

Response to Elqayam, Nottelmann, Peels and Vahid on my Paper “Epistemic Poverty, Internalism, and Justified Belief”¹
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Abstract

I here respond to four SERRC commentators on my paper ‘Perspectivism, Deontologism and Epistemic Poverty’: Shira Elqayam, Nikolaj Nottelmann, Rik Peels and Hamid Vahid. I maintain that all accounts of epistemic justification must be constrained by two limit positions which have to be avoided. One is *Conceptual Limit Panglossianism* (an excessively subjective, ‘emic’, ‘bounded’ and ‘grounded’, relativistic perspectivism, whereby anything the epistemic agent takes to be justified, is). The other is *Conceptual Limit Meliorism* (an excessively objective, ‘etic’, ‘unbounded’, ‘ungrounded’, absolutism, whereby the fundamental normative-epistemic notion of justification is wholly divorced from regulative, human, capacities). Within these bounds one may offer an account of rationality or epistemic justification that is closer to Meliorism or Panglossianism. Remarkable upon are my respondents’ considerations on Alston, on suggestions for a separation between a more-subjective epistemic justification and a more-objective rationality, and objections to my position based on the assumption that we must embrace a very objective and truth-conducive concept of epistemic justification.

Heartfelt thanks are due, and here given, to all my commentators, Shira Elqayam, Nikolaj Nottelmann, Rik Peels and Hamid Vahid—I am flattered to have respondents of such quality. I face a quandary: to respond individually or collectively. I will try a little of each but more of the latter, with me sometimes going off on a meander of my own. Unavoidably, if I am to make even a halfway adequate response within a reasonable timescale I will miss many important and worthwhile points—I am sorry about this: please re-make these points in rejoinder and we can begin dialectic. Please bear in mind this is, as it were, a ‘workshop’ style of discussion. I am not able to be anything like as careful in getting positions right as I would be in a refereed journal exchange.

Collectively, there is an issue about how much (to what extent) those of my interlocutors who are coming from classic normative epistemology, appreciate the intellectual hardness, seriousness, difficulty, of reconnoitring this issue, involving as it does, an appreciation of issues arising from other disciplines.² Allow me to state some claims I believe to be true.

¹ Major thanks are due to Jim Collier for facilitating this discussion. My thanks to all my respondents for their responses to my paper.

² My respondents engaged slightly less than I might have wished with issues specific to the cultural-psychological, anthropological and cognitive-psychological literatures (matters relatively novel to the epistemic literature that are to be found in my paper)—as opposed, that is, to more classic and well-worn issues in normative epistemology; but these latter issues certainly interest me and certainly engage with the commitments of my paper.

☛ Culture penetrates deeply into our cognition. It does not simply stop at the surface. The Luria/Vygotsky example I employed (of culture-ladenness in capacity for reasoning employing *modus ponens*) is just one example—there are plenty of others, for which this one case may hold place. The reader may consult the cultural psychology/psychological anthropology literatures at his or her leisure. These literatures are not examples of jejune armchair relativism: they are the product of costly, painstaking empirical data collection and careful attempts at interpretation by sensitive researchers working within intellectually serious disciplines. Do not think you can dismiss this one example as some kind of artefact or curio and move on. Do not think that the cultural psychologists/anthropologists just need your quickness of thought and conceptual dexterity (and distaste for relativism) and they would have dealt with these issues from the armchair easily enough. They are plenty bright enough, they are reporting what they find, the problems are vexed.

☛ These cases generally permit of no easy dismissal and no simple interpretation. For instance, the Cohen-Chomsky competence-performance distinction, though suggestive, and though an approach that I am very tempted by myself (as far as it goes) is an approach that will not be sufficient (not nearly sufficient) to explain these data in their entirety. But it may go some distance. Working out what is more ‘surface’ (performance) and what is ‘deeper’ (competence) is difficult, trappy, the devil is in the detail.

☛ Empirically, there are of course cross-cultural universals in human cognition.³ And (nothing to do with empirical issues in cognition) there are transcendent absolute truths. No-one should be a relativist about truth. No-one either should fall foul of Theaetetan *peritrope* arguments (whether or not pertaining to truth). In this hugely important sense I am not a relativist. No-one should be a relativist in this, the most important sense of ‘relativism’.

☛ Rationality/justification (I will get to the putative distinction) isn’t like truth, it isn’t like lower-level cognition, it mostly isn’t like knowledge (though due to my great respect for the Bartlettian socio-cognitive tradition in knowledge research I hedge on that too, to a degree). Rationality/justification is far more perspectively *bounded*, and *grounded*, than these. *How* bounded (which bounds) then becomes the issue.

☛ For the deontological tradition, a moral realism about the ethics of belief (perhaps ‘normativism’? I have never been entirely clear on the precise meaning of the phrase) is assimilated to a specifically deontic

³ *Pace* Elqayam, I am *not* building any account of rationality upon such. I do *not* propose “a hard core of normative absolutes” (Elqayam 2015, 48). There may be some rationality/justificatory absolutes (‘fixed bridgeheads’—like *modus ponens*) or there may be just neo-Lucretian variable bridgeheads (the view that any putative rational absolutes may be absent, yet still the agent may be rational: *any*, but not *all*). I hedge on these issues: they will require the philosopher to work closely with the data.

form of normative appraisal. This, combined with ‘ought’ implies ‘can’ (OIC), leads to perspectival bounds for one kind of normative-epistemic appraisal—namely, (deontic) justification (to be more-or-less identified with rationality by one strand of epistemological tradition, but not by others).

• Even more ‘objectivist’ epistemic and psychological (‘Meliorist’) traditions investigating rationality/justification are not in any sense unbounded. They just have a more idealized, more ‘objective’ criterion for epistemic success.

We then face a range of possible positions regarding the acceptable bounds for what could count as constituting our epistemic success-state. We need to start by identifying limit positions, positions that are *so* bounded (subjective) that they are worthless, and positions that are *so* unbounded (idealized, objective) that they are worthless. Let us start with the former.

What is a ‘Get out of Jail Free Card’? Conceptual Limit-Panglossianism

Lockie talks of a “get out of jail free” card—Nottelmann’s *carte blanche*; Stich-Elqayam’s ‘anything goes’. Nottelmann, rather nicely, puts it that any such position entails no ‘appearance-reality distinction’: if it seems to you you’re justified, you are. This represents a level of anti-realism whereby the epistemology (n.b. of epistemology, of justification/rationality, the ‘appearance’ of justification) has become identified with the *reality* thereof: the metaphysics (n.b. of epistemology, of justification/rationality). Vahid identifies an equivalent position for one who embraces a very strong take on Alston’s ‘subjectively justified’ (Alston’s own take on ‘subjective justification’ equivocates between this and a more moderate conception, as we shall see in the next paragraphs).⁴ I take it, with my interlocutors, that there is, conceptually, such a ‘limit’ position. To effect connections with the psychological literature we might call this *Conceptual Limit-Panglossianism*. I take it that this is indeed a limit position no-one should want to occupy.

Notice however, how close we can sail to this limit yet still remain in an intellectually substantive position (whether one you wish to occupy or not, still, not a vapid non-position). My own formative influence, my former teacher Richard Foley, comes to mind here, with what has come to be called ‘Foley Rationality’. Foley devoted two book-length treatments to what would be involved in being ‘egocentrically rational’ (being justified by one’s own deepest intellectual standards—e.g. Foley 1993). This is a strong (subjectivist) perspectivism, a species of relativism if you like.⁵ But Foley by no means articulates a series of facile pseudo-constraints whereby ‘anything goes’. His is a highly rigorous neo-Cartesian species of deep inner intellectual auditing—Descartes without his circle, admittedly, Descartes without a benevolent God to

⁴ Some of Alston’s arguments are couched in terms of *evidence* and some of my respondents touch upon issues of evidentialism. I did not couch my arguments in terms of evidence and (separately) have no commitments one way or the other regarding the debates about ‘evidentialism’.

⁵ Burnyeat (1976a, 1976b) identified two targets of the Platonic (and later Greek) *peritrope* arguments against relativism: subjectivism and cultural relativism. These are the well-springs of those forms of relativism that persist into our own times. Epistemic perspectivism is a species of relativism, but this may be a subjectivist (individualist, bounded) position or a cultural (collectivist, grounded) position. Foley exemplifies the former. *Peritrope* arguments apply to incautiously totalising versions of either.

guarantee a connection to the objective truth; but then (as we surely know by now) no-one gets that for free in epistemology.⁶

Consider Alston (especially his 1985) under whom several notions of subjective justification are entertained. Vahid goes into textual detail to correct and analytically sharpen my simplified Alston. (A point: I was using a simplified Alston for my own philosophical purposes, not doing precise textual exegesis on his work⁷). Note: Alston's 'Subjective Justification' is at the hard end of subjectivity; but it is not, in and of itself, at the conceptual limit thereof—to the point where it becomes vacuous pseudo-justification. Alston introduces the concept after the notion of 'objective justification', drawing the contrast [initially, as applied to behaviour] thus:

['Subjective Justification']

But suppose I did what I *sincerely believed* would bring about A? In that case surely no one could blame me for dereliction of duty. That suggests a more subjective conception of my obligation as doing what I believed was likely to bring about A. But perhaps I should not be let off as easily as that ... (Alston 1985 in Alston 1989, 86-7, emphasis added).

Perhaps I should not; but doing what I *sincerely believe* to be right is not to be let off as easily as *all that*, is it? It is very far from a 'get out of jail free card'; it is very far from an 'anything goes' or *carte blanche* attitude. It is very far from an empty abandonment of any strictures on justification at all, is it not? It is a very subjective notion of justification, granted; and without Alston's (and my own) qualifications—leading (for Alston) in a direction towards his other ("still a subjective conception") concept, namely of *cognitive justification*—perhaps it may not go far enough (at least in many epistemic contexts) but it is an important notion of justification for all that; and it sets a normative epistemic standard of which many people, in many contexts of inquiry, indeed fall short.

⁶ I endorse, very radically, the 'Foley divorce' between the theory of knowledge and the theory of justified belief (Foley 2004, Lockie 2014a)—my distaste for a reified, hypostatized account of the latter is of a piece with this. Separately, and as a quite distinct issue: Foley does not to my eyes mark Elqayam's distinction between pragmatic and normative rationality, whereby "Pragmatic or instrumental rationality is about achieving one's goals; normative rationality is about conforming to a normative standard" (Elqayam 2015, 48). I myself do not make a lot of sense of this distinction. Instrumental rationality may be normative (it is for Foley); and deontology, though it may sometimes be defined in terms of rules-following, should not be (it should rather be seen in terms of an adherence to a *sui generis* axiology of obligation, with cognate notions of OIC, culpability, responsibility, blame, etc.).

