Published in (eds.) J. Hvorecky and T.Hribek, *Knowledge Value Evolution.* London, College Publications. 2011:141-155.

# Evolutionary Ruminations on 'the Value of Knowledge Intuition'[1]

## 0 Introduction

Recent debates in epistemology have paid considerable attention to the so-called epistemic value problems[2]. That is, problems that beset the value of knowledge. These epistemic value problems grow out of the pervasive intuition that knowledge is in some robust sense good (or 'valuable'). In what 'robust' sense knowledge is considered valuable is to be explained in the next section II and until then we can rely on our fairly intuitive grasp of the notion. For the time being, let us call this pervasive intuition *'the value of knowledge intuition'*.

We are all well-acquainted with 'the value of knowledge intuition' because in our everyday life we all very often find ourselves valuing knowledge. That is, we find ourselves considering instances of knowledge to be good (in some sense). Examples are abundant and wide-ranging from the more practical instances of everyday life (e.g. how to use a blender) to the highly theoretical knowledge of mathematics, philosophy and special sciences (e.g. the solution to Fermat's last theorem, the semantic paradoxes or the Big Bang theory).

Indeed, 'the value of knowledge intuition' is so pervasive that some might feel inclined to infer that is not simply an intuition but an intuition universally entertained. And given that there is no reason to think that such a universally entertained intuition is deceptive, they might conclude that knowledge is beyond any reasonable doubt to be considered valuable. Really, they might contend, there is not much logical space for taking knowledge to be valueless or, even worse, positively evil.

But this conclusion is a bit too quick as anti-epistemic views are sometimes being expressed. One can find people (laymen and academics) voicing such anti-epistemic views. Sometimes you hear people asserting that knowledge is the royal road to depression and misery, that ignorance is bliss etc[3]. Such anti-epistemic views, namely,

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[1] I would like to thank Matthew Chrisman for helpful comments.

[2] See L.Zagzebski (1996); T.Williamson (2000); J.Kvanvig (2003); D.Pritchard (2007, forthcoming). Questions of epistemic value go back to Plato's *Meno* where the question whether knowledge is more valuable than true belief is being discussed.

[3] Compare Plato's example in the *Philebus* (12d1-3) of 'the fool who is full of foolish opinions and hopes and is pleased'.

views that question the reliability of 'the value of knowledge intuition' (and perhaps even its universal entertainment) and consider knowledge to be positively evil can, arguably, be found in works of literature, theology and even philosophy too[4].

Yet, although there are things to be said about such anti-epistemic views this is not the right place for this task. I will set aside such sceptical views about 'the value of knowledge intuition' and, subsequently, the value of knowledge itself and assume that they are mistaken. Thus, sceptics that do not find 'the value of knowledge intuition' compelling can stop here; or at least read it out of intellectual curiosity. The rest of the essay assumes that the pervasive intuition that knowledge is valuable is a reliable one. It correctly tracks that knowledge is in some robust sense valuable.

Scepticism about 'the value of knowledge intuition' and the value of knowledge itself set aside, a key epistemic value problem that grows out of 'the value of knowledge intuition' is the so-called *'core value problem'*. In the light of 'the value of knowledge intuition', 'the core value problem' asks why knowledge is valuable at all. Here I concern myself only with 'the value of knowledge intuition' that lurks in the background and essentially motivates 'the core value problem'. The rest of the epistemic value problems growing out of 'the value of knowledge intuition' won't show up in the ensuing discussion as we are not here interested in addressing them[5].

What we are here interested in addressing is the question whether evolutionary psychological considerations could potentially inform why knowledge is pervasively found to be valuable. That is, why we seem so naturally and effortlessly disposed to entertain 'the value of knowledge intuition'. The obvious methodological question then is how such an evolutionary psychological explanation of 'the value of knowledge intuition' should go.

