Coherentism and inconsistency

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ABSTRACT: If a subject's belief system is inconsistent, does it follow that the subject's beliefs (all of them) are unjustified? It seems not. But, coherentist theories of justification (at least some of them) imply otherwise, and so, it seems, are open to counterexample. This is the "Problem of Justified Inconsistent Beliefs". I examine two main versions of the Problem of Justified Inconsistent Beliefs, and argue that coherentists can give at least a promising line of response to each of them.

1   Introduction

If a subject's belief system is inconsistent, does it follow that the subject's beliefs (all of them) are unjustified? It seems not. But, coherentist theories of justification (at least some of them) imply otherwise, and so, it seems, are open to counterexample.[1] This is the "Problem of Justified Inconsistent Beliefs." I examine two main versions of the Problem of Justified Inconsistent Beliefs, and argue that coherentists can give at least a promising line of response to each of them.

2   Coherentism and the Consistency Thesis

2.1   Coherentism

Coherentism is distinct from foundationalism, social contextualism, and infinitism in that, *inter alia*, coherentism requires (for justification) a "circular" chain of evidential support:

> *Circular Chain of Evidential Support* (CCES): *S*'s belief in *p* is justified only if (i) *S*'s belief in *p* is evidentially supported by certain of her other beliefs, which themselves are evidentially supported by certain of her other beliefs, and so on, and (ii) this chain

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[1] Richard Foley (1979) argues in this fashion.

of evidential support circles back around at some point and does not continue on *ad
infinitum* with new belief after new belief.

(CCES) should be understood so that (ii) does not require that the chain of evidential
support in question literally take the shape of a circle, where, say, *S*'s belief in *p* is
evidentially supported by her belief in *q*, which is evidentially supported by her belief in
r, which is evidentially supported by her belief in *p*. It would be enough if, say, (a) *S*'s
belief in *p* were evidentially supported by her belief in *q* together with her belief in *r*, (b)
S's belief in *q* were evidentially supported by her belief in *p* together with her belief in *r*,
and (c) *S*'s belief in *r* were evidentially supported by her belief in *p* together with her
belief in *q*.

A circular chain of *evidential support* should not be confused with a circular chain of
justification. Coherentists deny that justification is transferred between beliefs.
Coherentists hold that justification is *holistic*: Beliefs are justified together, not in
isolation, when the requisite conditions are satisfied. Consider the view:

> (C1)   *S*'s belief in *p* is justified if and only if (i) *S*'s belief in *p* is evidentially
> supported by certain of her other beliefs, which themselves are evidentially
> supported by certain of her other beliefs, and so on, (ii) this chain of evidential
> support circles back around at some point and does not continue on *ad
> infinitum*, and (iii) *S*'s belief system is coherent.[2]

(C1) should be understood so that *S*'s belief in *p*, if justified, is justified by (that is, is
made justified by) not certain of her other beliefs, but by the fact that (i)-(iii) are satisfied.

2.2   The Consistency Thesis

The primary bearers of coherence and incoherence are sets of *propositions*. Likewise
with respect to consistency and inconsistency. Suppose *S* believes all and only the
propositions in the set $\{p_1, \ldots, p_n\}$. Then, whether *S*'s belief system (i.e., the set of *S*'s
beliefs) is coherent is determined by whether $\{p_1, \ldots, p_n\}$ is coherent, and whether *S*'s
belief system is consistent is determined by whether $\{p_1, \ldots, p_n\}$ is consistent.

Consider the set $\{p, q\}$, where:

p: Most of the marbles in this bag are red.

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[2] (C1), admittedly, is underspecified. The notions of evidential support and coherence
require clarification.

q: The first marble to be drawn from this bag will be non-red.[3]

{*p*, *q*} is consistent; there are possible worlds in which both *p* and *q* are true. But, intuitively, {*p*, *q*} is not coherent—*p* and *q* fail to "hang together" in the requisite sense. Consistency, thus, is *insufficient* for coherence.

It is widely believed, though, that consistency is *necessary* for coherence:

Consistency Thesis (CT): A set of propositions is coherent only if it is consistent.

I shall assume that (CT) is correct. The question I want to consider is whether coherentists can accept (CT) and still adequately answer the Problem of Justified Inconsistent Beliefs.

If (C1) and (CT) are correct, it follows that:

(C2)   *S*'s belief in *p* is justified only if *S*'s belief system is consistent.

(C2) implies that if *S*'s belief system is inconsistent, then *all* of *S*'s beliefs are *unjustified*. Hence, if there are cases in which a subject's belief system is inconsistent and yet certain of his beliefs are justified, it follows that (C2) is false, and so, granting (CT), that (C1) is false.