⁷ Vahid makes a point, as regards the dialectic of Alston's argument, that is well taken as far as it goes: Alston indeed identifies his various subjective-objective distinctions *prior* to making the epistemic poverty argument against deontologism. Were I concerned with Alstonian exegesis, that would be an important point (as it is, it is a worthwhile reminder). In terms of the (temporal, not logical) structure of the dialectic, Vahid's point is sound, and defends Alston's registration of the subjective-objective distinction prior to the emergence in the same work of the epistemic poverty objection. For more on the history of this dialectic (in ethics as well as epistemology) see my 2014a. Although I introduce my arguments with Alston's 'tribesman' example, Alston was *most certainly not* the first to consider the role of an objective-subjective distinction in addressing epistemic (or ethical) poverty problems for deontology, and in the context of these other figures (see my 2014a) this distinction is certainly put forward to defend the latter position.

In a nice analogy, Elqayam (2015, 48) compares the commitments of a strong Panglossianism about rationality (the preconditions of such) to having a functioning working memory, or pair of eyes—something most of us have. On an Alston/Foley conception of (even very strong) Panglossianism this should be changed to something like the ability and preparedness to *use* your working memory (however ‘working’ it is) carefully, with effortful attention and conscientiousness⁸ in a fairly draining task. Or it would be like *using* your eyesight with vigilance and concentration throughout a long watch. The great majority of the human race *can* do these things, not by any means *do they*.⁹

Alston discerns, and partly (gesturally) analyses many possible notions of justification on a continuum between the most subjective through to the most objective. For example, he notes one could make his ‘subjective justification’ *even more subjective* (only *believing* oneself to have discharged what one only *believed* to be one’s obligation); noting, however, of these possible distinctions “but sufficient unto the day is the distinction thereof” (Alston 1985 in Alston 1989, 86 F.N. 10). Agreed (and, re: ‘sufficient unto the day’ see my remarks below, of Peel’s distinction between ‘justification’ and ‘rationality’).

Alston outlines a *very important* subjective notion of justification, baptising this as ‘subjective justification’ per se; but notes the possibility of *more subjective* notions of justification (only *believing oneself* to have discharged obligations, or even—additionally—obligations one *only believes* oneself to possess). Provided his

⁸ Actually (importantly) this approaches something rather closer to an exemplar of e.g. Foley Rationality (or some other species of subjectivist deontically internalist justification) than does it an analogy thereto.

⁹ Note Elqayam’s important point: “If an agent has, e.g., low working memory capacity, or lacks the necessary cognitive tools, satisficing is not just a sensible option: it might optimise epistemic value for a given cognitive cost” (Elqayam 2015, 49). But (as I’m sure Elqayam realises) this is not just true of low functioning agents but of *all* fully-functioning agents (we are all epistemically impoverished). Rather than high-functioning agents being an exception to the need for heuristic, resource-attenuated compromise, it is *low functioning agents* (mind: *very* low functioning—e.g. mentally handicapped—agents) who may be exceptions to this. As people ascend in individual difference abilities (IQ, executive functioning) they increase their *meta-cognitive* capabilities: their capacities for planning how to ‘satisfice’, how to allocate scarce cognitive resources (how to schedule, task share, task switch, allocate attention, gate off working memory, select appropriate mental sets, consider future consequences etc. etc.). In the other direction though, as these abilities get poorer and poorer, a threshold may be approached. When damaged individuals get below a certain threshold they may indeed be outside of what in my paper I called “the community of rational agents”—or they may be only fragmentarily and episodically inside that community. It’s not that high (enough) functioning agents (epistemically non-impoverished agents) run optimising algorithms, whereas low-functioning agents (epistemically impoverished agents) run e.g. ‘satisficing’ heuristics. It’s that the highest functioning agents have *really good* metapsychological resources, giving them the capacity needed to run *really sophisticated* (really elegant, perhaps—as for Peels—really ‘rational’) metapsychological e.g. ‘satisficing’ heuristics. Below a certain threshold (a very low threshold—e.g. mental handicap) agents may have exceptionally damaged executive functioning (say: working memory, or attention, or capacity for ‘prospection’) whereby clever, metapsychological resource allocation *even ‘bounded’ relative to their limits* is not possible. This is what I meant in my paper when I stated “There will be limits to how objectively irrational a subject can be before he or she is too damaged to be considered a part of the community of rational agents at all; but these limits can’t, surely, be so restrictive as to require the community of rational agents to include all and only those with a modern university education, or written language, or grasp of statistics, or basic arithmetic, or any level of formal, abstract, education at all. *Most* humans who have ever lived have been rational animals” (Lockie 2015, 9).

‘sincerely’ proviso remains in force, even the two-fold combination of these latter subjective restrictions to his already subjective conception of justification does not seem vapid to me (nor, I conjecture, to Alston) though it is somewhat closer to what I have called Conceptual Limit Panglossianism—closer to vapidly, closer to a Get out of Jail Free card.

He later retrenches from this talk of ‘subjective justification’ as involving *sincerely believing* when he considers the equivalent of ‘subjective justification’ as applied to the *grounds* for a belief, thus: “If I believe them [my grounds for belief] to be adequate just because I have an egotistical penchant to overestimate my powers that would hardly make it rational for me to believe that *p*” (Alston 1985 in Alston 1989: 102). This surely is beyond our conceptual limit. *Sincerely believing* is a substantial justificatory constraint precisely because “an egotistical penchant to overestimate my powers” can so patently be seen as violating it. Conceptual Limit Panglossianism is precisely an example of a *Carte Blanche* / Get Out of Jail Free card because it would endorse *any* belief, however formed, as rational; whereas Foley Rationality / *sincerely believing*, although very perspectively limited, still excludes much.

Alston also considers a variety of (descriptively) subjective justification which he contrasts with his ‘Subjective Justification’ where this latter is employed as a proper name (as term of art). He notes very explicitly of his ‘Cognitive Justification’ that it too, is still a subjective notion of justification, albeit a *less subjective* notion of justification than his term-of-art ‘subjective justification’ per se, amounting to the following.

[‘Cognitive Justification’]

I can’t fulfill my obligation by doing just anything I happen to believe will bring about A. I am not off the hook unless *I did what the facts available to me indicate will have a good chance of leading to A*. This is still a subjective conception in that what it takes to fulfill my obligation is specified from my point of view; but it takes my point of view to range over not all my beliefs, but only my justified beliefs. This we might call a *cognitive* conception of my obligation (Alston 1985 in Alston 1989, 87).

Alston’s italicised clause suggests two things at least *prima facie* at odds with each other: *the facts* (objective, potentially entirely inaccessible) and *available to me* (subjective, necessarily accessible). This ambiguity / equivocation resurfaces in the clause “*indicate will have a good chance of leading to A*”. Does this mean *indicate to me?* (A natural, subjective, reading) or *indicate* in some *objective, informational*, sense: *indicate* inasmuch as the information contained within these facts is, objectively, an indicator (like, say, a chemical indicator)—that these facts have a good chance of leading to A? (An objective reading). Must the ‘justified beliefs’ which my point of view ranges over be *subjectively* or *objectively* justified in turn?

In, I’d suggest, rather dubiously motivated material, Alston (1985, in Alston 1989, 89) indicates that he rejects even a moderate ‘subjective justification’ conception of *subjective justification* in favour of a ‘cognitive justification’ conception of *subjective justification* (‘scare quotes’ indicating Alston’s term of art, *italics* indicating the thing

in nature—*justification* that is in some sense *subjective*). That is, he rejects the idea of someone being epistemically justified merely in virtue of them believing they have, e.g. evidence for their belief, and that this evidence is good. This rules out a strong, OIC-perspectively-constrained deontologism (a neo-Cartesian, Clifford, Foley-Rational approach) by fiat. Alston then, offers us as good an example as any, of how *very subjective* positions (and for ‘subjective’ read ‘perspectival’ most generally—to include culturally perspectival limits) may be at the conceptual limit of Panglossianism, or fall short of this. Here is a rough linear ordering of Alstonian positions (but a reminder: I am using a simplified Alston for my own philosophical purposes, not doing precise textual exegesis on his work).

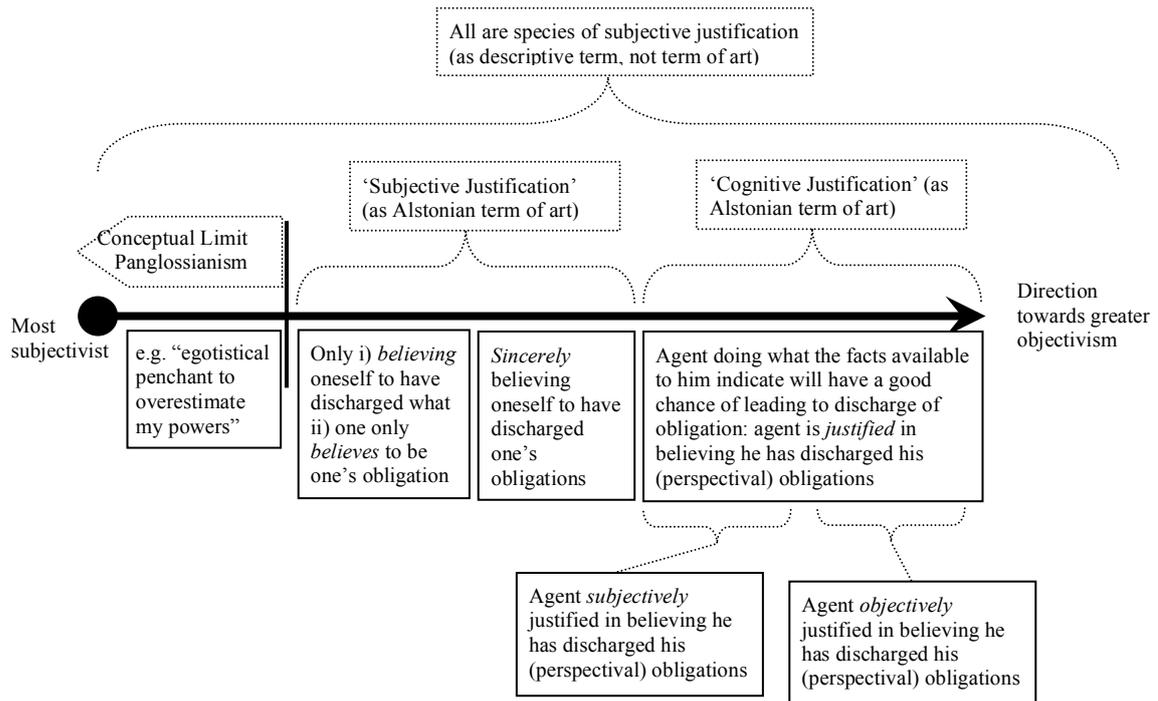


Figure 1. A rough linear ordering of some (not all) Alstonian positions (not for the purposes of Alstonian exegesis, but for my own further purposes, and not very carefully checked against Alston’s text).

