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SOCIAL EPISTEMOLOGY AND THE ACQUISITION OF UNDERSTANDING

ABSTRACT. Objectual understanding—i.e. the epistemic standing one attains when one understands a subject matter or body of information—is increasingly thought to have a special value knowledge lacks. This makes it all the more surprising that contemporary social epistemology debates concerning testimony focus almost exclusively on justification and (propositional) knowledge. This paper attempts to make some progress in rectifying this oversight. In particular, it is shown that unlike knowledge, objectual understanding cannot plausibly be given from speaker to hearer. Furthermore, distinctive and collaborative mechanisms by which understanding is acquired through speaker-hearer interactions are explored. To this end, a case study in which understanding is facilitated in concrete ways in a counseling setting is considered, and several general lessons and suggestions for future research are proposed.

1. Introduction

Contemporary discussions of testimony in social epistemology have traditionally focused on how epistemic justification and especially propositional knowledge can pass from speaker to hearer. By contrast, objectual understanding—i.e. the kind of epistemic standing one attains when one understands a subject matter or body of information—has for the most part been ignored entirely in these debates. This is surprising, in part, because recent literature on epistemic value (e.g. Kvanvig 2003; Pritchard 2010; Riggs 2009) has witnessed increased attention to understanding and the kind of purely epistemic value it might have, and which knowledge by contrast lacks. If this line in the epistemic value literature is right, the acquisition of understanding in social epistemic practice should be at least as important a topic of study as the social acquisition of knowledge.

The overarching aim of this paper is to rectify this oversight in the literature, by examining in detail the mechanisms by which understanding is acquired through speaker-hearer interactions. In doing so, new ways to facilitation understanding are suggested and future areas of research outlined.

The plan of the paper is as follows: §2 outlines two transmission principles typically defended (and objected to) as they pertain to justification and knowledge. §3 reimagines these transmission principles in the case of understanding, highlighting some important disanalogies that

show understanding is simply not an epistemic standing that a speaker can *give* to a hearer in the same way as (propositional) knowledge. The remainder of the paper accordingly engages with the following 'guiding question': what are the mechanisms by which an individual can come to acquire (or gain deeper) understanding from another?

Toward this end, §4 explores specific aspects of understanding that can be promoted by speakers through facilitating in the hearer (i) the acquisition of new true beliefs; (ii) the rejection of false beliefs; (iii) the grasping of new connections (and rejecting of mistaken connections); (iv) overcoming blocks to grasping; and (v) the acquisition or enhancement of abilities linked to grasping. §5 then focuses on a case study where the acquisition of understanding is well studied—specifically, speaker-hearer interactions in the context of counseling. By exploring how features of understanding develop in concrete ways through counseling, we can see how the acquisition of understanding is best facilitated in a way that is importantly collaborative. §6 builds on the counseling case study to draw some more general lessons about understanding acquisition and outline some areas for future research.

2. Stage setting: social epistemology and the transmission of epistemic properties

A popular view in contemporary social epistemology is what Jennifer Lackey (2008) has termed the *Transmission of Epistemic Properties Thesis* (TEP), according to which a testimonial exchange involves a speaker's belief, along with the epistemic properties it possesses, being *transmitted* to a hearer. TEP has two dimensions: a necessity thesis and a sufficiency thesis¹.

TEP-N²: For every speaker, A, and hearer, B, B's belief that p is warranted (justified, known) on the basis of A's testimony that p only if A's belief that p is warranted (justified, known).

TEP-S³: For every speaker, A, and hearer, B, if (1) A's belief that p is warranted (justified, known), (2) B comes to believe that p on the basis of the content of A's testimony that p, and (3) B has no undefeated defeaters⁴ for believing that p, then B's belief that p is warranted (justified, known).

Both theses have some intuitive plausibility, judging from widespread endorsement in social epistemology and also the wealth of everyday examples in which it seems propositional knowledge in particular is acquired in just the way these theses describe. After all, it doesn't seem as though I can know the location of my wayward cat via my partner's testimony unless my partner also knows the cat's locations. Similarly, regarding the sufficiency thesis, if I know that it's hot outside and tell this to someone else and that individual believes that it's hot outside on the basis of the content

of my testimony that it's hot outside (and has no undefeated defeaters), it seems as though that individual knows that it's hot outside too.

However, close inspection reveals subtle ways in which these theses are less plausible than they initially appear. Consider, for example, the following much-discussed counterexample to TEP-N (Lackey 2008):

CREATIONIST TEACHER: Stella is a devoutly Christian fourth-grade teacher, and her religious beliefs are grounded in a deep faith that she has had since she was a very young child. Part of this faith includes a belief in the truth of creationism and, accordingly, a belief in the falsity of evolutionary theory. Despite this, Stella fully recognizes that there is an overwhelming amount of scientific evidence against both of these beliefs. Indeed, she readily admits that she is not basing her own commitment to creationism on evidence at all but, rather, on the personal faith that she has in an all-powerful Creator. Because of this, Stella does not think that religion is something that she should impose on those around her, and this is especially true with respect to her fourth-grade students. Instead, she regards her duty as a teacher to include presenting material that is best supported by the available evidence, which clearly includes the truth of evolutionary theory. As a result, while presenting her biology lesson today, Stella asserts to her students, "Modern day Homo sapiens evolved from Homo erectus," though she herself neither believes nor knows this proposition.

Given that Stella reliably conveys to her students that modern day Homo sapiens evolved from Homo erectus, it seems her students (in the absence of any relevant undefeated defeaters) come to know this via her testimony. This case features an unreliable believer who is reliably able to testify to—and convey knowledge of—a proposition that she does not herself believe. This appears to show that TEP-N is false, though proponents of TEP-N have attempted to come to its rescue⁵.