3   The Problem of Justified Inconsistent Beliefs

Consider the case:

Case 1   *S* considers *p*, where, in fact, *p* is a necessary falsehood. *S* notes that *p*
                 contains exactly thirteen words, and, solely on that basis, comes to believe
                 p. *S*'s belief system is otherwise like that of a normal cognizer.

Since *p* is a necessary falsehood, it follows that the set of propositions *S* believes is inconsistent, hence *S*'s belief system is inconsistent. But, it seems, it does not follow that all of *S*'s beliefs are unjustified. Surely, at least many of *S*'s perceptual beliefs are justified. If, though, not all of *S*'s beliefs are unjustified, then (C2) is false, and thus,

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[3] Read "*p*" and "*q*" so that the referent of "this bag" in "*p*" is the same as the referent of "this bag" in "*q*."

granting (CT), (C1) is false. Likewise with respect to any other form of coherentism on which justification requires that the subject's belief system be coherent.

　　Now consider a second kind of case in which a subject's belief system is inconsistent:

> *Case 2*　　*S* believes *p*: This die is fair and six-sided. On the basis of this belief, *S* believes *q*: 1 will *not* come up on the first roll of the die. On the same basis, *S* believes each of *r*, *s*, *t*, *u*, and *v*, where *r* is the claim that 2 will not come up on the first roll of the die, *s* is the claim that 3 will not come up on the first roll of the die, and so on.

None of *p*, *q*, *r*, *s*, *t*, *u*, or *v* is a necessary falsehood. Yet, {*p*, *q*, *r*, *s*, *t*, *u*, *v*} is inconsistent.[4] Hence, *S*'s belief system is inconsistent. It might seem, though, that *S*'s beliefs in *p*, *q*, *r*, *s*, *t*, *u*, and *v* are justified. If these beliefs are justified, then (C2) is false, and so, granting (CT), (C1) is false.[5] Likewise with respect to any other form of coherentism on which justification requires that the subject's belief system be coherent.

　　The Problem of Justified Inconsistent Beliefs thus comes in at least two main versions. One main version involves cases such as *Case 1*, where a subject's belief system is inconsistent because of a belief in a necessary falsehood. A second main version involves cases such as *Case 2*, where a subject's belief system is inconsistent but not because of a belief in a necessary falsehood.[6]

　　I have explained two main versions of the Problem of Justified Inconsistent Beliefs. I will now try to show that coherentists can give at least a promising line of response to each of them.

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[4] I am assuming that, on its first roll, the die will come to rest on one of its sides.

[5] Lottery cases (some of them) are identical in structure to *Case 2*.

[6] A third main version of the Problem of Justified Inconsistent Beliefs involves cases such as the following:

> *Case 3*　　*S*'s trusted friend and mathematician *T* testifies to *S* that *p*: 3^8 is greater than 6562. On the basis of *T*'s testimony, *S* comes to believe *p*.

In fact, *p* is a necessary falsehood; $3^8 = 6561$, and so, necessarily, 3^8 is less than 6562. Since *p* is a necessary falsehood, it follows that *S*'s belief system is inconsistent. It might seem, though, that certain of *S*'s beliefs are justified, including, in particular, *S*'s belief in *p*. If I had the space, I would argue that, in cases such as *Case 3*, *S*'s belief in *p* is unjustified—*S*'s belief in *p* does not fit his evidence.

4   Nonglobal coherentism

Proponents of (C1) are "globalist" coherentists, in that they require that *S*'s belief system *as a whole* be coherent. Coherentists *per se*, however, need not be globalists. Coherentists can be "nonglobalists" and hold that justification requires not that *S*'s belief system as a whole be coherent, but that a certain, perhaps proper, *subset* of *S*'s belief system be coherent.[7] Consider the view:

(C3)   *S*'s belief in *p* is justified if and only if (i) *S*'s belief in *p* is evidentially supported by certain of her other beliefs, which themselves are evidentially supported by certain of her other beliefs, and so on, (ii) this chain of evidential support circles back around at some point and does not continue on *ad infinitum*, and (iii) the *p*-subset of *S*'s belief system is coherent.

The "*p*-subset" of *S*'s belief system is the subset of his belief system *relevant* to the justification of his belief in *p*. If not all of *S*'s belief system is relevant to the justification of his belief in *p*, then the *p*-subset of *S*'s belief system is a *proper* subset of his belief system, and so (iii) in (C3) can be satisfied even if *S*'s belief system as a whole is not coherent. (C3) thus opens the way for coherentists to allow for cases in which *S*'s belief system as a whole is incoherent, because inconsistent, and yet certain of the *S*'s beliefs are justified.