Conceptual Limit Panglossianism amounts to Lockie’s “get out of jail free” card, Nottelmann’s *carte blanche*; Stich-Elqayam’s ‘anything goes’. Here there is no ‘appearance-reality distinction’: if it seems to you that you’re justified (however little this “seems to you” amounts to) then you are. If I have Alston’s “egotistical penchant to overestimate my powers” I may be here. *No one is defending a species of epistemic justification like this.* And hence, no-one should be saddled with this as a (straw) commitment of their position. This is a conceptual limit to perspectivism, whether subjectivist or cultural. Intellectually serious projects in subjectivist, perspectival, epistemology begin further to the right than this.

Typically there may be, for instance, some kind of a Chisholmian or Foley-like ascent, or reflective-equilibration around, or dialectic-between, or bootstrapping-towards, non-limit positions to the right of this. In the cultural-psychological literature, a Vygotskian Zone of Proximal Development (ZPD) will precisely be what is *beyond* our present limits, but not so far beyond these that in seeking after an *aim* of idealized, objective success (truth, e.g., of our beliefs) we may not travel into this

ZPD over time. An ‘objective’ (my term) take on Alstonian ‘Cognitive Justification’ may be within my ZPD—or it may not. A 1930’s Uzbek may be able, with effort and time and enough Vygotskian scaffolding, to achieve an understanding of very *concrete*, ‘culture-fair’ versions of *modus ponens*, or he may not (from the cultural psychological literature more generally: either he will not, or his responses will be chronically ambiguous and open to interpretation, and anyway, *pace* Peels, there are real conceptual problems with the notion of legitimate restrictions of *formal*—decontextualized, decoupled, true-in-virtue-of-form-alone—species of logical reasoning to very *concrete*, ‘culture-fair’ versions of problems being set: *cf.* remarks in my paper about rational norms concerning the appropriate heuristics and algorithms employed by participants for task construal (e.g. Stanovich, West, and Toplak 2011) and with the fact that *decontextualizing task construal* is a big, constitutive, part of what such ‘rational abilities’ are all about).

If, with effort and time, an understanding of *modus ponens* is securely enough within our Uzbek’s ZPD we may say his problems are mere performance, rather than competence errors; but mostly, the extensive cultural psychology/anthropology literatures indicate nothing so irenic. Decontextualized cognition is a *rather radical* cultural-cognitive boundary,¹⁰ not by any means one located merely on the cognitive periphery; though interpretations of what is ‘front end’ and what is deeper are chronically vague, ambiguous, and difficult to be sure about. [Semi-]intractable problems with achieving correct *task construal* may themselves constitute quite a lot of what the problem of achieving ‘decoupled’, counterfactual, abstract, decontextualized, thought amounts to in itself: what appears to be a ‘surface’ issue may in fact be rather substantially (to some extent *constitutively*) intertwined with what it is that the deeper problem actually amounts to.

There may be a more emic, perspectivist, approach to rationality or a more etic approach. Both have their place, and (especially) a dialectic between these has its place—very much so (I wish to emphasise this point). But there will not only be conceptual (e.g. Theaetetan) limits on how *emic* one can get. There are also limits on how etic. There are ‘moral’ (OIC) limits to how far one may push an ‘imposed etic’ account of rationality/justification; but also more general limits on this latter, limits deriving from what one might call the ‘absurdity’ of such a project—limits I indicated in my paper, limits I shall indicate again; limits Elqayam (notably, out of my respondents) needed no reminding of.

Conceptual Limit Absolutism

There are serious problems with a notion of ‘objective rationality’. *How* objective? Push things too far and we get simply *true*. An ‘objectively rational’ belief is just a true belief. No-one wants to go that far—but how far do we go?

¹⁰ One might analogise it (only as analogy) to the mooted transition in Kuhnian philosophy of science between pre-paradigmatic and paradigmatic science. *After* one is post-paradigmatic and within the Kuhnian cycle, an issue emerges as to whether one embraces Meliorism (a Whig history, verisimilitude)—a question Kuhn, I take it, equivocated on (though I should not: clearly science, across both its ‘normal science’ and revolutionary shifts makes progress towards the truth). However, *prior* to the emergence of paradigmatic science, we are not even at the races. The transition from pre- to post-paradigmatic science represents a revolution in human thought that is more fundamental (incomparably more fundamental) than any that comes after.

All parties to these debates will be arguing either forwards from the capabilities/freedoms/limits cognitive agents are acknowledged to possess—to see whether said agent had reasoned *as well as he is able* within those limits (say, within his ZPD). Or, parties to these debates will be arguing backwards from a prior, idealized and supposedly independent conception of ‘good reasoning’ conceived in the abstract (an objective, Meliorist, rationality, formulated supposedly independently of *that agent’s* cognitive limits)—then to see if said agent *reasons as he [objectively] ought* (as would be ‘right’, notwithstanding he may be unable to achieve this standard).

Note that this latter ‘ought’ now threatens to have no motivation to stop itself short of an *unbounded ought*: a ‘superlative’ ought, an ‘ought’ which does not imply ‘can’ (cf. Owens 2000, for one of several who knowingly, but to my mind recklessly, heedlessly, flouts this constraint). It has no reason to stop itself even at, say, a strong Meliorism (perhaps, a very strong Wide Reflective Equilibrium position—whereby only a few thousand persons in the history of the human race have ever been, in this proprietary sense, ‘rational’; with perhaps all of these born within the last few hundred years). Worryingly, it has no obvious reason to stop itself within human biological, or even extended, socioculturally augmented, bounds.

If this blue-collar worker, or (worse) tribesman, or caveman, may be held to be irrational for failing to reason (however diligently) to a statistical error-estimate quite beyond his bounds (or grounds), why then insist that John von Neumann *was* rational because he reasoned heuristically with the greatest diligence, to a statistical error-estimate heuristic inference that no other human who ever lived could have computed? Why not demur that rather he was *irrational* for failing to compute the determinate (non-estimated, non-statistical) algorithm itself, even though it would require computations at a rate of a trillion petaflops in a humanly unattainable working memory (not the magic number 7, plus or minus 2, but the magic number gazillion), using a set of theorems yet to be discovered, which latter would require the human species a billion years to derive? ¹¹

The limit positions here are just completely uninteresting. *All* (informed) participants in these debates embrace a bounded rationality. As I stated in my paper (following the very apposite quotation from Oaksford and Chater 1992):

The issue is not then, one of bounded versus unbounded rationality, but of how bounded, and which bounds. I believe there can be no principled grounds for including species-wide biological constraints (working memory, processing speed, etc.) yet not cultural constraints (which will also be mediated and expressed biologically) (Lockie 2015, 8).

Absent an argument for either a general hard determinism/incompatibilism or a specifically ‘cognitive’ version thereof, the severely perspectively limited agent nevertheless has freedom to reason well or ill—and thus does *not* have a get out of jail

¹¹ The rhetorical question makes perhaps a slightly implausible assumption: von Neumann would probably have computed the determinate function—cf. the hoary von Neumann ‘train-fly’ (sometimes: ‘bicycle-swallow’) heuristic/algorithm anecdote: <http://www.math.utah.edu/~cherk/mathjokes.html>

free card—merely a card stating “get out of being castigated for not reasoning in a way that lies clearly beyond your zone of proximal development: get out of being castigated for being irresponsible when avowedly you reasoned to a position of being Foley Rational”. I *want* my cogniser to get out of Jail on that appeal. I’d want a pass on that myself—and so would you.

Note, moreover, that even a very idealised Meliorism (one which opposed ZPD limits on rationality) is still (to some extent) a ‘bounded’ position (one which dismisses a normative standard involving the gazillion petaflops/WM issue canvassed above). The interesting limits (the limits within which interesting and informed debate can take place) are between a position just, fractionally, shy of Conceptual Limit-Panglossianism at the one extreme, and a position just shy of a Humanly Unbounded ‘Rationality’ at the other extreme: between these limits, debate can occur. We can see then, the strengths and weaknesses of different stances on rationality/justification we can take—and we can situate them on the illustration I shall offer below.

A Foley Rationality or Vygotskian/anthropological/emic ZPD is one (family of) position(s) just short of the conceptual limit that we can take, and *very interesting these positions are too* in my judgement (and I speak as a *metaphysical* absolutist and a ‘normativist’—a *moral* realist). And a very harsh, irrationalist, idealized, objectivist, Wide Reflective Equilibrium stance might be an example of the other. We could situate a Cohen-style narrow reflective equilibrium (that of an arch, educated, headmasterly ‘Man on the Clapham Omnibus’) closer to ZPD Panglossianism, but with its ungrounded, highly decontextualized and WEIRD¹² aspects still (in my conception of things) making it a somewhat Meliorist stance. We can place the earlier, more gleefully irrationalist heuristics-and-biases literature nearer to conceptual limit Meliorism (points Cohen’s 1981 and Dennett’s 1981 transcendental arguments sought to exploit); and we can place the later, less gleeful, less irrationalist literature somewhat (a little) closer to the ZPD than this.

With the idea of a *zone* of proximal development in mind (and the very important point that we are *active cognisers*, that we can, within limits, sometimes with cultural scaffolding, sometimes through our own exploratory cognitive virtues, travel into and around that zone) here is a sketch of a range of possible options for the limits on accessibility available to a theorist of rationality; with these arranged not on a line but as concentric circles—zones—from Conceptual Limit Panglossianism to Conceptual Limit Absolutism. Note that despite the labels and the perimeters being marked out by concentric rings, these positions are on a continuum. The limit positions here (at least: the limits of the limit positions) are, I take it, simply to be avoided. And ‘travel’ into a ZPD that involves a transition to decontextualized thought may be (for contextualized cognisers) something empirically impossible except, as Luria/Vygotsky indicated, across generations.