The *sufficiency* dimension of the transmission thesis is given comparatively less attention. Like TEP-N, however, TEP-S also bears some initial plausibility. When rejecting TEP-S, Lackey relies on the following case to cast doubt on the claim that (provided that one has no undefeated defeaters) simply *believing* what a testimonial source says suffices to attain knowledge:

COMPULSIVELY TRUSTING: Bill is a compulsively trusting person with respect to the testimony of his neighbor, Jill, in whom he has an obsessive romantic interest. Not only does he always trust Jill when he has very good reason to believe her, he is incapable of distrusting her when he has very good reason to not believe her. For instance, even when he has available to him overwhelming evidence for believing that she is deliberately lying or being deceitful, Bill cannot come to believe this about Jill. Indeed, Bill is such that there is no amount of evidence that would convince him to not trust Jill. Yesterday, while taking his afternoon walk, Bill ran into Jill, and she told him that she had seen an orca whale while boating earlier that day. Bill, of course, readily accepted Jill's testimony. It turns out that Jill did in fact see an orca whale on the boat trip in question, that she is very reliable with

respect to her epistemic practices, both in general and in this particular instance, and that Bill has no reason to doubt the proffered testimony. Given his compulsively trusting nature with respect to Jill, however, even if he had had massive amounts of evidence available to him indicating, for instance, that Jill did not see an orca whale, that she is an unreliable epistemic agent, that she is an unreliable testifier, that orca whales do not live in this part of the country, and so on, Bill would have just as readily accepted Jill's testimony.

So, Jill knows that p (i.e. that she saw an orca while boating earlier that day), Bill believes that p on the basis of her testimony, and Bill has no (undefeated) defeaters, yet *he* seemingly doesn't know that p, because his belief is evidentially insensitive. He is obsessed with Jill and incapable of distrusting her, so he is incapable of being sensitive to any defeaters for her testimony. This sort of examples reveals that speakers can be highly reliable believers and testifiers while their hearers might nonetheless be such that the speaker's knowledge is prevented for being transmitted⁶.

The case against the transmission thesis about propositional knowledge is more or less that examples like those above show that we should abandon both the necessity and sufficiency dimensions. However, given that many non-reductivists in the epistemology of testimony find these transmission principles attractive, the viability of TEP-N and TEP-S remains very much a live debate.

The particular issue I want to focus on now is not the viability of TEP-N and TEP-S *per se*, but rather, the matter of whether analogous transmission principles might hold of a different epistemic state—*understanding*. Of course, if understanding just is knowledge, we should expect to find these new transmission principles are *prima facie* plausible but become less plausible in the face of analogous kinds of counterexamples. This is, however, not at all what we find—especially in the case of sufficiency. This result raises some important questions about the mechanisms by which understanding might be gained by a hearer through interactions with a speaker, and more generally, how to promote the acquisition of understanding in social-epistemic practice.

3. The transmission of understanding?

Before going further, I should briefly emphasize that I am concerned here with just one type of understanding—*objectual* understanding, where the object of understanding is not a single proposition but rather is (or can be treated as) a body of information (Kvanvig 2003). Attributions of this type of understanding take the form of "S understands φ ." For example, "Cassie understands virology" and "James understands the rules of the game."⁷ This type is widely regarded as an especially valuable, and it is natural to wonder whether it's the sort of epistemic standing that might transmit from speaker to hearer by the same mechanisms of as proponents of TEP-N and TEP-S regard knowledge as transmitting from speaker to hearer.

In order to bring this issue into sharp relief, let's consider some 'analogue' principles to TEP-N and TEP-S—*viz*., TU-N and TU-S—where the target state is not knowledge, but understanding:

TU-N: For every speaker, A, and hearer, B, and subject matter φ , B can acquire understanding of φ on the basis of A's φ -testimony only if A understands φ .

TU-S: For every speaker, A, and hearer, B, and subject matter φ , if (1) A understands φ , (2) B comes to believe A's φ -related testimony on the basis of the content of A's φ -testimony, and (3) B has no undefeated defeaters for believing A's φ -related testimony, then B understands φ .

As with TEP-N, we might initially think that TU-N is very plausible—at least many cases of understanding acquired by listening to a speaker are ones in which that speaker herself understands (e.g. in teaching contexts). However, if TU-N is right, then there will be no case in which a hearer understands φ on the basis of a speaker's testimony regarding φ whilst the speaker herself nonetheless does *not* understand φ . On reflection, though, it seems like TU-N can be challenged on the basis of considerations similar to those which Lackey appeals to in TEP-N. Specifically, a modification of a CREATIONIST TEACHER case would be sufficient for showing TU-N to be problematic. In this respect, TU-N is not obviously that interestingly different from TEP-N, in terms of plausibility. More generally, we might say that it's very plausible that TU-N and TEP-N *stand or fall together*, depending on how they can circumvent threats posed by CREATIONIST-TEACHER-style cases.

TU-S, however, is a different story altogether. TEP-S and TU-S do *not* stand or fall together. While TEP-S looks at least *prima facie* plausible and requires Lackey to generate complex counterexamples in order to tease out the intuition that it's false, TU-S is by contrast *obviously* false—not even the most ardent proponent of TEP-S would be inclined to defend TU-S. Even more, the falsity of TU-S is widely taken for granted, and for good reason. There are plenty of cases in which a hearer (with no undefeated defeaters) who comes to believe an understander A's φ -related testimony on the basis of the content of A's φ -testimony nonetheless *lacks* understanding of φ —all it takes is for a hearer to acquire various beliefs about a subject without thereby grasping how the relevant propositions might be interrelated. This is a ubiquitous phenomenon.

