  - Allows us to balance curiosity vs. commitment; helps us toe the line between dogmatism and skepticism
- **Picture of Epistemic Responsibility & Achievements:** epistemically responsible agents often inquire further.
  - Epistemic improvement

# Further Questions About Double-Checking

1. Is double-checking while knowing ever *required*?
2. When, if ever, is double-checking while knowing *impermissible* or *criticizable*?

# Motivating a Stronger Thesis: Double-Checking as Required

**One Option:** The standard for belief is higher than knowledge in (e.g.) high stakes cases.

- Ex: Brown's surgeon case

**Further Worries for DCT:** Moral vs. Epistemic Dilemma

# Further Work on Further Inquiry

Further questions about **further inquiry** in general:

1. When, if ever, are agents *required* to **think further** about a matter?
  - Ex: evidence-gathering
2. When, if ever, are agents *criticizable* for **inquiring further**?
  - Ex: incessant checking or redeliberating

# Further Work on Inquiry and Social Epistemology

Inquiry and open-mindedness are often, but not always, a way to epistemically improve.

- Inquiry and open-mindedness can make agents epistemically *worse off* (e.g. echo chambers; gaslighting).
- A complete picture of inquiry-norms would bring in factors about agents' social & practical environments.

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# Bonus Slides

Bonus Slides Unlocked!



# Undermining the Motivations for $I \rightarrow IA$

Cases of further inquiry suggest that many of the initial motivations for IRIA don't apply:

1. Motivation 1: Inquiry seems question-directed
  - Verbs like 'double-check' embed well with propositions.
2. Motivation 2: Inquiry is compatible with radical ignorance
  - When one inquires further, one is not radically ignorant.
3. Motivation 3: Inquiry requires openness
  - One can believe  $p$  and be open about whether  $p$ .

## Recall Premise (iii)

Premise (iii):

Knowing requires not having an interrogative attitude.

A.K.A. [The Ignorance Norm](#)

# Rejecting the Ignorance Norm

## The Ignorance Norm for IA's (IGN)

If you know that  $p$ , you ought not have an interrogative attitude toward  $p$ .

IGN offers an apparently plausible explanation of the data.

But are there alternative explanations?

# An Alternative Explanation

- When one asserts that  $p$ , one proposes to treat  $p$  as settled & to add it to the common ground.
- There is then something odd about questioning whether  $p$ .
- In (1)–(3),  $S$  proposes to treat  $p$  as settled and as unsettled.

## The Settling Norm

Don't propose to treat  $p$  as settled and as unsettled.

Norm about *conversational moves*.

# Independent Motivation

Falls out of a broadly Stalnakerian understanding of assertion:

- When  $S$  asserts that  $p$ , she tries to eliminate situations incompatible with  $p$ .

## Correspondence

It is unacceptable, *ceteris paribus*, for a speaker to non-rhetorically ask, “Is it the case that  $p$ ?” when  $p$  is already part of the common ground (Kirk-Giannini 2018).