¹² Western Educated Industrialised Rich Democratic: Henrich, Heine and Norenzayan (2010).

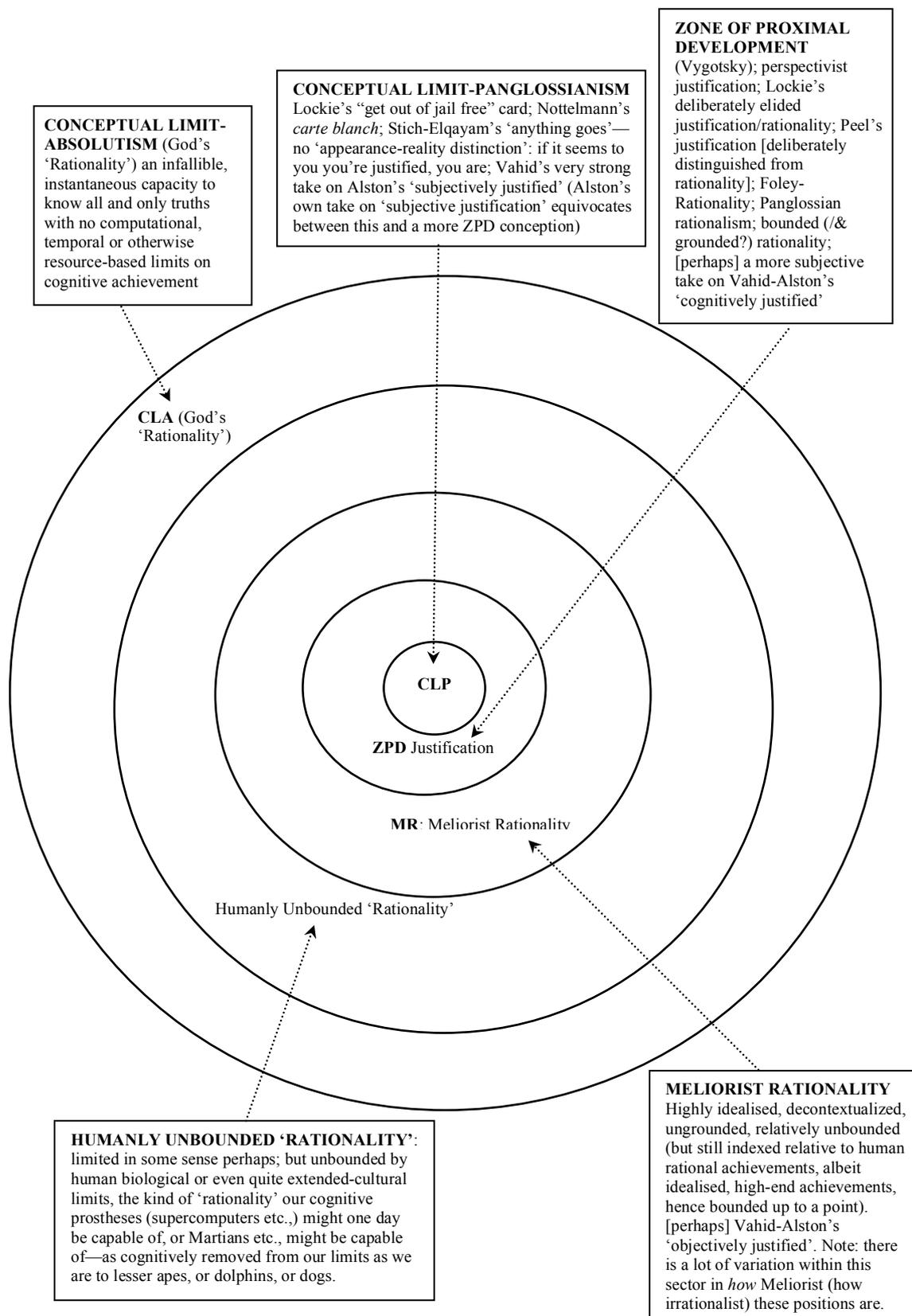


Figure 2. Positions on restrictions regarding the attainability of justification/rationality. (Despite the concentric rings, these positions are on a continuum).

Distinction Between Justification and Rationality

As Peels notes, I do indeed, repeatedly run together ‘justified’ with ‘rational’. Some of the time I feel a little ashamed of this, mostly I do not—but I do and did so knowingly, and with malice aforethought. ‘Justification’ can be used as a placeholder for any axiological success state, any kind of normative epistemic achievement (so-considered, knowledge is a type of very objective epistemic justification; but I shall shelve this usage after mentioning it once, as being dangerously distracting—and, *pace* Peels (2015: 48) I *certainly do not believe* that justification is necessary for knowledge in any other sense: *cf.* my earlier, footnoted, endorsement of the Foley (2004) divorce, expanded upon in Lockie (2014a)). More commonly, as Peels advises, ‘justification’ can be used as a highly deontic term. As many have noted, in [allegedly] ‘ordinary’ language it has deontic connotations from the off.

My linguistic intuitions tell me that ‘justified’ and its cognates are properly used only in a deontological sense. To be justified in doing or believing . . . something just is to not have violated any relevant rules, norms, or principles in so doing, believing. . . . If, as I believe, most epistemologists use ‘justified’ for some quite different notion, they are speaking infelicitously. However, this way of talking is so firmly entrenched that I shall go along with it, albeit with an uneasy linguistic conscience (Alston 1988 in Alston 1989, 143).

I agree wholeheartedly with Alston here. In order to engage in debate and not to beg the question against opponents or representatives of whole epistemic traditions, I sometime use ‘justified’ as a neutral marker term for candidate approaches to epistemic normativity in the abstract, despite having a distaste for it used thus, and feeling, with Alston, that its *Ur* meaning is deontological. In this I am highly tempted to agree with Peels:

One could make the strong assertion that the deontological conception of epistemic justification is *the right* conception of epistemic justification (Peels 2015, 43).¹³

I do not want, however, to win any terminological victories. As Alston notes, there is more than one notion of epistemic normativity afoot in epistemology. I will die in a ditch to insist the deontological notion is a crucially important notion of epistemic

¹³ I am, however, bemused by what immediately follows this passage: “. . .because epistemic justification is a subjective notion” [*Loc. Cit.*]. Surely this is the wrong way round? The *sui generis* deontological character of epistemic justification (which I, after Alston, Clifford, Descartes etc. deeply endorse) would *entail* subjective restrictions; these subjective restrictions would be necessary not sufficient for the deontological character of justification—and derivative therefrom. Separately, note that I am not interested in the ‘real’ meaning of ‘epistemic internalism’, nor yet to distinguish and discuss the merits of other prevalent meanings of it (Nottelmann’s 2016, 22 “standard internalist positions”). Internalism is a term of art (and a Protean one at that): one which has been around for only about 35 years, though the philosophical positions which motivated its emergence date back centuries. *Of course* there are more purely accessibilist, and mentalist (and other) conceptions of this elastic term. I think I have made very clear in my paper the sole conception of this term that interests me: deontic internalism whereby the deontic normative core comes first and the accessibilist restrictions (which are in no sense definitive of the position) come a *long way* after. Other people don’t use the term ‘internalism’ like this; but since there is no danger of my usage being confused with theirs, that is their business and of no interest to me.

justification, and have made clear that with Alston (and Plantinga, and Clifford, and Peels) I would rather regard it as the *Echt* notion thereof. If readers (who may wish to employ their own preferred notion of ‘justification’) understand that I am employing it thus, that is enough.

Used in this deontic sense, and assuming ‘ought’ implies ‘can’, we have a direct entailment to a subjective, ‘access-restrictive’ constraint on what the agent may be held responsible for. Here, the sense of ‘access’ at issue is very important. *Pace* Nottelmann,

1. The access restrictions come *after* the deontic core—so it’s not (not in any useful, non-misleading sense) an ‘access internalism’¹⁴. At the conceptual heart of ‘justification’ conceived thus, is *sui generis* deontic force: pure normative obligation, an ‘ethics of belief’ [deontic ethics, that is]. (I will ignore issues of whether epistemic obligation is a sub-species of ethics more generally—such debates are familiar elsewhere). So this is *deontic* internalism notwithstanding that it will *entail*, as a consequence, *access restrictions*.

2. ‘Access’ here is itself a placeholder—it doesn’t (mostly) mean ‘access’ *simpliciter*. To give a glimpse of my larger epistemological project: the ‘can’ restrictions of the OIC entailment require both an *afferent* and an *efferent* component. That is, it requires an afferent, passive, access component (alone ‘access’ properly so-called—what McHugh (2013) calls *reasons responsiveness*). This may to some extent involve an introspective, phenomenal, conscious, etc., access, but even as access, it is probably not restricted to these things). And it requires an efferent, active, agential, actional, regulative, directive, component (what McHugh calls *reasons reactivity*): the ability to *direct* and *regulate one’s cognition*—say, to initiate and shape a process of reasoning leading to a solution to a given problem. ‘Access’ as umbrella term for the ‘can’ component of OIC requires *both* of these things, acting in concert; *but the latter is considerably more important than the former*.

There can be de facto (OIC ‘can’) psychological limits on either of these. Some of the problems of contextualized cognisers may be problems of understanding the nature of the problem set—e.g. ‘front end’ problems, of demand characteristics, [Chomskian] ‘performance’ characteristics, ‘alternative task construal’ etc. But even these (perhaps) more afferent things are not by any means merely and purely passive, being incipiently actional to some considerable extent. And many (among them the most important) limits on cognisers strongly pertain to their regulative abilities—to direct their thoughts. In any event there are what Fuster (2013) calls ‘perception-action

¹⁴ Vahid criticises me here on grounds that this view is “out of date”—citing the transition from early Bonjour (1985: 8, 41-45) who accepted this deontic view of internalism but by 2003 (e.g. pp. 175-7) had changed his mind. I demur. A good argument doesn’t go out of date, and Bonjour’s abandonment of his earlier perspectivalist defence against epistemic poverty was (in my judgement) entirely unwise and wholly regrettable. Anyone who embraces a deontic conception of justification and OIC *must* embrace access restrictions on their justificatory ground, and the latter are derivative from the former. See Lockie (2014a) for more here.

cycles’ (pervasively reapplied cycles) but *with the actional more important than the perceptual* (pace especially the early Kahneman-Tversky, for example, and their ‘neo-perceptual’ model of heuristics and biases—of errors of reasoning as akin to perceptual illusions—*cf.* late Kahneman (2012) for explication). Man is not a passive animal—not cognitively anyway. We are here precisely concerned with what Reid would have called the ‘active powers of man’.