Here is one autobiographical example (of which I could give many). Along with many students in my undergraduate philosophy of mind class, I had difficulty understanding Donald Davidson's anomalous monism simply from listening to the professor's lectures. I listened carefully and trusted the professor (who understood the theory very well) implicitly. Just believing the various features of the view, as the professor accurately explained them in lectures, wasn't enough for me or many others in the class to actually understand the view. I managed to understand it only after going home and drawing several diagrams⁸. But a view as tricky as anomalous monism isn't needed to highlight the obvious falsehood of TU-S. More generally, undefeated-defeater-less students are sitting in classrooms all over the world this minute, listening to lecturers whom they trust implicitly, and not understanding subject matters understood perfectly well by their teachers.

There is, thus, a striking disanalogy between TEP-S and TU-S, and this disanalogy is worth thinking about more closely. A moment's reflection reveals that there's no point in attempting to merely 'tweak' TU-S in order to get around counterexamples. The deeper problem, revealed by the ubiquity of cases like those described above, is that there is no point to giving counterexamples to a principle like TU-S in the first place.

Why is this? A first approximation—one we will continue to explore and refine—is this: understanding *can't simply be given to another in the way knowledge can*⁹. Consider: A can be very well informed about φ and intend to give B understanding of φ by testifying, and B can trust A and desire to understand φ , and further, to believe everything A truthfully testifies (e.g. A can believe and come to know all the propositions A asserts)—and still fail to understand φ . Put differently, it's always an *open question* whether the hearer attains understanding, given facts about (i) what defeaters the hearer lacks in conjunction with (ii) facts about the reliability/competence of the speaker, and (iii) facts about what the hearer believes which the speaker says.

Given that the problem with TU-S is not that it needs tweaked, but that (given the open question point just noted) there's no point in even proposing it, it looks fruitful to step back and explore things at a greater level of generality: how is understanding acquired through interactions between a speaker and a hearer *at all*, when it is? Obviously, understanding *can* in certain circumstances be acquired through speaker-hearer interactions, even if understanding (plausibly in contrast with propositional knowledge) cannot simply be *given* by a reliable speaker to a defeater-less hearer in a straightforward way. Accordingly, it will be helpful to think about paradigmatic *successful* understanding acquisition, on the basis of a speaker's interactions with a hearer.

Importantly, however, limiting discussion to exclusively *testimonial* acquisition of understanding is going to be unhelpfully restrictive to this end. As Hawley (2010: 3) points out,

^[...] even the most generous accounts of [testimony] restrict it to assertions, declaratives statements or communications of information, as opposed to genuine questions and imperatives, for example.

Yet, plenty of paradigmatic cases of understanding acquisition that result from interactions between speaker and hearer will not involve strictly *testimonial understanding*, as such. It's much more productive to frame the discussion as accommodating a wider class of speech acts that might aid in facilitating understanding acquisition, which can transpire between speaker and hearer. This need for a wider focus motivates the following generally construed (and non-testimony-specific) 'guiding question':

Guiding question: What are the mechanisms by which an individual can come to acquire (or gain deeper) objectual understanding from another?

The aim in what follows will be to use a case study to sketch an answer to this question. One practical arena within which (perhaps more obviously than in other places) collaborative interactions between speaker and hearer lead to hearer's acquisition of understanding—is the arena of *counseling*. In using this case study, I will first explore (i) key elements of understanding that an agent can acquire through social interaction, and (ii) specific elements of dialogues that seem to promote understanding. Features of counseling cases will then be drawn out to make points about understanding in broader contexts—for example, we will consider the role of the speaker's questioning (a role that cannot always be played by merely asserting), and how discourse can remove certain "blocks" to understanding when the hearer appears to already have all the correct beliefs required to understand. More generally, by focusing on some ways understanding is facilitated in the counseling setting, we'll ultimately be in a much better position to appreciate the mechanisms by which an individual can come to acquire understanding from another—a lesson that should be important for social epistemologists typically preoccupied with the social distribution of *knowledge*.

4. Aspects of understanding facilitated by speakers

First, let's consider some major components of understanding—all of which might plausibly be facilitated by speakers. Next, we'll turn to more specific tools, methods and strategies that might be used to bring about those key elements.

4.1. Acquiring new beliefs

Perhaps acquiring new true beliefs about some subject matter is the most obvious way in which a hearer might come to acquire understanding or improve understanding through interactions with a speaker. However, whether (and the extent to which) understanding is acquired or improved might depend on the *type* of new true beliefs that are acquired. Specifically, Kvanvig (2003: 201)

distinguishes between central and peripheral beliefs—central beliefs are essential if understanding is to be had (and can undermine understanding if false), while peripheral beliefs are less significant, merely enhancing or detracting from a case of understanding.

For example, if a hearer acquires a new true belief that is central to some subject matter, this might sometimes lead to cases of *new* understanding—at least on a Kvanvig-style view, where the suggestion is that at least having certain central beliefs would be a necessary condition for having understanding at all (Kvanvig 2003, 200-202). Coming to believe that a war began in a particular year, say, might well be a central belief required for understanding that war at all. Alternatively, a hearer might acquire a peripheral belief that *enhances* understanding. For example, a history scholar might add a new belief about the underlying motivations of a certain politician to their understanding of some time period.

In cases of newly coming to understand *and* cases of coming to have better understanding through acquiring new beliefs, these new beliefs might result from direct testimony—for example, in the above case, the speaker might say "New evidence from this politician's journal suggests he not only wanted peace but was also privately motivated by a desire for power." However, new beliefs might also be acquired via the hearer's making inferences based on what a speaker says—even if that speaker doesn't have the belief that the hearer then acquires. For example, if a speaker says "Tom has been withdrawn and sad-looking at work today" the hearer might come to believe that Tom is still upset following their minor argument the previous evening (enhancing, say, their understanding of Tom's psychology).

4.2 Abandoning false beliefs

One might also come to acquire understanding through interactions with a speaker that lead to the abandonment of a false belief or beliefs. Again, this might be just one false central belief that played a significant role in the agent's conception of a subject matter. In such a case, the hearer either develops at least a degree of understanding if she replaces the false central belief with the corresponding true belief, or she at least comes *closer* to understanding if, for example, she unfortunately still has other false central beliefs.