The first thing to be noticed is that there seems to be a *psychological mechanism* operating behind 'the value of knowledge intuition' and any psychological explanation of 'the value of knowledge intuition' should go through an explanation of the origins and function of this psychological mechanism. There is a stable, perhaps innate, psychological mechanism that disposes agents to find knowledge valuable. If this diagnosis is right, then evolutionary psychological considerations should elucidate the origins and function of this mechanism, if they are to account for the

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[4] Views of an anti-epistemic ilk are sometimes attributed to Romanticists like J.Rousseau and other anti-rationalists like A.Schopenhauer and F.Nietzsche. But as I am far from being an expert in their work this claim should be treated with some caution.

[5] A nice unpacking of the epistemic value problems growing out of 'the value of knowledge intuition' can be found in D.Pritchard (forthcoming: chapter 1).

pervasive 'value of knowledge intuition'. But let me first explain the reasons that ground the diagnosis that there is a psychological mechanism operating behind 'the value of knowledge intuition'.

Very briefly, the first reason that inclines me to think that there is a psychological mechanism in operation behind 'the value of knowledge intuition' is its *pervasive*, if not universal, entertainment. Few people, I think, will dare to question the reality of 'the value of knowledge intuition' and these are bound to have some hard time defending their view. They are bound to have such a hard time because even sceptics about the reality of 'the value of knowledge intuition' will be forced to accept that in their non-philosophical moments of everyday life go on finding knowledge valuable. Our psychological mechanism goes on finding knowledge valuable even in the case of sceptics who would like to claim that 'the value of knowledge intuition' is not a real one. This Humean in character point leads to a second reason[6].

The second reason is that 'the value of knowledge intuition' seems to be almost involuntary. We seem to *find* ourselves valuing instances of knowledge as if this is something we do all the time but we only consciously realize it at our more reflective, philosophical moments. Some might want to go even further here and based on these reasons talk in terms of an innate 'module' operating behind 'the value of knowledge intuition' but I need not pursue these considerations[7]. All I need to suggest for present purposes is that there is some sort of psychological mechanism operating behind 'the value of knowledge intuition'.

That being said, my goal in this paper is to provide some tentative and exploratory evolutionary ruminations that could inform our understanding of the psychological mechanism operating behind our disposition of finding knowledge valuable. Such evolutionary ruminations are intriguing because by informing our understanding of the psychological mechanism operating behind our disposition of finding knowledge valuable, they could provide us with an evolutionary psychological explanation of why we do have this pervasive 'value of knowledge intuition'. In other words, explain why knowledge pervasively strikes us as valuable.

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[6] It is a Humean in character point because it parallels Hume's( 1985) famous point about inductive scepticism. After giving impetus to scepticism about inductive inferences, Hume argued that as human agents (with the psychology we have) we are bound to go on relying on inductive inferences, even if we think they are irrational.

[7] Talk of modules stems from the work of J.Fodor (1983) and J.Tooby and L.Cosmides (1992), though, note that Fodor does not rely on evolutionary considerations as Tooby and Cosmides (1992) are.

With this much by way of introduction, we can now sketch how the discussion will unravel. First, in section II, I introduce 'the core value problem' which grows out of 'the value of knowledge intuition' and explain in what 'robust' sense knowledge is found to be valuable. As I explain, knowledge is found to be valuable either instrumentally or finally. In other words, it is found to be good either as a means to action or for its own sake. I call instrumental value *practical* and final value *pure epistemic value*.

Afterwards I explain that evolutionary considerations, if they are to adequately account for 'the value of knowledge intuition', they should be able to explain why we entertain 'the value of knowledge intuition' in regard to both the practical sense and the pure epistemic value sense. That is, why we seem naturally disposed to think of knowledge as practically valuable or as purely epistemically valuable. I take this to be a *desideratum* for any adequate explanation of the psychological mechanism operating behind 'the value of knowledge intuition'.