Now the distinction between ‘justified’ and ‘rational’ that is offered me, is initially merely a terminological one (it may then become more than terminological, I concede; but I am not interested in any ordinary language connotations of these terms, having a severe aversion to that metaphilosophy). I am offered the chance to keep much of my reasoning as to there being quite serious perspectival restrictions on *justification*, provided I do not presume to assert these restrictions apply to *rationality*. Crudely: justification is subjective, rationality objective¹⁵ (one could qualify things here, and express nuances—I shall not). As indicated, I can see some point, in some contexts, to doing this—though I did not in my paper, and am somewhat ambivalent about doing so more generally.

There is some point to an ‘objective’ notion of rationality (perhaps more than one such notion). But Elqayam’s Bayesian point and its cognates is and are well-understood in the psychological (and economic) literature, and insufficiently appreciated by most epistemologists. Do we hold pre-Bayes thinkers were (in the respects at issue for us) *irrational*, or *less rational than us*? For a purpose we could say this, but in most contexts of concern to normative epistemologists (indeed of concern *per se*) it seems pretty silly to me.¹⁶ Who is the relativist here? Parochialism

¹⁵ I can’t tell from the text, but is Vahid offering me (terminologically) the opposite distinction to Peels here? “After all there seems to be something essentially right about the claim that our concept of justification is sensitive to the truth conductivity of the grounds of beliefs. But Lockie makes no efforts in that direction. He does consult certain empirical investigations (such as Luria’s “white bear” case), but one can always argue that such cases pertain to rationality rather than justification” (Vahid 2016: 16)

¹⁶ Where we have similar, equally decontextualized subjects, each tackling similar tasks within similar environments (say: academic environments) and one has worked harder, and is better at the tasks in question, perhaps we might want to say this (actually, we might want to say the superior subject had higher intelligence or expertise or knowledge—even as regards the narrow range of tasks that tend to be used in the psychological literature: Bayesian tasks, Wason tasks, etc. etc.). But when we go to a comparison of decontextualized versus contextualized agents, or consider performance on more ecologically valid tasks, or different eras of intellectual history, or types of task found across very different disciplines or trades or activities or intellectual milieus, methinks not. We *might* note of agents that so-and-so is more or less rational than some comparison person or tacit population (especially when other things are held constant) but even within a decontextualized population I think the prospect entertained by Stanovich, West and Toplak (2011) of a standardised ‘rationality test’ (to be constructed on the model of an IQ test and involving a suite of standardised performative or pencil and paper tasks derived and normed up from what are currently experimental paradigms) will be forever out of reach—and this for deep reasons. Rationality is coextensive with the greatest and smallest cognitive-cultural achievements of mankind. It is greatly implausible to suppose rationality can be reduced to a procedure, or even a complex (but specifiable) logical sum out of a disjunctive set of procedures. Rationality is a matter of using all we have got (our cultural as well as our individual cognitive resources), using these resources as well as we are able, across all the epistemic contexts and challenges we encounter, over whatever the relevant timescale may be. There is no algorithm for rationality: it is too large and too open-ended a concept. As to the prospect of defending *objectivity* whilst discounting the possibility of ever achieving psychometric *reliability* or *validity*; well, it depends on your concept of ‘objectivity’ but a searching appraisal of problems with the latter would seem to me to point up problems with the former.

is a kind of relativism too, is it not? And a kind lacking the humility of more standard relativisms moreover. When we apply these issues to the difference, not between the members of a pre- and post-Bayes decontextualized educated elite, but instead to the gulf between a contextualized and decontextualized thinker, I can't see it becomes any easier to motivate the distinction between *objectively* rational/irrational and *subjectively* justified/unjustified.

Presumably, we are to believe a pre-Bayes thinker is *eo ipso* less rational (but not less justified) than a post Bayes thinker; and that a contextualized thinker is less rational (but not less justified) than a decontextualized thinker. Well, we can employ these terms thus, as terms of art if we want to, but mostly (not entirely) I wonder why we would want to. Without a dialectical purpose to drawing this distinction it is a mere terminological distinction—a bit of analytic casuistry. I don't care what the 'real' meaning of technical philosophical terms like *epistemic justification* or *rationality* are (e.g. their connotations and nuances for e.g. Cohen's omnibus passenger). What do I gain, philosophically, from such a distinction? A device to use in the context of other arguments, should these emerge, perhaps—but I could wait for any such arguments to emerge before drawing this or some other distinction. In regard to the Figure 2 above, where is this objectivist rationality?

Presumably, one supposes, still just inside the humanly bounded limit, but closer to the hard edge of Meliorist Rationality—certainly not grounded, and not very bounded in a traditional sense. How categorical a position is this objectivist rationality? (Categorical as opposed to an ordinal tendency that is). Presumably not very categorical: a tendency towards the most objective (but still humanly bounded) end of this limit, with an arbitrary, say, analytic cut-off available to be drawn, but with any such distinction rather pointless until in the service of some other argument, one supposes. Will this conception of rationality have it that there was rationality (any epistemic rationality at all in the world) prior to, say, the invention of writing five thousand years ago? Prior to the agricultural revolution ten thousand years ago?

If yes, what percentage of, say, a typical illiterate contextualized pre-industrialised (but agrarian) population will be rational [to our intended, ahistorical, culturally unsituated, objective, 'cut off' operationalisation thereof]? 1%? 0.001%? None? What percentage of a typical hunter-gatherer population? Which 'culture fair' versions of Linda the Feminist Bank Teller or Green Bayesian Cab/Blue Bayesian Cab shall we use as stick with which to beat them? And when we're done, ask yourself: how long would you survive¹⁷ in their environment, solving their problems? Half a day?

¹⁷ This point ('survive') made already in my paper, has *nothing, nothing at all* to do with evolutionary considerations. I have no interest in exploring the various notions of evolutionary rationality and am absolutely not appealing to such. It has to do with this far more quotidian point: we are all of us motivated by what the 17th and 18th century philosophers would have called 'self-love' are we not? We all (as individuals, not genes or species) want to survive and even to flourish if possible. Consider a highly contextualized agent (illiterate, pre-industrial, agrarian or even hunter-gatherer). He is no 'noble savage'—his cognition is enormously sophisticated, and culturally embedded, as is the case for us all. You and he both want to survive (or even flourish) don't you? You have that in common whatever else is different. You see his performance on a series of (probably) culture-unfair, (probably) ecologically invalid decontextualized laboratory tasks putatively translated [/transliterated] over to him from your culture, and worry that his problems are almost certainly not merely 'front end' performance errors, though surely they are that as well. But now place yourself in his problem space. See the complexity of his environment and the ingenuity he needs to survive, or even flourish. See how far short of his

If we, through *simpatico*, careful, anthropological, participant-observation have a deep appreciation of, and engagement with, the problems which the contextualized thinker addresses, his ‘cultural construction of the world’, we may come to the view that he is *very rational indeed*. And if we have a deep appreciation of the problems which a particular decontextualized thinker addresses, we may come to the view that he is *really quite irrational*—with little in the way of matched-group controls being even conceptually possible between these two thinkers. Look into the triviality and sterility of many (not all) of the laboratory experiments these literatures trade in, even where the population they are generalised to is strongly decontextualized. Look at the difficulties of finding an acceptable (agreed-as-correct) normative solution *even for our own community of avowedly decontextualized thinkers* (remarked upon by Elqayam). Look at the wholesale (deep, conceptual and empirical) impossibility of finding ‘culture fair’ equivalences between WEIRD and non-WEIRD thinkers (western, educated, industrialised, rich, democratic)—cf. the white bear case among many, many others.

I would remind the reader: I am in *no sense* a metaphysical relativist—I have argued *strongly and at length* against relativism as applied to truth, and as applied to other things besides; but there are limits to absolutism as applied to certain very core normative epistemological concepts, and I rather doubt if the line can usefully be held at ‘objective’ rationality but surrendered for a subjective notion of justification—at least generally, that is, as opposed to some particular, specific, future, dialectical purpose. Still, I register the drawing of this distinction as a possibility, and keep my options open in regard to future possible debates.

God, Light Doves, and Language-Holidays

Granted then to Peels and others is that one could distinguish a perspectivist ‘justification’ from an idealized, ‘objective’ rationality. We need an awareness of the fact that we can move our success terms in this fashion; but even were we to do so, rationality would *not* (for the reasons given) be a genuinely hypostatized, *really objective*, humanly unbounded ‘God’s Eye View’. It can’t be. It is epistemology we

competences in his problem-space you fall—when your *survival* as a test, is arguably quite ‘ecologically valid’. I mean nothing more by these remarks than this—that seems enough to me, however. Should you be minded to dismiss such considerations, ask yourself specific questions about, say the rationality equivalent of what (in the IQ literature) notoriously has involved such issues as the application of allegedly ‘culture fair’ measures of intelligence to say the San people (Kalahari Bushmen)—as here reported by the strongly and unapologetically hereditarian g theorist of group [racial] differences, Richard Lynn (2006: 51): “The three studies of Bushmen by Porteus and Reuning give IQs of 48, 62, and 52 and can be averaged to give an IQ of 54. It may be questioned whether a people with an average IQ of 54 could survive as hunter-gatherers in the Kalahari desert, and therefore whether this can be a valid estimate of their intelligence. An IQ of 54 is at the low end of the range of mild mental retardation in economically developed nations [about 0.13% of people score this low in the western, decontextualized nations on which IQ tests are typically normed]. This is less of a problem than might be thought....”—I think it is quite as much of a problem as might be thought. The San people survive as hunter-gatherers in one of the harshest environments on earth, yet we are to believe their population *average* intelligence is equal to what in our societies would be the 13th lowest IQ person out of ten thousand. Ask yourself what your feelings are towards the arguments which beckon (*mutatis mutandis*) for the San and other such people’s *rationality*. The San people are genetically the oldest and most diverse people on earth. They are also among the most persecuted. The stakes are higher than you might think in these debates.

are doing here after all. Even an idealised epistemic success term is still an *epistemic* success term. God's reasons are not reasons for us—if indeed He has reasons in the sense used herein (which I doubt). An unbounded agent may be envisaged as being omniscient, but it is not easy for me to see how a being unlimited in epistemic power could be omnirational, rather than being a putative agent who knows everything instantly with no effort and therefore is one to whom the concept 'rational' no less than the concept 'irrational' simply did not apply. Rationality applies to our executive functioning—and presumably, that of beings somewhat like us, to whom we may attribute executive functioning. It applies to the wise allocation of our limited cognitive resources—and the good versus rather than less good operation of said resources. One *works* in working memory (a strictly finite resource), one *pays* attention (attention can only apply to a limited being, and involves great cognitive *costs*), one exhibits 'mental agility' involving *flexibility of thought* and this involves specific (considerable) *switching costs*.¹⁸

One uses these (these three families of executive function) to govern their operations at the same time as one uses them to think (all executive functioning is incipiently metaphilosophical, but some is more metaphilosophical than others, some actually governs executive functioning itself at the same time as said executive functioning is used to govern first order cognition). These notions only apply to finite beings. There is no such thing as attention in a being with infinite cognitive resources, infinitely distributed. God does not foveate. There is no such thing as the magic number 7 +/-2 in a being that has a working memory that is numberless, indeed, a completed infinity, of the highest order of cardinality. There is no such thing as a working memory *simpliciter* in such a being.