Alternatively, interactions with a speaker might lead one to abandon one or more *false peripheral* beliefs. In the case of peripheral beliefs, the abandonment of false beliefs might either lead to a case of understanding (if combined with another significant change, such as acquisition of new true central beliefs), or it might simply enhance the quality of the understanding. Consider, for example, a modified version of the previous history scholar example—abandoning a minor

false belief about a politician's underlying motivations might marginally improve understanding of a particular time period.

4.3 Grasping new connections

Epistemologists working on understanding often discuss the notion of 'grasping' connections between the propositions that constitute a subject matter, suggesting it as a key element of understanding. For example, Kvanvig (2003, 192) characterizes grasping in terms of "explanatory and other coherence-making relationships" and Riggs (2003, 217) suggests that understanding "requires a deep appreciation, grasp or awareness of how [the subject matter's] parts fit together [and] what role each one plays in the context of the whole." However, there is no consensus¹⁰ about what such grasping amounts to (for example, might it be utilizing a particular ability?), nor agreement on precisely *which* connections must be grasped for understanding.

For present purposes, we can remain largely neutral about the precise nature of a grasping condition on understanding. However, we should keep in mind that a plausible necessary condition on understanding would require that for subject matter φ , S must grasp (in some suitably specified sense) the coherence-making relations between the propositions constituting φ . As something like this is widely thought to be an integral component of understanding, we get a clearer picture of why understanding isn't something that can be given from speaker to hearer as knowledge can; for whatever grasping is, *it isn't something that can just be "handed over.*" Rather, the relevant facts need to be "pieced together" by the hearer. No one can exactly induce this in the hearer, even if they explicate the coherence-making relations—passivity in the hearer will arguably prevent grasping (this was essentially the 'open question' point in §3). However, as we'll see in §5, others do plausibly provide considerable help with grasping sometimes¹¹.

4.4 Overcoming blocks to grasping

On a related note, an agent might not only grasp an entirely new connection because of interactions with someone—she might *overcome a block* to grasping a connection (or connections). In other words, the hearer might lack understanding before encountering the speaker, and then acquire it not because the speaker directly helps the hearer to grasp a connection between relevant facts, but because the speaker helps to take away something previously standing between the hearer and grasping that relation.

The core thought here is that someone might have access to a host of facts and yet be unable to "grasp" in the way necessary for understanding because of a block—something like a false assumption about how two things relate to each other, not seeing that they relate at all, or falsely believing that two things *do* relate when they do not. Think, for example, of a case in which an agent who was imaginative and mentally flexible when younger was discouraged from thinking in this way, and then later begins associating with a friend who comfortably and consistently thinks outside the box. These interactions might remove the agent's blocks to grasping a number of connections that necessarily require creative thinking.

So, a speaker can tell a hearer how to remove a block to grasping, or help them to remove it, making way for grasping that would plausibly have happened naturally without that original block—we will look at examples of this phenomenon within a counseling context in §5.

4.5 Gaining or enhancing abilities linked to grasping

Speaker-hearer interactions might also have the potential to teach a hearer *abilities* that are intimately connected with grasping. Consider that Hills (2009, 102) suggests that the grasping involved in understanding-why requires certain abilities—we might generalize some of these to apply to objectual understanding. For example, understanding subject matter φ might require being able to follow explanations associated with φ when given by someone else, explain aspects of φ yourself, and draw conclusions about connections between new, relevant pieces of information that resemble other aspects of φ regarding which you have already grasped connections.

Meanwhile, Grimm (2011) has considered whether grasping might be a modal sense or ability, involving not only registering how things are but also anticipating what would happen if things were relevantly different. In other words, the agent should be able to make accurate inferences about how relevant differences to the truth or falsity of certain propositions that pertain to the subject matter might influence the inferences that currently obtain in the actual world. More recently (2014), Grimm characterizes understanding-why as a type of (non-propositional) *knowledge of causes.* On this view, understanding requires the agent have an ability to grasp how changes in one property, object or entity would lead (or not lead) to changes in another. So, perhaps interactions between speaker and hearer could facilitate this type of grasp as well.

Against this background, let's now look at some more specific ways in which speakers facilitate understanding in their hearers, taking understanding acquisition in a counseling setting as paradigm.

5. A case study in methods of facilitating understanding: counseling

As we considered in §4, objectual understanding can't be "handed over" like it might seem propositional knowledge can be—you don't simply listen to another person and then acquire understanding without any effort (be that effort prior to, during or after the listening). For example, Pritchard's model of understanding-why (e.g. Pritchard 2010; Carter and Pritchard 2015) characterizes it as a *cognitive achievement*—a cognitive success that is primarily creditable to the efforts of the agent who acquires it. However, it seems as though many cases of objectual understanding acquired through social interaction also involve a degree of effort from the *speaker*. There is often an important *collaboration* between speaker and hearer when a hearer acquires understanding. Perhaps as a result, one point that became especially obvious in §3 is that some salient aspects of understanding facilitated by speakers—such as gaining or enhancing abilities linked to grasping connections—might be most effectively facilitated by something other than mere testimony. Rather, there are other, more two-way interactive types of exchanges between speaker and hearer that might better promote understanding in certain cases.

At this point, it will be helpful to take some cues from (a sample of) the concrete methods of facilitating understanding that are employed to effect in a counseling environment. As McLeod (2013, 10) points out, "[counseling] helps in part¹² because of [...] the acquisition of an understanding of the origins and development of emotional difficulties." But what specific aspects, of counseling lead this new or enhanced understanding to develop? It seems there are a range of factors in play.