Second, in section III, I explore how evolutionary considerations could potentially inform our understanding of the origins and function of the psychological mechanism operating behind 'the value of knowledge intuition', that is, our disposition of finding knowledge valuable. Through exploring the origins and function of the psychological mechanism operating behind 'the value of knowledge intuition', I ruminate on how evolutionary considerations could explain why we find knowledge valuable (instrumentally or finally). In the end, in section IV, I overview and summarize the argument.

## 1 'The Value of Knowledge Intuition' and A Desideratum

Epistemic value problems like 'the core value problem' (or the so-called *Meno* problem, namely, why is knowledge more valuable than true belief) are widely accepted to constrain any plausible theory of knowledge[8]. Any plausible theory of knowledge must not only provide an account of the nature of knowledge but also must address problems of epistemic value, if it is to have any luck in the dialectical marketplace.

Such a theory of knowledge can address the problems either by *vindicating* the intuitions that lurk in the background of the epistemic value problems or by *explaining them away* in an adequate manner. But no matter how these problems are

[8] See L.Zagzebski (1996); J.Kvanvig (2003); D.Pritchard (2007, forthcoming).

to be addressed, a theory of knowledge that does not address the epistemic value problems is at best to be considered incomplete. This much goes uncontested in epistemological circles and it is widely accepted as a legitimate dialectical constraint on any plausible theory of knowledge.

An epistemic value problem is the already introduced 'core value problem', a problem that lies at the core of the debate about epistemic value because it asks the fundamental question of why knowledge is valuable at all. Intuitively, we find knowledge to be valuable and 'the core value problem' exactly asks why knowledge is valuable at all. As can be easily grasped, 'the core value problem' is a direct product of 'the value of knowledge intuition' because it grows out of the pervasive intuition that knowledge is good or valuable. The pervasive 'value of knowledge intuition' naturally gives rise to the question of why is knowledge to be considered valuable at all.

Now, as it is often noted in the literature, we seem to find knowledge valuable in two senses[9]. Like other sorts of goods (e.g. friendship or love), we find knowledge to be of *instrumental* and *final* value. We entertain 'the value of knowledge intuition' for both cases where knowledge seems to be instrumentally valuable and for cases where knowledge seems to be finally valuable.

On the one hand, knowledge is found to be instrumentally valuable because it can function as a means to successful action i.e. achieving our goals like satisfying desires, intentions, fulfilling plans and the like. For example, if I desire a glass of water then, trivially, to satisfy my desire is necessary that I have the relevant means-end knowledge that will guide me to satisfy my desire. If I am to satisfy this desire I must know where I can find a glass of water; otherwise, I rest my hopes for satisfying this desire on accidentally coming across water and this is unfortunate, as we surrender to the unpredictable hands of luck.

On the other hand, we also seem to find knowledge to be finally valuable. That is, valuable for its own sake and not as a means for something other than knowledge itself. For example, we value knowledge of how to solve a differential equation, a geometrical problem, prove a logical theorem etc. Such instances of knowledge are valued for their own sake and not for something practical like the guidance they can offer. For, obviously, such instances of knowledge cannot offer much of practical guidance in any immediate or direct sense. The fact that we seem to often engage in

[9] See D.Pritchard (forthcoming: chapter 1).

inquiry for the mere sake of cognitive achievement illustrates the point, that is, it illustrates that we often value knowledge for its own sake, regardless of practical considerations[10].

More generally, we value practical knowledge but also value knowledge that is detached from the buzz of our practical lives. Whole branches of pure mathematics attest to that as they seem to have nothing direct to do with practicality and the same could be claimed about some branches of philosophy like abstract metaphysics (e.g. the universals debate, the reality of time debate etc.). Still, we consider such intellectual pursuits worthwhile and the derived knowledge valuable for its own sake, independently of having any direct practical purport.

On the basis of this analysis of 'the value of knowledge intuition' then, we can distinguish between two senses of epistemic value: *practical value* and *pure epistemic value*. Practical value is instrumental value while pure epistemic value is final value. On the grounds that we entertain 'the value of knowledge intuition' in both senses, an adequate address of 'the core value problem' should account for both senses of epistemic value. Any address that accounts only for one of the two senses is to be considered inadequate as it would strikes us as elliptical. It would leave out of the theoretical picture one of the two intuitive senses of epistemic value and, at first instance, this would seem inadequate.