I don't think I have more than the surface, chimerical, appearance of a concept of rationality that applies to an unlimited being; I fear language may be 'on holiday' in any such an extension of the concept; but perhaps I am unwise here—I don't work in philosophy of religion, and armed with little more than a knowledge of frontal lobe function and a Wittgensteinian catchphrase I do not wish to trespass in an area about which I know little. I *do* think, regarding a neighbouring issue, that deontic normative terms make sense only in the context of deontic normative leeway entailments (say OIC, or one of its cognates) and in the context of agents who are limited in their powers—for them then to be assessed in light of these leeway entailments. If we push normative deontic predicates beyond certain conceptual limits then 'language is on holiday'. This is of relevance e.g. to (non-theological) classic ethical and epistemic debates about the notion of 'objective duty' (whether epistemic or ethical).

The deontic notion of 'ought' that applies in epistemology is an essentially *agent-relative* notion. If it is made absolute and truly objective, the inaccessibility of such a hypostatized notion of epistemic value necessarily separates it from something for which the agent may be held responsible, to the point where calling this notion a notion of objective 'obligation' ('ought', 'duty') would be irretrievably misleading. One's *duty*, what one *ought to do*, is something one is *responsible* for. To place a 'duty' upon one that one is yet not responsible for fulfilling, or perhaps is 'responsible' for 'fulfilling' but blamelessly unable to fulfil, is to place no duty upon

¹⁸ Miyake and Friedman (2012), Friedman and five authors (2008) developed the now widely used taxonomy of executive functions into these three families: Shifting ('flexibility'), Updating ('Working Memory') and Inhibition. All are strictly limited cognitive resources.

one in any ordinary sense. Talk of ‘objective’, ‘absolute’ obligations, duties and the like came in to epistemology at least with Chisholm (1957) and Alston (1985) but is infelicitous. Since we cannot be held responsible for acting or failing to act on these ‘obligations’—cannot be *obliged* to act on them, etc.—they are then not *obligations*, *duties*, *oughts*, in anything like the ordinary sense: We see an example of apparently deontic terms being stretched far beyond what the interconnected deontic conceptual framework actually permits (we see these stretched to the point where they become ‘superlative oughts’).

The objective, absolute, contrast to Chisholm’s subjective, practical, terms of requirement, would then be better not put in terms of ‘duties’, ‘obligations’, ‘oughts’ and the like at all. Talk of *objective*, *absolute*, ‘obligations’, ‘duties’, etc. should tacitly be read as occurring within ‘scare-quotes’—one should mean by it: objective, absolute, *epistemic value*, but not ‘duty’. Material on the Right versus the Good is centrally relevant here also. Consequentialist theories in ethics are those which reduce the Right to the Good (deontic theories oppose this). By parity of reasoning, I would argue that language of this nature when encountered in epistemology should give us pause, and urge a radical re-thinking of the extent to which we continue to use talk like Chisholm’s, of “the absolute sense of ‘right’”—talk which is widely found in ethical debate as well. No such sense of ‘right’ can be sustained, I claim. The Good alone can be absolute, the Right alone can be practical. To pick an example from Chisholm (1957, 6) It would have been *Good* not *Bad* (*sans phrase*) had Hitler been killed as an infant. His nurse though, would have been *Wrong* not *Right* (*sans phrase*) to have smothered the infant.

Objective and Subjective Truth-Conduciveness; Regulative and Theoretical; Epistemology of Epistemology vs Metaphysics of Epistemology

Nottelmann (2016, 13) on “good epistemic reasons”:

Concerning [“good epistemic reasons”] I propose that at least initially we follow Bonjour’s lead and unpack this notion in terms of truth conduciveness. In Bonjour’s preferred words, good epistemic reasons offer a relevant subject “at least some chance of finding the truth”...

Following Bonjour’s lead, relative to a situation, we may then take a *good* epistemic reason for S to believe/disbelieve p to be an epistemic reason, such that, should S in that situation come to believe what the epistemic reason indicates, S would then have a fairly high chance of believing the truth concerning p ...

Umm... this is a strong statement of things Nottelmann holds to be true, but it appears to ride roughshod over much of what is in dispute here—it threatens to be advancing a strong externalism regarding “good epistemic reasons” (an account based upon *actual* rather than *expected* truth conduciveness) by stipulation (see remarks on Alston “*what the facts available to me*” above). As an account of epistemic normativity, *actual* as opposed to *expected* truth conduciveness has its area of core strength when we consider knowledge rather than epistemic justification. An initial, ‘softening up’ objection to taking this objective, externalist, theoretical state as the basis for one’s account of “good epistemic reasons” *tout court* may then be made vivid with esoterica

such as the ‘new evil demon problem’. Consider a subject who is a brain in a vat, or the victim of an evil demon. We recognise that these subjects cannot, for the most part, have knowledge—at least, since they will lack truth. But there is a venerable internalist tradition holding that such envisaged subjects could be *rational* (Foley 2001, 38; 2004, 69; Weatherson 2008, 564-5; Williamson 2007, 182-3; but see Nottelmann 2013).¹⁹ Likewise for Alston’s tribesman who is brought up to be deferential to a spurious authority, and all other perspectival limitations. One is dealt the cognitive hand one is dealt, and if this be a poor hand it may deny one the possibility of knowledge; but there is a vital sense of “good epistemic reasons” that has to do with how well one plays the cards one is dealt, be these good or bad.²⁰

Nottelmann however, follows the previous passages with the following, the first sentence of which I think is a good and important point, (the second I take to be over-dismissive of the severity of the problems that the empirical literature present us with):

The above conception of a good epistemic reason [externalist: in terms of objective truth conduciveness] allows us to enforce an appearance-reality distinction and separate epistemic reasons that are *really* good (relative to a subject and a situation) from those that are only *apparently* so. The only bit of proper empirical psychology we need now add to the mix is the seemingly plausible thesis that sometimes subjects cannot help forming beliefs based on what *appears* to them to be good epistemic reasons, even if those reasons are not *really* good ones (Nottelmann 2016, 13).

Nottelmann is right to say that an unconstrained epistemology, one in which there was no separation between “*really* good (relative to a subject and a situation) from those that are only *apparently* so”, would be utterly unacceptable. But I have already defended the view that the positions advanced by Lockie (or Foley, or Clifford, or Chisholm, Descartes, Locke and the whole of the deontological tradition) are committed to no such elision—if Nottelmann is opposed to these latter this must be defended on other grounds.

The example from Alston considered already is a simple and elegant case in miniature: a distinction between the case where I believe because of an “egotistical penchant to overestimate my powers” versus where one where I believe following a course of stringent intellectual auditing that leads me to *sincerely* take myself to have discharged my epistemic obligations. This is a miniature for larger philosophical

¹⁹ Of course, not if, by stipulation of the thought experiment, the demon is held able to manipulate the envatted agent’s active thought processes—his decision-making, his erstwhile, hitherto seen-as, *executive functioning*. We know that one can impair individuals epistemically in suchlike ways without appeal to *recherché* thought experimentation. But if our demon merely manipulates appearances—say, the sensory inputs to said agent (that is, if the envatted brain, by hypothesis really has powers of cognitive agency, really is an *agent*)—then my points stand: he (our brain) can be rational.

²⁰ One may take a ‘factive turn’ and re-terminologise ‘epistemic reason’, ‘justification’ etc. as terms of art that cease to be possessed unless certain (proprietary) external specifications are met. I find this a familiar, but uninteresting, move. The terms for being as justified as *one can make oneself*, as justified as *one may be held responsible for*, for scrutinising as well as one is able those justifiers that *one has reason to believe one possesses* will simply have to be resurrected, regardless of terminology.

accounts to be found throughout the long, distinguished, history of epistemic deontology

if I abstain from giving my judgement on any thing when I do not perceive it with sufficient clearness and distinctness, it is plain that I act rightly. . . . But if I determine to deny or affirm, I no longer make use as I should of my free will, and if I affirm what is not true, it is evident that I deceive myself; even though I judge according to truth, this comes about only by chance, and I do not escape the blame of misusing my freedom; for the light of nature teaches us that the knowledge of the understanding should always precede the determination of the will. And it is in the misuse of the free will that the privation which constitutes the characteristic nature of error is met with (Descartes 1931, 176).²¹

I act (epistemically) rightly if I determine to withhold judgement when things are not clear and distinct, where I fail to do this, even if I light on the truth (à la Bonjour's Clairvoyant) I do not escape *blame*. As Descartes points up, the attribution of *blame* presupposes free will. Locke says:

Faith is nothing but a firm assent of the mind: which, if it be regulated, as is our duty, cannot be afforded to anything, but upon good reason; and so cannot be opposite to it. He that believes, without having any reason for believing, may be in love with his own fancies; but neither seeks truth as he ought, nor pays the obedience due his maker, who would have him use those discerning faculties he has given him, to keep him out of mistake and error. He that does not this to the best of his power, however he sometimes lights on truth, is in the right but by chance; and I know not whether the luckiness of the accident will excuse the irregularity of his proceeding. This at least is certain, that he must be accountable for any mistakes he runs into; whereas he that makes use of the light and faculties God has given him, and seeks sincerely to discover truth, by those helps and abilities he has, may have this satisfaction in doing his duty as a rational creature, that though he should miss truth, he will not miss the reward of it. For he governs his assent right, and places it as he should, who in any case or matter whatsoever, believes or disbelieves, according as reason directs him. He that does otherwise, transgresses against his own light and misuses those faculties, which were given him (Locke 1975, IV, xvii, 24).