5.1 Questioning in the counseling room

In a counseling setting, the client and counselor swap back and forth between the roles of speaker and hearer. While the client may begin as the speaker—explaining experiences and outlining issues—the counselor typically occupies the speaker role when promoting new (or better) understanding. One way to do this is by asking *questions* that inspire the client to develop new beliefs, abandon false ones, and grasp relationships between previously discussed facts. But this raises a further question: what *kinds* of questions can help, and how can they best be deployed to improve a client's epistemic standing?

Firstly, a general piece of advice from James (2001) suggests the therapist consider and use information about the client's stage of understanding to design discovery-promoting questions that are not too far outside the client's current understanding—this approach might make it easier for clients to find useful answers. This general advice can then be used to shape a wide variety of different questions. For example, James, Morse and Howarth (2010) worked with trainees in cognitive therapy and doctoral students in clinical therapy to look at the function of questions in counseling (based on a taxonomy by McGee at al. 2005). Some widely accepted functions for questions in therapy include: information gathering (e.g. "When did you start this job?"), summarizing (e.g. "So, would you agree that you've described feeling quite isolated in your working

environment?"), challenging (e.g. "You say that you believe you aren't involved in socializing at work because people don't like you, but do you have any evidence that your colleagues dislike you?"), educating (e.g. "Can you tell me how my explanation of 'differentiation of self' might be used to explore how you depend on other's for acceptance?"), clarifying (e.g. "So you were the older, but your sibling left home first?"), eliciting feedback (e.g. "Is there anything you'd like to change about how we're working together in our sessions?"), and facilitating (e.g. "You say you want to figure out why you reject people when they start to get close to you. What do you think you'd need to discover in order to figure this out?"). Meanwhile, Hargie and Dickson (2004) call questions that go beyond recalling information and instead require some time for reflection "process questions"—many such questions that promote understanding in therapy are further labelled "affective questions", concerning emotions and attitudes. It is likely that many questions might be of more than one type, and have more than one function.

Such reviews of questions make several points that are relevant for our purposes. For one thing, it seems like there will be times when open questions better facilitate understanding, and other times when *closed* questions are more effective (Hargie and Dickson 2004). The former are broad and invite a wider range of potential answers, while the latter are answerable with short responses selectable from a small amount of options (which will often-but not always-be limited to a simple "yes" or "no.") For example, if a client is prone to giving factual descriptions without accessing their emotional responses, an open question such as "What was it like for you when your partner told you that she was moving out?" invites more emotional reflection, potentially facilitating (for the client) greater understanding of present relationship difficulties through the formation of new beliefs and the grasping of new connections. Padesky (1993) submits that "listening is the second half of questioning", which means that the therapist should be focused, and doing their best to pick up signs of particular emotions (along with particularly evocative language). Padesky believes that if the therapist can detect and then describe (or "reflect back", to use therapist parlance) underlying emotions, vivid imagery or interesting word choice that the client hasn't necessarily acknowledged or seen as important, this may help the client connect more with what they're feeling and facilitate faster progress towards understanding. So, the aforementioned open question might be even more effective if followed up by a further invitation for the client to say more about their language. For example: "This is the third time you've used words related to threats to your mortality when you talk about your divorcedrowning, suffocating, being stabbed in the heart. Could you tell me more about how you think the threat of some kind of death might connect to your spouse leaving?"

Interestingly, however, *closed questions* might be more effective in other cases. For example, "Do you believe that your parents think you're solely responsible for the failure of your business?" encourages the client to entertain and accept or reject a particular interpretation of their current behavior that may (for example) facilitate understanding of their family dynamics. New true beliefs, the rejection of false beliefs, the grasping of new connections and/or the abandonment of formerly accepted connections may follow—as may the removal of a self-defensive "block" to seeing a connection that was hidden from the client until the counselor made it an explicit possibility.

In addition, cognitive behavioral therapy (CBT) often involves Socratic dialogue that helps find irrational or contradictory beliefs and facilitates exploration of the client's experiences and underlying assumptions and feelings (Overholser 2010). Carey and Mullan (2004) call Socratic questioning in therapy a "clinical skill or art" and it can be summarized as having "two aims: (a) to lead the client in the direction of making connections between their thoughts and the behavioral consequences of these thoughts; (b) opening a creative, reflective space within which new possibilities (i.e., different ways of thinking about things) might be realized" (McLeod 2003, 151). Examples of such questions might be "What evidence do you think supports your belief?" and "What evidence contradicts your conclusions?" along with invitations to consider hypothetical scenarios (e.g. "What would happen if you were to...?"). To relate this method to the understanding literature in epistemology, these types of invitations encourage clients to "see how certain properties (objects, entities) are modally related" (Grimm 2014, 339) and will generally allow them to also answer other "What if things were different?" (Woodward 2003) questions.

Once again, such approaches to questioning clearly encourage clients to assess their beliefs (adopting new ones and discarding old as appropriate), make connections (or discredit old connections) and potentially overcoming blocks. In particular, questions intended to create dissonance and facilitate reevaluation of beliefs can help clients to see where certain parts of their thinking don't add up (Overholser 1993), facilitating understanding as a result. Similarly, the approach called "downward arrowing" (Burns 1980) uses questions to continue working down through assumptions, beliefs and feelings, challenging the client to continually say more about what a certain feared outcome or difficult experience means to them. One idea is that this might help to get rid of certain negative thinking patterns that blow potential (or actual) consequences out of proportion—so, it might facilitate understanding by encouraging the rejection of false beliefs and incorrect corrections (which might then be replaced with correct alternatives).

As James, Morse and Howarth (2010) point out, Socratic questioning in CBT also has an inherent aim of "building more adaptive thinking styles" that may encourage cultivation of the types of abilities that make agents effective at grasping coherence-making relationships in a way

that promotes understanding. Note that when asking the sort of "what would happen if..." questions mentioned above, the therapist is inviting the client to grasp *how things could have been relevantly different* (which is intimately related to understanding on a view like Grimm's). In addition, hypothetical questions like "what would you advise someone else to do in this situation?" could help to remove a *block* to grasping—for example, failing to see that one's actions are rational given current circumstances could be a result of low self-esteem and a tendency to berate oneself, so being invited to view the situation as being experienced by someone else might help to encourage one to see past that interference.