But it is worthy of notice that it would be inadequate only for a solution that attempts to vindicate and not explain away the intuitions built into 'the core value problem'. Approaches that do not vindicate but explain away at least some of the intuitions built into 'the core value problem' (and the rest epistemic value problems) would be *revisionary*. But 'revisionary' here should neither be taken to be pejorative nor honorific. A revisionary approach might be good or bad enough on independent reasons that have nothing to do with evolutionary considerations about the psychological mechanism operating behind 'the value of knowledge intuition'[11].

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[10] Some philosophers have thought that knowledge is of final value because, exactly, it is a cognitive achievement. But there are problems for such a view as there are cases where, intuitively, we have knowledge but not a cognitive achievement and vice versa. See D.Pritchard (forthcoming: chapter 2) for criticism of this approach to final value.

[11] Usually, what revisionary approaches to epistemic value try to do is to claim that instrumental value exhausts the value of knowledge and, thereby, explain away the final value of knowledge. This does not deny the reality of the intuition of final value, of course; what it denies is that we should take the final value intuition at face value. For such an approach see M.Ridge's PP presentation 'Getting Lost on the Road to Larissa'. An evolutionary psychological explanation of the value of knowledge intuition could lend a hand to revisionist approaches to epistemic value (like Ridge's epistemic value minimalism) because this would allow such people to explain why we have the value of knowledge intuition in the final value sense, though, this intuition should not be taken at face value.

At any event, what is to our interest here is not 'the core value problem' but an evolutionary psychological explanation of the mechanism operating behind 'the value of knowledge intuition'. And if our analysis of the two senses in which we entertain 'the value of knowledge intuition' is correct, then an adequate psychological explanation must explain both the intuition that knowledge is valued instrumentally for its practicality and finally for its own sake, regardless of any practical value.

An evolutionary psychological explanation that does not explain why we are disposed to find knowledge valuable in both senses would leave something essential out and would therefore fail as an explanation. It would fail to inform our understanding of the psychological mechanism operating behind 'the value of knowledge intuition' and giving rise to 'the core value problem' (and the rest of the epistemic value problems). For these reasons, I take this requirement to be a *desideratum* for any adequate psychological explanation of the mechanism that operates behind 'the value of knowledge intuition'.

One last important point remains before we embark on our evolutionary exploration of 'the value of knowledge intuition'. We should make no mistake about the theoretical scope of exploring an evolutionary psychological explanation of 'the value of knowledge intuition'. The *psychological* question of why we pervasively have 'the value of knowledge intuition' is quite independent of the *normative* question of what the value of knowledge really is. The question I aspire to tentatively explore is why knowledge appears valuable to us not why knowledge really is valuable. We should be careful enough to discern that even if the evolutionary ruminations on 'the value of knowledge intuition' are to the right direction, this says nothing direct about 'the core value problem' (and the other epistemic value problems).

We should make no mistake to claim the opposite, namely, that evolutionary considerations could on their own explain the value of knowledge because that would mean to breach Hume's(1985) famous 'is-ought gap' and commit Moore's (2000) 'naturalistic fallacy'. This is what we may call 'the Moorean/Humean lesson'. Let me very briefly explain what 'the Moorean/Humean lesson' is about[12].

[12] A similar point is found in T.Lewens (2007:159-162). Also, philosophers who have applied evolutionary considerations on normative domains like knowledge and meaning, such as E.Craig (1990:9) and D.Papineau (2003:11), are careful enough to make clear that these evolutionary considerations do not answer the normative questions of how we ought to use the concept of knowledge or what we ought to mean. As Papineau (2003: p.11) says 'As a teleosemanticist I hold that our beliefs have been biologically designed to track their truth conditions. But I don't think that this does anything to show that they *ought* to do this' (Papineau's own emphasis).