The distinction between axiological appearance and reality is not in any way effaced by the deontically internalist tradition—not even the strongly access-limited versions of that tradition—and attempts to argue or assume otherwise will, I believe, tend to be based upon the assumption that there cannot be real cognitive freedom (real freedom *simpliciter*) in the world. If you want that assumption you will have to argue for it on its own merits. With a strong enough notion of cognitive freedom and self-mastery in

²¹ This and the next (Locke) quotation are much cited—notably by Foley (1993), Plantinga (1993) and Feldman (2002).

the regulation of my mental life, the distinction between appearance (of good epistemic reasons) and reality thereof proceeds just as the greatest author of this tradition asserted it did: if “I no longer make use as I should of my free will, and if I affirm what is not true, it is evident that I deceive myself; even though I judge according to truth, this comes about only by chance, and I do not escape the blame of misusing my freedom”. If, however, I *do* make use as I should of my free will, only then to be helplessly *unable* thereby to achieve the truth—perhaps because of a situation of grave epistemic poverty—then I am Locke’s agent who “though he should miss truth, he will not miss the reward of it”.

There are objective and subjective notions of epistemic value operative in epistemology, each seeking to answer to a different desideratum of adequacy (theoretical and regulative—Lockie 2014a). Emphasise a humanly unattainable truth-conducivity too much (that is, eliminatively—to the wholesale exclusion of the subjectively attainable) and you are no longer doing epistemology: you are doing metaphysics. In the context of a discussion of Lockie’s paper; it is worth noting that there these issues were already discussed:

The deontic understanding of justification, plus the ought-implies-can principle, leads to the threat of being never able to convict an agent of being unjustified, even when he is radically awry, should he or she merely be unable to apprehend the fact that he or she is mistaken. The solution to this problem for the internalist is to mark a distinction between “absolute” and “practical” justification—between fulfilment of “objective” and “subjective” duties. To escape the epistemic poverty objection, deontic, oughts-based justification must be restricted in its application to the “subjective”, “practical” realm. There is another, “objective”, “absolute”, sense of being justified for which the discharge of duty, the fulfilment of obligations, be we ever so diligent, is not guaranteed to satisfy. So, consider when Goldman says

“I shall assume that only right epistemic rules make a difference to genuine justifiedness. This point should be equally acceptable to both internalism and externalism”
(Goldman 2009, 5–6).

This point will be “equally acceptable to both internalism and externalism” only should this statement be read by each under a different interpretation of “right epistemic rule”. For the internalist, this means subjectively right; for the externalist, objectively right. [F.N. 5] Argument at cross purposes beckons if we do not keep this in mind (Lockie 2015: 3).

Endnoted at this passage is N. 5

Lockie N. 5: Goldman subsequently considers the application of his interpretation of this principle to a specimen “rightness criterion” from the internalist camp—and he chooses as his specimen Richard Foley. He objects that the subjectivism of a “Foley Rationality” approach “makes Foley’s approach ill suited to the objectivist, nonrelativistic

spirit of our entire framework” (Goldman 2009, 28). But this section has argued that such a subjectivism (such an “internalist perspectivism”) is and must be a feature of any clear-headed internalist account. What then becomes of Goldman’s claim that “this point should be equally acceptable to both internalism and externalism”? Against an internalist of Foley’s stamp, I’d suggest that this comes worryingly close to begging the question (Lockie 2015, 13).

Nottelmann’s point, drawing on (late) Bonjour for support, is just the point which Goldman is here noted to be making, and as for Goldman, this point is not “equally acceptable to both internalism and externalism”—excepting where each is allowed to pun on “right epistemic rules” (Goldman) or “good epistemic reasons” (Nottelmann). As I note: “For the internalist, this means subjectively right; for the externalist, objectively right”.

Turning to Nottelmann’s specific, semi-regimented arguments: in particular his first argument; I would mainly be concerned with his premises 1 and 2. They seem to sum up where we differ.

1. In order for a subject S to be epistemically justified in believing a proposition p in some situation C, S’s belief that p must be supported by good epistemic reasons for S to believe p in C;
2. [Bonjour-style understanding of epistemic reason-goodness] In order for a reason to be a good epistemic reason for S to believe p in C, in C S must have a fairly high chance of believing the truth concerning p, should she believe as the reason indicates (Nottelmann 2016, 14).

Regarding 1: I concur, but note what is already obvious from my paper and from a vast epistemic literature (one adverted to in my paper and notably also in my 2014a): “good epistemic reasons for S to believe p in C” is an *agent-relative* (and circumstance-relative) notion—an attenuated, access-restricted notion. In order for a subject S to be [deontically] epistemically justified in believing a proposition p in some situation C, S’s belief that p must be supported by [*subjectively, practically, regulatively*] good epistemic reasons for S to believe p in C. Of course, 1. is also (but separately) true should the reader (contra Peels, Alston, and myself) want to employ the locution of ‘*objectively* epistemically justified’ (that is, the notion of the epistemically Good rather than Right, an idealized, externalist, theoretical, absolute, non-directive notion of epistemic success). Then we have simply used the conjunction of words in 1. to make a different statement. Then, we can say in order for a subject S to be [externalistically] epistemically ‘justified’ in believing a proposition p in some situation C, S’s belief that p must be supported by [*objectively, theoretically, non-regulatively*] good epistemic ‘reasons’ for S to believe p in C. (I have ‘problematised’ such a notion of reified ‘reasons’ already—hence the scare-quotes around such an ‘objective justification’, but let it stand).

Turn now to 2. I have already stated that I don’t accept a [late—not early] “Bonjour-style understanding of epistemic reason-goodness”—excepting when the punning on the understanding of epistemic ‘reason’-goodness already indicated in 1. is taking place. The only way that 2. goes through is if we qualify to the claim that “In order for

a reason to be an *objectively* good ‘reason’ it must be *objectively truth conducive*”. Properly qualified, as hundreds of years of deontic epistemology (and ethics) indicate they should be, 1 and 2 cannot begin to get Nottelmann the conclusion he seeks.

But why shouldn’t we ride roughshod over the internalist here? After all, one seeks truth doesn’t one? Vahid joins Nottelmann in claiming “there seems to be something essentially right about the claim that our concept of justification is sensitive to the truth conducivity of the grounds of beliefs” (Vahid 2016, 16). Some of what seems “essentially right about the claim that our concept of justification is sensitive to the truth conducivity of the grounds of beliefs” just pertains to what I have called the ‘halo effect’ deriving from one massively important source notion in normative epistemology (*objective* truth conduciveness), applying as it does, to knowledge, only then smearing over to another massively important source notion in normative epistemology—epistemic justification, ‘good epistemic reasons’ and the like²². The externalist stance Vahid, Nottelmann & Goldman adopt here goes back to Alston at least:

Of course if I am to carry out the *activity* of justifying a belief, I must provide an argument for it; I must say something as to why one should suppose it to be true. ... In saying what reasons there are for supposing that *p*, I am expressing other beliefs of mine and contextually implying that I am justified in accepting them. But this all has to do with the activity of *justifying* a belief, *showing* it to be justified (Alston 1989, 197-8).

Alston is here marking a distinction between two things. The first is the metaphysics of justification, a belief’s state of being justified—to the extent it is. The second is variously glossed as the epistemology of justification (“reasons ... for supposing”); the activity of justifying (“showing...”); and the pragmatics of that activity (that it “contextually implies” that I accept, hence have internalist access-to, my reasons).

Alston is saying that externalism is being put forward as an account of the metaphysics of justification—what it is to *be* justified. It is not put forward as an account of the epistemology of justification—how we can *show* or *tell* that we are justified. He concedes that the project of finding out if one is justified, the activity of *justifying*, and the pragmatic implications of arguing for a claim’s being justified, all

²² I repudiate ‘conceptual analysis’ in epistemology for lots of reasons; but in no small part because of what I have labelled (after Thorndike and the social-cognitive psychologists) the role of ‘halo effects’ in this kind of theory-building (Lockie 2014a, 2014b). Ask yourself what characteristics you think *justification* or *knowledge* or *rationality* should have. Introspect on this matter from your armchair. Consult your *intuitions* (perhaps: you ‘deepest intuitions’, perhaps your *immediate, pre-analytic, prior or primitive intuitions*) and interrogate your intuitions with thought experiments. Before you know it you’ve lobbed in every pro-attitude success-term even vaguely in the vicinity of normative epistemology. Normative pro-attitude terms smear from one success-state to another in these unconstrained atomistic armchair meanderings. Should *epistemic justification* involve (one assumes: an *objective*) “sensitivity to the truth” / “objective truth-conduciveness”? *Oh yes!* My intuitions would *revolt* against any claim or imagined thought experiment to the contrary! Should knowledge involve (one assumes: a *subjective, internalistic*) notion of justification? *Oh yes!* My intuitions would *revolt* against any claim or imagined thought experiment to the contrary! I develop careful, considered remarks about metaphilosophy in general and meta-epistemology in particular in Lockie (2014a, and especially 2014b).

“of course”) require internalism. But to urge this against externalism is an epistemic (or pragmatic) non sequitur: externalism is a metaphysical thesis.

From the fact that I can *justify* a belief only by relating it to other beliefs that constitute a support, it does not follow that a belief can *be justified* only by its relations to other beliefs. Analogously, from the fact that I cannot justify my expenses without saying something in support of my having made them, it does not follow that my expenses cannot *be justified* unless I say something in support of my having made them (Alston 1989, 197-8).

Goldman, in the context of discussing another Alston paper, notes approvingly: “this just shows that *being* justified cannot be equated with *having* a justification” (Goldman 2009, 29). Although Alston is the figure who is rightly most cited for drawing this distinction, it is a move now very widely deployed in epistemology, with a good appraisal of it being offered by Leite (2004). Leite calls this the ‘spectatorial conception’ of justification—inasmuch as one’s justificatory status is something entirely extrinsic to one’s knowledge of, or beliefs about, or activity in regard to that status: it is something one may ‘spectate’ in activities extrinsic to and dissociated from that justificatory status itself.

One’s justificatory status itself and as such is an entirely theoretical state, one’s knowledge of, or beliefs about, or efforts to work towards that status (say, through active, agential, executive cognition) is a wholly distinct, extrinsic, regulative, issue. It appears to be just this move that Nottelmann makes in the passage from him cited above, talking of a “conception of a good epistemic reason allows us to enforce an appearance-reality distinction and separate epistemic reasons that are *really* good (relative to a subject and a situation) from those that are only *apparently* so” (Nottelmann 2016, 13).