5.2 Offering interpretations

In some cases, the counselor will also facilitate understanding by outlining an interpretation for the client to process, then accept, amend, or outright reject. At this stage, it's fair to say that the counselor displays *intelligibility*—an epistemic state similar to understanding, but lacking the need for the grasped connections to be true (Riggs 2004). However, the client's access to further information about their own experiences can allow them to then develop or deepen their understanding in response to the counselor's interpretation.

For example, if a client has talked for about their childhood for several sessions and spent another few sessions talking about their difficulties at work, the counselor might see an intelligible picture of the links between how the client was disciplined by his parents and how he's now acting and feeling when he believes his superiors are displeased. The client might then reflect, agree that this interpretation is close to the likely reality, but then add further information into the mix perhaps regarding a specific incident of childhood discipline by a particularly frightening aunt or uncle—bringing both client and counselor closer to understanding.

The counselor might also offer the start of an interpretation as a result of first gaining understanding-*why*—for example, she might come to understand why a client avoids emotional intimacy with other people, and in offering this as a start of an interpretation of the client's current difficulties, she may thereby facilitate greater understanding (say, of the client's upbringing, adult relationships, or recent relationship breakdown).

However, it's vital that a counselor be skilled in *offering* interpretations tentatively (e.g. Macaskie 2013, 155)—it is possible that certain clients will be tempted to view the counselor as an authority, and that there might therefore be a pull to adopt an incorrect interpretation if the therapist seems confident of the interpretation correctness. As Barrott (2013, 279) points out, "the purpose of interpreting is not to make the right interpretation for its own sake, but to make an interpretation which helps clients gain insight." Offering interpretations involves preceding them

with remarks like "I wonder if..." or "One interpretation might be X [with added explanation of interpretation], while another might be Y [with added explanation of contrasting interpretation]."

This ongoing process of discussing, amending and accepting or rejecting interpretations helps to facilitate many aspects of understanding—from rejecting false beliefs to acquiring new ones, seeing new connections and rejecting previously assumed, false connections.

5.3 Connecting material from previous encounters

Another way in which counselors aim to help clients understand the meaning or significance of thoughts, feelings and behaviors involves connecting material diachronically from different sessions. This might be especially useful both for promoting the grasping component of understanding and the acquisition of important new beliefs. For example, the counselor might point out an overlap in affect that is described by the client in two unique situations, and the client might then suddenly (say) realize their anger was triggered by an underlying feature present in both situations.

5.4 Externalizing

"Externalizing the problem" (e.g. White 1998) is an approach from family therapy that is sometimes adapted for individual work. The thought is that linguistically separating the client from a problem can open "conceptual space" that allows more imaginative and effective solution generation. The problem is often personified in a sense (e.g. as having a certain character, appearance or even smell), and the client is therefore enabled to consider the problem without as intensely negative self-appraisals getting in the way (e.g. feelings of guilt and shame). For example, "I am a depressed person" becomes "I feel inhibited by depression" (where depression is viewed as an external issue that is interfering with the client's life). In addition, making the problem an entity or object for the purposes of discussion seems to prompt creativity in the client.

This approach might facilitate understanding by helping the client take a more rational, objective perspective on their own situation. The rejection of false beliefs, acquisition of true beliefs and grasping of accurate relationships may follow as a result.

5.5 Explaining frameworks

There is also a sense in which the counselor can facilitate understanding of X (a personal difficulty or confusing issue) by imparting understanding of Y (a theoretical framework). As McLeod (2013, 67-69) points out, "more and more counselors and therapists have found that it is valuable for clients to acquire a theoretical framework within which they can make sense of their difficulties

[...]. [Theories] can help to build an understanding, shine a light on something unclear, and provide a map of knowledge."

For example, an integrative therapist who uses family systems theory (e.g. Bowen 1978) as part of their practice might explain (in some detail) how the family can be seen as an emotional unit, and supply the client with conceptual tools that make it easier to identify patterns of interdependence in a family of origin (e.g. a tendency to take on too much responsibility because a parent has unrealistic expectations). The client might then come to understand a *further* subject matter—such as their family's influence on their current romantic relationship—in response to gaining understanding of family systems theory. In such a case, the understanding facilitated may not actually be attained by the counselor, and some of it may not even be discussed in the room.

5.6 Modelling and encouraging abilities that promote understanding

When counselors offer interpretations, discuss potential connections and ask questions that advance exploration of a subject, it's plausible that they're modelling useful abilities to their clients—ones that promote understanding. It's noted that counseling often involves the client "acquiring a general competence in problem solving" (McLeod 2013, 10)—for clients who are not practiced about thinking of their own belief systems, assumptions and personal experiences in the way encouraged by counseling, seeing the counselor model skills associated with grasping connections could help those clients to develop or hone their own such abilities. To use a more specific example, if we think back to how suggestions from Hills (2009, 102) might be applied to objectual understanding, we might consider the importance of, say, the counselor's being able to draw conclusions about new information associated with the subject matter under discussion.

In addition to modelling these types of skills, the counselor can design specific questions or suggestions that prompt the client to practice these skills. For example, as Hills points out, explaining aspects of the subject matter in one's own words may be partially constitutive of grasping—and it will sometimes reveal what is currently *lacking* in the agent's cognitive economy (e.g. through failure to paraphrase appropriately). Asking clients to experiment with trying to succinctly explain critical parts of a subject matter may help them to start piecing together individual bits of information in a way that leads to the grasping necessary for understanding.