As Hume (1985) has famously argued, you cannot deduce a normative injunction from merely descriptive facts like, among others, our evolutionary history as natural animals. You cannot deduce an 'ought' from an 'is', as philosophers sometimes say. No doubt, Hume didn't (and couldn't) have in mind evolutionary theory, as Darwin came almost a century after him, but his lesson still applies.

For example, the fact that wishful thinking, self-deception and other forms of doxastic irrationality may have been evolutionary advantageous for broadly pragmatic reasons does not mean that we ought to believe what is produced by the cognitive processes of wishful thinking, self-deception etc.. Equally, the fact that wrongdoing like lying, stealing, etc. may have been evolutionary advantageous for broadly pragmatic reasons does not mean that we ought to lie, steal etc.

In parallel with Hume, Moore (2000) with his 'open question argument' argued that attempts to reduce moral properties to descriptive (or natural) properties commit 'the naturalistic fallacy'[13]. He argued that attempted reductions of moral properties to natural properties always meet 'open feel' semantic intuitions that undermine such attempts. Moore himself applied 'the open question argument' to the Social Darwinism of H.Spencer with devastating effect. He argued cogently that evolutionary considerations cannot reduce goodness. As he (2000:99) said :

> 'The survival of the fittest does *not* mean, as one might suppose, the survival of what is fittest to fulfil a good purpose - best adapted to a good end: at the last, it means merely the survival of the fittest to survive; and the value of the scientific theory[of evolution], and it is a theory of great value, just consists in shewing what are the causes which produce certain biological effects. Whether these effects are good or bad, it cannot pretend to judge (Moore's own emphasis)'[14].

In essence, what 'the Moorean/Humean lesson' instructs is that you cannot deduce what you ought to believe or what you ought to value from mere descriptive facts like our evolutionary history as natural animals. For this reason, even if there is a good evolutionary psychological explanation of why we have the pervasive 'value of knowledge intuition' this does not answer why knowledge is valuable at all. It might

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[13] As W.Frankena (1939) argued, 'the naturalistic fallacy' is not a *logical* fallacy. There is nothing incoherent in the idea that goodness can be reduced but we haven't yet found the right analysis. But philosophers who accept Moore's 'open question argument' treat it not as a conclusive argument but as an inference to the best explanation for our 'open feel' semantic intuitions that undermine such reductive efforts.

[14] Not all philosophers accept the Moorean/Humean lesson as there are philosophers who attempt to show that we can reduce moral concepts and bridge the gap between 'is' and 'ought'. One example is M.Smith (1994). Here I will simply assume that such attempts are not successful and treat 'the Moorean/Humean lesson' as a fact.

overall *contribute* to such an answer but this will have to be part of a broader philosophical theory.

More generally, the moral of 'the Moorean/Humean lesson' is that even if evolutionary considerations could inform our understanding of the origins and functions of our psychological and cognitive capacities, it won't be sufficient on its own grounds to answer normative philosophical questions of the familiar sort: What we ought to value? How we ought to live? How we ought to reason? What we ought to do? What we ought to believe? etc. Valuable the evolutionary theory maybe, it has certain theoretical limits that one should be cautious enough not to transgress.

The theoretical scope of such an evolutionary psychological explanation clarified, our evolutionary psychological ruminations in the next section III will attempt to explain both senses in which we find knowledge valuable and meet the imposed desideratum.

## 2 Evolutionary Ruminations on 'the Value of Knowledge Intuition'

Evolutionary psychology as such is a relatively recently founded branch of psychology, although its roots go back to C. Darwin's work[15]. Roughly, it attempts to illuminate the operation of psychological and cognitive mechanisms by appeal to evolutionary considerations. That is, considerations invoking the idea that these mechanisms might have been genetically inherited to us due to the shaping hand of biological adaptation through natural selection. With this project in mind, evolutionary psychologists often resemble the mind with a Swiss army knife, namely, a knife containing multiple tools that can serve different purposes. Each tool's function has been naturally selected under adaptation pressures to play an evolutionary advantageous role.