Consider *Case 1*. Suppose *S* believes *q,* where this belief is a perceptual belief. Suppose *S*'s belief in *p* is not a member of the *q*-subset of *S*'s belief system. Suppose the *q*-subset of *S*'s belief system is coherent, and (i) and (ii) in (C3) are satisfied. Then, even though *S*'s belief system as a whole is inconsistent and, thus, by (CT), not coherent, (C3) implies that *S*'s belief in *q* is justified.

Is it plausible that *S*'s belief in *p* is not in the *q*-subset of *S*'s belief system? Yes, where, say, *p* is some obscure claim in mathematics, and *q* is some ordinary claim about *S*'s immediate surroundings, e.g., the claim "That cat is black."

A difficult question for proponents of a view such as (C3) is: Which of *S*'s beliefs are in the *p*-subset of his belief system, and which are not? One proposal is that *S*'s belief system should be partitioned into two subsets, one subset consisting of her *meta-beliefs* and one subset consisting of all her non-meta-beliefs.[8] Then, the *p*-subset of *S*'s belief system is the subset consisting of her meta-beliefs, if her belief in *p* is a meta-belief, and is the subset consisting of her non-meta-beliefs, if her belief in *p* is a non-meta-belief.

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[7] See Lycan (1996) and Olsson (1997).
[8] Jonathan Kvanvig (forthcoming) discusses this proposal.

This proposal is problematic for several reasons. Surely, *S*'s meta-beliefs can be relevant to the justification of at least some of her non-meta-beliefs. But, on the proposal under consideration, if *S*'s belief in *p* is a non-meta-belief, e.g., a perceptual belief, then the *p*-subset of *S*'s belief system contains no meta-beliefs. Also, in *Case 1*, since *S*'s belief in *p* is a non-meta-belief, it follows, on the proposal under consideration, that all of *S*'s non-meta-beliefs, hence all of *S*'s perceptual beliefs, are unjustified. This is the wrong result.

A second proposal is that *S*'s belief system should be partitioned into two subsets, one subset consisting of his *particular* beliefs, i.e., his beliefs about particular matters of fact, and one subset consisting of all his non-particular beliefs.[9] This proposal, like the first, is problematic for several reasons. One reason is that it does not adequately deal with cases such as *Case 1*. Suppose *S*'s belief in *p* is a non-particular belief. Then, on the proposal under consideration, it might be that at least some of *S*'s particular beliefs are justified. But, all of *S*'s non-particular beliefs are unjustified. This is the wrong result.

I find it plausible that the *p*-subset of *S*'s belief system should be determined on probabilistic grounds. A very simple (probably overly simple) proposal along these lines is the following:

(C4)   *S*'s belief in *q* is in the *p*-subset of *S*'s belief system just in case *S*'s belief in *q* is probabilistically relevant, by itself or together with certain of his other beliefs, to *S*'s belief in *p*.

If, say, *S* believes *p*, and *q*, and if $\Pr(p \mid q) \neq \Pr(p)$, then *S*'s belief in *q* is a member of the *p*-subset of *S*'s belief system.[10] Or if *S* believes *p*, *q*, and *r*, and if $\Pr(p \mid q \& r) \neq \Pr(p)$, then *S*'s beliefs in *q* and *r* are members of the *p*-subset of *S*'s belief system.[11] (C4) is recommended, in part, by the fact that it allows that *S*'s meta-beliefs can be relevant to the justification of at least some of his non-meta-beliefs, and that it gives the right result with respect to *Case 1*. Since *p* is a necessary falsehood, it follows that $\Pr(p) = 0$, and so $\Pr(q \mid p)$ is undefined. Hence, it is not the case that $\Pr(q \mid p) > \Pr(q)$, and it is not the case

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[9] Jonathan Kvanvig (forthcoming) discusses this proposal.

[10] When $\Pr(p) < 1$, *S*'s belief in *p* is probabilistically relevant to his belief in *p*, since $\Pr(p \mid p) = 1 \neq \Pr(p)$, and so, by (C4), *S*'s belief in *p* is in the *p*-subset of his belief system. I take it that this is the right result. When, though, $\Pr(p) = 1$, *S*'s belief in *p* is not probabilistically relevant to his belief in *p*, and thus, by (C4), *S*'s belief in *p* is not in the *p*-subset of his belief system. I take it that this is the wrong result. (C4) would thus need to be modified so that even when $\Pr(p) = 1$, *S*'s belief in *p* is in the *p*-subset of his belief system.

[11] I am assuming that $\Pr(p \mid q \& r) \neq \Pr(p \mid q)$, and that $\Pr(p \mid q \& r) \neq \Pr(p \mid r)$.

that $\Pr(q \mid p) < \Pr(q)$. Thus, it is not the case that S's belief in p is probabilistically relevant, by itself, to S's belief in q. Further, since $\Pr(q \mid p \& r_1, \ldots, r_n)$ is undefined, for any $r_1, \ldots, r_n$, it is not the case that S's belief in p is probabilistically relevant, together with certain of his other beliefs, to his belief in q. Therefore, S's belief in p is not a member of the q-subset of S's belief system. Hence, though S's belief system as a whole in inconsistent, because of S's belief in p, it does not follow that the q-subset of S's belief system is inconsistent, and so does not follow that S's belief in q is unjustified.