5.7 Supervision

Interestingly, there is sometimes a chain or group of speakers that might be relevant to a client's understanding in counseling—or at least more than one individual figuring out how to facilitate that client's understanding. Specifically, supervision is part of a counselor's ongoing "behind the

scenes" work, with the aim of the practitioner both gaining understanding and considering how their clients may gain more understanding (see e.g. Hawkins and Shohet (2012) for discussion of how supervision helps to specifically develop improved understanding). Most professional counseling associations insist on mandatory supervision, so that the counselor has one supervision meeting per set number of client contact hours (e.g. 10-12 after training is complete). While supervision in a lot of other disciplines is largely managerial in nature, counseling supervision primarily aims to help the counselor improve their work with the client (Carroll 1988). It is widely supposed that a counselor will not practice as well without supervision—and perhaps part of the reason is that understanding's status as a more significant cognitive achievement than propositional knowledge may be more likely facilitated if more than one person is turning their analytical and reflective capabilities to the issue of that facilitation.

For example, counselors often start making a case formulation, which "comprises a set of hypotheses that make potential connections between the immediate problems being presented by a client, the underlying factors and processes that are responsible for these problems and through which they are maintained, and the therapeutic interventions or strategies that might be used in working to resolve the client's problems" (McLeod 2013 68). The supervisor will help to appraise this case formulation, challenging the counselor where possible, and sometimes inviting a brief role play in which the counselor gets a chance to try out—for example—particular ways to phrase *questions* that might elicit more useful information or encourage deeper understanding.

Given the role of supervision, there's a sense in which some instances of client's acquiring understand through counseling are facilitated by *two* other agents—the counselor (who hears the material directly), and the supervisor (who works with the counselor to facilitate *their* understanding of client material). With the possibility of group supervision meetings thrown into the mix, 5-10 other counselors may be giving input on at least some aspects of a counselor's cases every month or so.

This ongoing process gives us food for thought about facilitating understanding more generally—it shows how discourse with other, trustworthy epistemic agents can promote or expand understanding, especially when multiple, *intelligible* interpretations are on the table.

5.8. Traits of those who facilitate understanding

It's also worth pausing to think about a further question—what *kind* of people seem to be good at facilitating understanding in a counseling context, and how might these traits generalize?

A study investigating the qualities of exceptional counselors with long, highly successful careers (Jennings and Skovholt 1999) identified that these counselors tended to have the following

in common: they were experts at using their strong relationship skills in therapy, voracious learners, sensitive to/valuing of the cognitive complexity of people, emotionally receptive, self-aware, reflective, non-defensive, open to feedback, mentally healthy and mature, aware of how their emotional health impacted on work quality, believed that a strong working alliance is the foundation for therapeutic change, attended to their own emotional well-being, and were able to use their accumulated life/professional experience as a major resource for work. These traits are perhaps largely unsurprising, and many of them might be highly specific to situations in which the type of understanding being promoted relates to personal development (as opposed to, say, solely intellectual development).

However, several of these traits stand out as relevant to facilitating understanding more generally—specifically, being a voracious learner, having a sensitivity to the cognitive complexity of others (e.g. being able to see why they might struggle to make a certain connection or adopt a certain belief), being open to feedback, and possessing strong relationship skills all seem to be relevant in almost any context in which a speaker hopes to facilitate understanding in a hearer. Master therapists are described (Mozdrierz, Peluso and Lisiecki 2014, 27) as "delighted in the pursuit of knowledge, have a healthy sense of curiosity, have the intellectual sophistication to handle complex situations" and can tolerate the ambiguity inherent in the parts of the problem solving process. This appears to describe not just someone who would be good in a counseling context, but also be good at facilitating understanding in broader contexts.

6. Understanding and social epistemology: lessons from counseling

We began by considering some important differences between how knowledge and understanding seem to develop through social interactions. By comparing potential transmission principles for understanding to the commonly endorsed (though nonetheless divisive) transmission principles for knowledge, we saw that acquiring understanding is a substantially more complex matter—one that invites us to consider broader interactions between speaker and hearer (not just speaker testimony) if we want to have a better sense of how we might facilitate understanding in others. Next, we considered key aspects of understanding that might be facilitated by speakers, and then used the counseling context to tease out just a few of the methods and techniques that seem especially useful in facilitating those aforementioned aspects of understanding (before briefly turning to traits of "master" counselors that might also be relevant to the facilitation of understanding more broadly). This final section adverts to some elements of the foregoing counseling case study to highlight some useful lessons for theorizing about understanding in social

epistemology more generally. For each lesson, I will suggest a corresponding important area for future research.

Firstly, one such lesson seems to be that a closer investigation of questions and the related skill of questioning¹³ are important to appreciating what features of a speaker are important to promoting understanding-not just in a counseling room. Compare here the important difference with propositional knowledge. The primary epistemic demand on speakers who aim to disseminate knowledge is reliability (along with sensitivity to, say, Gricean conversational maxims). What we can tell from the counseling case study is that questioning skills have a special kind of relevance and plausibly, the very kinds of skills which are relevant to questioning (in a way that facilitates understanding) in counseling are generalizable to speakers whose aim is to facilitate the acquisition of understanding in a hearer in the default case. A few examples here will be useful to note. For instance, as we saw, skillful questioning can be pertinent to the hearer's satisfaction of both the belief and grasping components of understanding. Depending on whether questions are, for example, open or closed, pose hypotheticals or aim to highlight inconsistencies, they may help a hearer move closer to the truth in terms of their beliefs and the connections that obtain between those beliefs. Relatedly, skillfully posed questions can encourage grasping how things could have been different (fulfilling a Grimm-style condition on understanding). With respect to future research, it's worth thinking about whether (or how) things like question style and function might be specifically tailored to encourage understanding in different fields-and indeed worth further investigating what types of questions aren't so helpful to a hearer when it comes to acquiring understanding. (For example, to this end, it would be important to get clearer about just why closed questions are more effective than open questions in facilitating understanding in some circumstances, and open rather than closed questions in others). In addition, are there particular intellectual virtues of speakers associated with asking the types of questions that facilitate understanding, and what of intellectual virtues that might make hearers receptive to using understanding-facilitating questions in the most effective ways?

