Greco (2014) + Bird & Pettigrew (2019) Focused

Bird & Pettigrew (2019) (B&P) are interested in Externalism $\equiv \neg$KK. They focus on EnoKK:

$$\text{Externalism} \rightarrow \neg\text{KK} \quad (\text{EnoKK})$$

KK is the principle that if you know p, then you know that you know p.[1] B&P define externalism as "the claim that for some necessary condition on knowledge, ϕ, it is possible for some subject to know some proposition and believe that she knows it without knowing that ϕ holds of it with respect to her" (p. 1715).[2]

Greco (2014) argues that:

(i) There's an inconsistent triad of (a) intuitive higher-order *intersubjective* knowledge, (b) a knowledge closure principle[3], (c) and the denial of KK.

(ii) An information-carrying 'normal conditions' analysis of knowledge explains the appeal of higher-order intersubjective knowledge, KK, and closure.

(iii) (Apparent) counterexamples to KK are best handled with *contextualism*.[4]

Greco's analysis in (ii) is intuitively externalist, so if he's right that it's compatible with KK, then EnoKK is false.

B&P attack (ii), arguing that Greco's analysis makes knowledge too easy and is really internalist.

[1] $Kp \rightarrow KKp \quad$ (KK)

[2] $\diamond\exists s \exists p(K_s p \;\&\; B_s K_s p \;\&\neg K_s \Phi_s p) \quad$ (externalism)

[3] If S knows that p, and p entails q, then S knows that q.

[4] Within a context, KK holds. But considering the question "Does S know that S knows that P?," might shift the context into a new one where S has neither second- nor first-order knowledge.

Greco's Analysis and Argument for KK

Greco offers a Dretske-like analysis of knowledge that's basically:

s knows p iff

(3) conditions are normal;

(4) s is in a state X such that, in normal conditions, if s is in X, then p

Greco proves that on this analysis, higher-order knowledge comes for free with first-order knowledge:

> If S is in a state that carries the information that P, then that very state also carries the information that S is in a state that carries the information that P. Why is this? Higher-order information carrying requires that one be in a state that is correlated (given normal conditions) with being in a state that is correlated (given normal conditions) with P. But because every state is correlated with itself, if one is in a state X that is correlated with P, then one is also in a state (X itself) that is correlated with being in a state that is correlated with P. (p. 184)

The full account: s knows p iff

1. s believes p;
2. p;
3. conditions are normal;
4. s is in a state X such that, in normal conditions, if s is in X, then p;
5. s's being in state X causes or constitutes s's belief p

Greco idealizes such that that (3) and (4) entail (5) and (1). (3) and (4) also entail (2).

B&P's Complaints

Greco's Analysis Makes Knowledge Too Easy

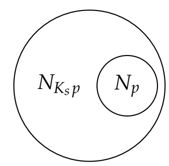
B&P observe that Greco's analysis makes knowledge easy. If I know any proposition, then conditions are normal. Thus, for any state I'm in and any proposition that holds normally when I'm in that state, then I know that proposition, even if I have no reason to rule out abnormal conditions.

I see a station clock display 12:05. The clock is broken and it happens to be 12:05. I know I have hands, so it's normal conditions. On Greco's analysis, I know it's 12:05, since normally station clocks are accurate and it's normal conditions.

The obvious response is *relativizing* normal conditions, either to the proposition or process. Yet, this makes the proof invalid.[5] Let's relativize to the proposition. Normal conditions appears twice in the proof, but for different propositions. There's normal conditions for the first-order knowledge (N_p) and normal conditions for the second-order knowledge ($N_{K_s p}$). The proof follows only if $N_p \rightarrow N_{K_s p}$.

[5] See *Appendix* for the formal statement.

B&P think any argument for $N_p \rightarrow N_{K_s p}$ likely begs the question. They hold that arguments for $N_p \rightarrow N_{K_s p}$ will turn on whether it's more demanding to know $K_s p$ than it is to know p, the issue at hand.



What about relativizing to process? The proof follows only if $N_{1st-order-proc} \rightarrow N_{2nd-order-proc}$. Is there some process *proc* always available for higher-order belief formation where $N_{1st-order-proc} \rightarrow N_{proc}$?[6] B&P hold adjudicating these questions just is debating the plausibility of KK.