Nottelmann, Goldman, Alston et al.—all who embrace this ‘spectatorial conception’ of justification—are drawing a metaphysics (“reality”, “reasons that are *really* good”) versus epistemology (“appearance”, “those that are only *apparently* so”) *within epistemology*, indeed, *within the epistemology of ‘reasons’*. Drawing an epistemology-metaphysics distinction is normally a benign realist move in philosophy (I have strongly realist sympathies myself). *But we are within epistemology here: we are within the domain of ‘appearances’, indeed, we are within the domain concerned with the epistemology of ‘reasons’*. We can apply an epistemology-metaphysics distinction *within* epistemology, granted (we can be as iterative—unkindly, one might say ‘regressive’—as you like) *but we are concerned with epistemic justification here*, we are concerned with ‘appearances’, with the normative epistemology of what the old British philosophers of language called ‘warranted assertability’; with *justified* belief where this has not been hypostatized, transformed and transmogrified into something metaphysical.

When is the agent epistemically justified? That means: when, from the agent’s perspective, are the appearances indicative of truth (*not*, when, from the perspective of one in the know—God, or a Victorian Anthropologist, or a ‘London School’ g theorist, or an absolutist, etc, decontextualized cognitive scientist—are they *really* flags of truth). If you choose the latter, spectatorial, stance, why not cut the

epistemology altogether, and just stick to the metaphysics? We may passively *possess* a certain (externalist) epistemic status, but then again, we may possess a certain alethic status (Chisholm 1988, 287ff; 1989, 77ff; Plato: *Meno*, *Theaetetus*) the project of epistemology precisely takes its point of departure from the commonplace that axiologically, mere possession of a certain metaphysical status is not enough.

Epistemological Humility (The Psychologists and Anthropologists are Actually Quite Bright)

The psychologists working on rationality (not more generally, however) are in many instances remarkably philosophically sophisticated. Psychology, moreover, can give lessons as well as take them: it is a highly developed discipline in its own right. The Vygostkian literature is just one (striking) literature indicating that rationality is *significantly, radically*, ‘culture laden’—and not merely culture-laden at the periphery, as it were, but at its core. Thus, the Chomskian competence-performance distinction, as adapted by L. J. Cohen, though very worthwhile, and though capable of accounting for some of the variance, is quite incapable of accounting for it all; and *pace* Elqayam, I never thought it could.

I am not sure, however, whether many traditionally educated epistemologists appreciate this to the extent they might. So, the cultural-psychological and anthropological literatures do not need armchair assistance from the philosopher (myself or any other) indicating that such phenomena as Luria’s ‘white bear’ syllogism permit of easy solution in terms of a surface performance error and a deeper logical competence (or incompetence—I could not always tell which position was being attributed to me or endorsed by my respondents in their own right)—I am not seeking to offer any such armchair assistance, and I would caution anyone against offering such.

Such problematic empirical phenomena do not permit of any easy ‘conceptual’ solution—as, say, for example, in terms of front-end culture-fair measurement solutions (Luria-Vygotsky, Cole et al were and are extremely culture-fair, *pace* Nottelmann’s (2016, 18-19) otherwise rather attractive ‘Gorilla-weightlifting’ example, which in any event I take to be a major concession to my view that contextualized thinkers *are* epistemically justified/rational). The aprioristic epistemological tradition should give itself some familiarity with the nature of the cognitive psychological, cultural psychological and anthropological literatures here.

The problems cultural psychologists have uncovered (and they are legion—the ‘white bear’ syllogism is merely an exemplar, a placeholder for many such cases in these literatures) do not permit of any facile, dismissive, ‘conceptual’ solution. Such cases indicate *real, serious, deep* cognitive differences between contextualized and decontextualized humans—including contextualized humans who may nevertheless be *fine thinkers*. Most humans that have ever lived (including some, doubtless, with the genetic potential of a Gödel, an Aristotle or a Kant) have been contextualized cognisers. Deciding what we say of their rationality (or epistemic justification, or epistemic poverty) is a genuinely vexed question.

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References

- Alston, William. "Concepts of Epistemic Justification." *Monist*, 68, no. 1 (1985): 57-89. Reprinted in Alston, 1989, 81-115.
- Alston, William. "The Deontological Conception of Epistemic Justification." In *Philosophical Perspectives: Vol. 2, Epistemology*, edited by James E. Tomberlin, Atascadero, CA: Ridgeview, 1988, 257-299. Reprinted in Alston, 1989, 115-153.
- Alston, William. "Internalism and Externalism in Epistemology." In *Epistemic Justification*, edited by William Alston, 185-226. Ithaca: Cornell University Press, 1989.
- Alston, William. (1989) *Epistemic Justification*. Ithaca: Cornell University Press, 1989.
- BonJour, Laurence. *The Structure of Empirical Knowledge*. Cambridge MA: Harvard University Press, 1985.
- BonJour, Laurence and Ernest Sosa, eds. *Epistemic Justification: Internalism vs. Externalism, Foundations vs Virtues*. Oxford: Blackwell, 2003.
- Burnyeat, Myles. "Protagoras and Self-Refutation in Later Greek Philosophy." *Philosophical Review* 85, no. 1 (1976a): 44-69.
- Burnyeat, Myles. "Protagoras and Self-Refutation in Plato's Theaetetus." *Philosophical Review*, 85, no. 2 (1976b): 172-95.
- Chisholm, Roderick. *Perceiving: A Philosophical Study*. Ithaca: Cornell, 1957.
- Chisholm, Roderick. "The Indispensability of Internal Justification." *Synthese* 74, no. 3 (1988): 285-296.
- Cohen, L. Jonathan. "Can Human Irrationality be Experimentally Demonstrated?" *Behavioral and Brain Sciences* 4, no. 3 (1981): 317-370.
- Dennett, Daniel. "Making Sense of Ourselves." *Philosophical Topics* 12, no. 1 (1981): 63-81.
- Descartes, Rene. *Philosophical Works of Descartes Vol. 1*, edited by Elizabeth Haldane and G. R.T. Ross. Cambridge: Cambridge University Press, 1931.
- Elqayam, Shira. "Instrumental, Bounded and Grounded Rationality: Comments on Lockie." *Social Epistemology Review and Reply Collective* 4, no. 11 (2015): 47-51.
- Feldman, Richard. "Epistemological Duties." In *The Oxford Handbook of Epistemology*, edited by Paul Moser, 361-84. Oxford: Oxford University Press, 2002.
- Foley, Richard. *Working Without a Net: A Study of Egocentric Epistemology*. New York and Oxford: Oxford University Press, 1993.
- Foley, Richard. *Intellectual Trust in Oneself and Others*, New York: CUP, 2001.
- Foley, Richard. "A Trial Separation Between the Theory of Knowledge and the Theory of Justified Belief." In *Ernest Sosa and His Critics*, edited by John Greco, 42-58. Wiley, 2004.
- Friedman, Naomi P., Akira Miyake, Susan E. Young, John C. DeFries, Robin P. Corley, and John K. Hewitt. "Individual Differences in Executive Functions are Almost Entirely Genetic in Origin." *Journal of Experimental Psychology: General*, 137, no. 2, (2008): 201-225.
- Fuster, Joaquín. *The Neuroscience of Freedom and Creativity*, Cambridge: Cambridge University Press, 2013.
- Goldman, Alvin. "Internalism, Externalism and the Architecture of Justification." *Journal of Philosophy* 106, no. 6 (2009): 1-30.

- Henrich, Joseph, Steven J. Heine, and Ara Norenzayan. "The Weirdest People in the World?" *Behavioural and Brain Sciences* 33, no. 2-3 (2010): 61-83; discussion 83-135.
- Kahneman, Daniel. *Thinking, Fast and Slow*. Harmondsworth, Middx: Penguin, 2012.
- Leite, Adam. "On Justifying and Being Justified." In *Philosophical Issues, Epistemology* (a supplement to *Nous*), edited Ernest Sosa and E. Villanova 14, no. 1 (2004): 219-253.
- Locke, John. *Essay Concerning Human Understanding*, ed. P.H. Niddich, Oxford: Oxford University Press, 1975.
- Lockie, Robert. "The Regulative and the Theoretical in Epistemology." *Abstracta* 8, no 1 (2014a): 3-14.
- Lockie, Robert. "The Epistemology of Neo-Gettier Epistemology." *South African Journal of Philosophy* 33, no. 2 (2014b): 247-258.
- Lockie, Robert. "Perspectivism, Deontology and Epistemic Poverty." *Social Epistemology* 30, no. 2 (2016): 133-49.
- Lynn, Richard. *Race Differences in Intelligence*, Augusta, GA: Washington Summit Publishers, A National Policy Institute Book, 2006.
- McHugh, Conor. "Epistemic Responsibility and Doxastic Agency." *Philosophical Issues* 23, no. 1 (2013): 132-157.
- Miyake, Akira and Naomi P. Friedman. "The Nature and Organization of Individual Differences in Executive Functions: Four General Conclusions." *Current Directions in Psychological Science* 21, no. 1 (2012): 8-14.
- Nottelmann, Nikolaj. "The Deontological Conception of Epistemic Justification: A Reassessment." *Synthese*, 190, no. 12 (2013): 2219-2241.
- Nottelmann, Nikolaj. "Epistemic Poverty, Internalism, and Justified Belief: A Response to Robert Lockie." *Social Epistemology Review and Reply Collective*, 5, no. 1 (2016): 12-28
- Oaksford, Mike and Nick Chater. "Bounded Rationality in Taking Risks and Drawing Inferences." *Theory & Psychology* 2, no. 2 (1992): 225-230.
- Owens, David. *Reason Without Freedom*. London: Routledge, 2000.
- Peels, Rick. "Let's Bite the Bullet on Deontological Epistemic Justification: A Response to Robert Lockie." *Social Epistemology Review and Reply Collective*, 4, no. 12 (2015): 42-50.
- Stanovich, Keith E., Richard F. West, and Maggie E. Toplak. "Intelligence and Rationality." In *Cambridge Handbook of Intelligence*, edited by Robert J. Sternberg and Scott B. Kaufman, 784-826. New York: Cambridge University Press, 2011
- Vahid, Hamid. "Deontological Perspectivism: A Reply to Lockie." *Social Epistemology Review and Reply Collective*, 5, no. 2 (2016): 12-17.
- Weatherson, Brian. "Deontology and Descartes' Demon." *Journal of Philosophy* 105, no. 9 (2008): 540-569.
- Williamson, Timothy. *The Philosophy of Philosophy*, Oxford: OUP, 2007.