A second important lesson from the foregoing is that in social contexts, a speaker can facilitate understanding of X in a hearer somewhat indirectly—i.e., by first encouraging understanding of *something else*—e.g. theoretical framework Y—that then provides the hearer with concepts and ideas that can be used to promote understanding of X. For example, a lecturer in an undergraduate philosophy class might facilitate in a hearer understanding of informal logic, and the hearer might then use that understanding to develop or enhance *further* understanding of, say, the current political landscape (by way of applying the learned frameworks to the rhetoric deployed

by politicians). So, for example, I think it is worth considering which frameworks (or types of frameworks) most often promote the greatest amounts of further understanding.

Thirdly, I'd encourage further investigation into how we model particular abilities related to understanding. For example, we might look to suggestions (e.g. from Hills 2009) that certain types of understanding can plausibly be thought of as a kind of know-how. We could benefit from figuring out exactly what sorts of abilities are integral to grasping connections, and perhaps from empirical research into how speakers can best demonstrate those to hearers in ways that encourage those hearers to develop such abilities themselves.

Fourthly, just as *interpretations* offered in counseling can help a hearer consider a range of possible ways in which information might fit together, a speaker suggesting (or prompting) a range of intelligible pictures for the hearer to consider might help to move from intelligibility or (what Grimm (2010) calls) subjective understanding. For example, highlighting that other intelligible pictures exist might be what a hearer needs to trigger explorations of underlying assumptions that previously led them to believe that their own picture was correct. Also on the topic of underlying false assumptions, something along the lines of the "externalizing" technique used in counseling might plausibly be used in other contexts in which an emotionally-laden subject matter may present a block to understanding.

Finally, consider what we might learn from the importance of a counselor's supervisor in the chain that culminates in a client acquiring understanding through counseling. Perhaps largely due to understanding's status as a particular kind of cognitive achievement, it sometimes requires a "joint effort" and is creditable to a collaboration more so than any one individual. This feature of the acquisition of understanding in a social context indicates an interesting potential point of connection between (i) the social/collaborative nature of engendering understanding in individuals; and (ii) collective epistemologist's approach to (non-summative) group epistemic states. For example, under what conditions do a group of people deliberately working towards understanding of a particular subject matter end up with group understanding as opposed to (or in addition to) individual understanding¹⁴? One kind of answer to this question—proposed by Palermos (e.g. 2014)—is that in the case of group epistemic states, there are feedback loops between the individuals, in a way which is helpfully modeled using dynamical systems theory. To the extent that the counseling case study reveals an important sense in which the hearer's understanding is ultimately down to features of the collaboration more so than to the efforts of either individual, we have reason to think that dynamical systems theory (and more generally, tools from collective epistemology) will be useful in illustrating these mechanisms.

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³ Endorsement for TEP-S thesis can be found e.g. in Audi (1997), Fricker (1987) and Coady (1992).

⁴ Defeaters can be either psychological or normative. Psychological defeaters are beliefs indicating one's belief that p is false or unreliably formed/sustained—a belief does not have to be true to be a psychological defeater. Meanwhile, normative defeaters are beliefs one *should* have, that would indicate one's belief that p is false or unreliably formed/sustained—a belief does not have to actually be held to be a normative defeater.

⁵ See S. Wright (2015) for a recent such attempt, and Carter and Nickel (2014) for an expansion of Lackey's argument. See Lackey for some convincing and thorough responses to potential objections that (i) Stella's testimony isn't the source of the students' knowledge, (ii) Stella only gives indirect testimony, and (iii) Stella offers a mere statement (not testimony).

⁶ Lackey also offers two different types of counterexample designed to undermine TEP-S—A LUCKY CHOICE (a Gettier-style example) and ALMOST A LIAR (in which the belief has a belief that's counterfactually insensitive to the truth).

⁷ Objectual understanding is most often contrasted with understanding-why, as attributed in sentences of the form "S understands why X" (e.g. "Nick understands why his aunt is ill"). For some prominent discussions of understanding-why, see Pritchard 2010, Hills 2009, and Grimm 2014.

⁸ We will return to the relevance of this particular component of understanding in §3.

⁹ See Hills (forthcoming) for an argument that another type of understanding—understanding-why—can't just be "handed" to a hearer (unlike propositional knowledge).

¹⁰ See Kelp (forthcoming) for an overview of how grasping-related conditions on understanding should be explicated.

¹¹ Naturally, there is also logical space for interactions between speaker and hearer to lead to the hearer's rejecting what they previously *thought* were correct connections between beliefs (just as the hearer might reject previously held beliefs).

¹² As the quote suggests, I am not suggesting that positive change through counseling owes entirely to the acquisition of understanding—there are of course many things about counseling that might facilitate such positive change, e.g. the freedom to speak in a confidential space and feeling valued by the counselor.

¹³ See Watson (forthcoming) for related discussion on inquisitiveness as a virtue associated with questioning.

¹⁴ See Lackey's work on group epistemology, e.g. 2014.

¹ Since the success of these claims do not hinge on one another, their plausibility should be assessed individually.

² TEP-N is endorsed and defended in subtly different forms—e.g. McDowell (1994), Burge (1993) and Williamson (2000). Note also that TEP-N holds that *every link* in the chain of testimonial transmission must know that p (regardless of whether that knowledge is testimonial). Dummett's weaker view (1994) is that for a hearer to gain testimonial knowledge, *at least the first* link in the testimonial chain must acquire her knowledge non-testimonially.