(e.g. $N_{vision} \rightarrow N_{introspection}$)

[6] B&P also argue that normal conditions sometimes must be relative to process-proposition pairs (the normal conditions for judging *scarlet* with vision are more restrictive than judging *red* with vision). They suggest Kp and p are like this as well.

Greco's Analysis Really is Internalist

Let's return to Greco's non-relativized analysis. B&P argue it's really internalist. B&P start with an intuition pump using the toy account MM:

$$Kp \equiv (Bp \;\&\; p \;\&\; Mp) \quad \text{(MM)}$$

Where Mp is the proposition *Mars has two moons*

Mp a constant propositional function, so $Mp \equiv Mq$ and $Mp \equiv MKp$.

Intuitively, MM is externalist, as someone might Kp, BKp, but doesn't $\neg BMp$. Yet, it's easy to show that MM entails *weak* KK.

$Kp \;\&\; BKp \rightarrow KKp$ (weak KK)
MM $\rightarrow$ weak KK

(1) $Kp \;\&\; BKp$ (Assumption)
(2) $Mp \equiv MKp$ (Since M is constant)
(3) $Kp \equiv (Bp \;\&\; p \;\&\; Mp)$ (MM)
(4) $Kp \rightarrow MKp$ (MM, 2)
(5) $BKp \;\&\; Kp \;\&\; MKp$ (1, 4)
(6) KKp (4, MM)

MM is obviously a bad account of knowledge. B&P think Greco's analysis suffers the same faults as MM. B&P argue that for both, should the subject know anything, the subject is in a position to know that the additional condition for knowledge over true belief is fulfilled.

They hold that an account of knowledge is externalist either if:

(a) It is *intuitively possible* for a subject to satisfy the analysis and to be a witness to externalism;

(b) It is *possible by the lights of the analysis itself* for a subject to satisfy the analysis and to be a witness to externalism.

I don't fully get (b). I kinda get it if B&P mean that a subject can know the analysis yet remain a witness to externalism. But why (independently) think anyone means this with externalism?

An account is *weakly* externalist if it satisfies (a) but not (b), *strongly* externalist if it satisfies (a) and (b).

We should only expect EnoKK to hold for *strongly* externalist accounts. Since Greco's analysis is weakly internalist, it's not a counterexample to EnoKK.

Appendix

B&P take Greco's analysis as:

Where N symbolizes 'conditions are normal' and $\Box_N p$ symbolizes 'in all normal worlds, p'.

$$K_s p \equiv s \text{ is in a state } X_s \text{ such that } \Box_N(X_s \to p) \;\&\; N$$

Greco proves his analysis entails KK. The proof relies on two lemmas:

First lemma

This first lemma is basically just $(P \to Q) \to (P \to (P \to Q))$.

$$s \text{ is in a state } X_s \text{ such that } \Box_N(X_s \to p) \to$$
$$s \text{ is in a state } X_s \text{ such that } \Box_N(X_s \to (s \text{ is in a state } X_s \text{ such that } \Box_N(X_s \to p)))$$

Second lemma

$$\Box_N(P) \text{ entails } \Box_N(P \& N)$$

We can then prove KK...

(1)	$K_s p$	(assumption)
(2)	s is in a state X_s such that $\Box_N(X_s \to p)$	(1, Greco's analysis)
(3)	N	(1, Greco's analysis)
(4)	s is in a state X_s such that $\Box_N(X_s \to$ (s is in a state X_s such that $\Box_N(X_s \to p)))$	(2, first lemma)
(5)	s is in a state X_s such that $\Box_N(X_s \to$ (s is in a state X_s such that $\Box_N(X_s \to p) \& N))$	(4, second lemma)
(6)	s is in a state X_s such that $\Box_N(X_s \to K_s p)$	(5, Greco's analysis)
(7)	s is in a state X_s such that $\Box_N(X_s \to K_s p) \& N$	(3, 6)
(8)	$K_s(K_s p)$	(7, Greco's analysis)
(9)	$K_s p \to K_s(K_s p)$	(1, 8)

If we relativize normal conditions, the proof no longer follows. Consider relativizing to the proposition. The N in Line 3 is normal conditions relative to p ('N_p'). The N in line 5 is normal conditions relative to $K_s p$ ('$N_{K_s p}$'). The proof follows only if $N_p \to N_{K_s p}$.