I do not claim to have shown that coherentists can adequately answer the first main version of the Problem of Justified Inconsistent Beliefs. I claim just that coherentists can be nonglobalists, and that by appeal to (C3), and (C4), or something like (C4), coherentists can give at least a promising line of response to the first main version of the Problem of Justified Inconsistent Beliefs.

I turn now to the second main version of the Problem of Justified Inconsistent Beliefs.

5   The Requirement of Total Evidence

Suppose S believes the propositions:

p: o is G
q: o is F
r: almost all Fs are Gs

Suppose S's beliefs in q and r are justified. Does it follow that S's belief in p is justified? Not necessarily. Suppose S believes the propositions:

s: o is H
t: no FHs are Gs

Suppose S's beliefs in s and t are justified. Suppose S has no additional evidence of relevance to whether p is correct. Then, it seems, S's belief in p is unjustified. For, though S's belief in p is evidentially supported by his beliefs in q and r, it is not the case that S's belief in p is evidentially supported by his *total* evidence. Quite the opposite in fact: S's total evidence entails the falsity of his belief in p, and thus evidentially *anti-*supports his belief in p.

This case illustrates the importance of the "Requirement of Total Evidence." This requirement states that: S's belief in p is justified only if S's belief in p is evidentially supported by his total evidence.

I am assuming that *S*'s total evidence vis-à-vis his belief in *p* includes his justified beliefs.[12] But this assumption is not essential to my overall position. I would be happy to say just that: *S*'s belief in *p* is justified only if it is not the case that *S*'s justified beliefs evidentially anti-support his belief in *p*. If *S*'s justified beliefs evidentially anti-support his belief in *p*, then *S*'s reasons, if any, for believing *p* are *defeated*, and so *S*'s belief in *p* is unjustified.

Let's return to *Case 2*. Recall that *p* is the claim that the die (in question) is fair and six-sided, *q* is the claim that 1 will not come up on the first roll of the die, *r* is the claim that 2 will not come up on the first roll of the die, etc. *S*'s belief in *q* is evidentially supported by his belief in *p*. But, *S*'s belief in *q* is evidentially anti-supported by his beliefs in *p*, *r*, *s*, *t*, *u*, and *v*. Suppose, as is alleged in the second main version of the Problem of Justified Inconsistent Beliefs, *S*'s beliefs in *p*, *r*, *s*, *t*, *u*, and *v* are justified. Then, *S*'s belief in *q* is evidentially anti-supported by his total evidence, hence is not evidentially supported by his total evidence. Thus, by the Requirement of Total Evidence, and contra the second main version of the Problem of Justified Inconsistent Beliefs, it is not the case that *S*'s belief in *q* is justified. By similar reasoning, it follows that if, as is alleged in the second main version of the Problem of Justified Inconsistent Beliefs, *S*'s beliefs in *p*, *q*, *s*, *t*, *u*, and *v* are justified, then, by the Requirement of Total Evidence, and contra the second main version of the Problem of Justified Inconsistent Beliefs, it is not the case that *S*'s belief in *r* is justified. And so on. It seems, then, that *Case 2* is *not* a case of justified inconsistent beliefs.

(C3), together with (C4), implies that *Case 2* is not a case of justified inconsistent beliefs. *S*'s beliefs in *p*, *r*, *s*, *t*, *u*, and *v* are probabilistically relevant, together, to *S*'s belief in *q*. Hence, *S*'s beliefs in *p*, *r*, *s*, *t*, *u*, and *v* are in the *q*-subset of *S*'s belief system. Thus, since {*p*, *q*, *r*, *s*, *t*, *u*, *v*} is inconsistent and, thus, incoherent, it follows that the *q*-subset of *S*'s belief system is inconsistent and, so, incoherent, hence *S*'s belief in *q* is unjustified. Likewise with respect to *S*'s beliefs in *p*, *r*, *s*, *t*, *u*, and *v*. My suggestion is that coherentists should embrace this implication.

I do not claim to have established that coherentists can adequately answer the second main version of the Problem of Justified Inconsistent Beliefs. I claim just that coherentists can give at least a promising line of response to the second main version of the Problem of Justified Inconsistent Beliefs.

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[12] Not including, of course, *S*'s belief in *p*, if that belief is justified.

6   Conclusion

I have examined two main versions of the Problem of Justified Inconsistent Beliefs. If what I have argued is correct, coherentists can give at least a promising line of response to each of them.

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