But like the rest of evolutionary theory, evolutionary psychology's scientific status is controversial as some philosophers and psychologists tend to think that evolutionary psychological explanations are nothing more than 'just so stories'[16]. That is, they are theoretical stories that in reality remain highly speculative assertions with not much of substantial evidential support.

As my chief purpose here is to argue *from* the vantage point of evolutionary psychology rather than argue *for* evolutionary psychology, in what follows I will

[15] See T.Lewens (2007: chapter 5) and D.Buller (2007) for discussion of the origins of evolutionary psychology.

[16] See T.Lewens (2007: 128-9) for a brief discussion of challenges to evolutionary psychology.

assume that evolutionary psychology could potentially inform our understanding of the origins and function of our psychological and other cognitive mechanism and processes. More generally, I will assume that it could inform our understanding of the functional structure of our cognitive architecture. No doubt, this is an assumption that needs to be argued for but arguing for this assumption here would have taken us far beyond from what the scope of this essay allows.

Let us now apply evolutionary considerations on the psychological mechanism operating behind 'the value of knowledge intuition'. As we made clear in section II, evolutionary considerations should be capable of explaining why we are disposed to value knowledge for both its practical value sense and for its purely epistemic value sense. This is what we identified as a desideratum for any adequate psychological explanation of the mechanism operating behind 'the value of knowledge intuition'.

Now, the intuition I want to tentatively press is that the psychological mechanism disposing us to find knowledge valuable is something that has evolved to be a constitutive feature of our psychological architecture. It has evolved because it has been evolutionary advantageous for our struggling-to-survive hunters-gatherers ancestors of the Pleistocene period- the era spanning 1.8 million to 10,000 years ago and taken to be the formative period for evolving adaptations[17]. The idea is that we, homo sapiens, so naturally and effortlessly find knowledge valuable because during our evolutionary history our hunters-gatherers ancestors who did entertain 'the value of knowledge intuition' were in better survival terms than those who didn't.

According to this idea, the psychological mechanism behind 'the value of knowledge intuition' has evolved to be a constitutive feature of our psychological architecture because it was chosen by means of Darwinian natural selection due to adaptation pressures. Our ancestors that did have this psychological mechanism could better adapt and cope with the challenges of their natural environment while our ancestors that didn't have this psychological mechanism fared significantly worst in terms of adaptation to their natural environment.

Agents equipped with this psychological mechanism could adapt and fare better than agents that weren't equipped with this psychological mechanism for a very simple and intuitive reason. The reason is that being disposed to find knowledge

[17] It is taken to be the formative period for evolving adaptations because our ancestors spent only the past 10,000 years living as agriculturists and the past few hundred years living in industrial societies. Given that the last 10,000 years our ancestors didn't meet much of evolutionary challenges as agriculturists, it is rather improbable that humans have evolved adaptations to post-pleistocene environments. See D.Buller (2008: 259-260) and B.Charlesworth and D.Charlesworth (2003: chapter 1) for discussion.

valuable would naturally have been coupled with a desire for knowledge for its own sake. We usually have a desire for things we consider good and if we found knowledge to be good then it is reasonable to surmise that we had a desire for knowledge for its own sake[18].

Thus, our ancestors that had this 'value of knowledge intuition' and the desire for knowledge for its own sake, reasonably, would have channelled this desire towards practical knowledge concerned with how to satisfy their pressing sustenance needs for food, drink, shelter, clothing etc. and this would have allowed them to amplify their survival chances. I say they would have 'reasonably' channelled this desire for knowledge towards practical knowledge of how to satisfy basic sustenance needs because they would also have the instinctive desire for self-preservation. They would have been disposed to desire to survive and to achieve this they would have to use practical knowledge for the satisfaction of their basic sustenance needs.

An evolutionary psychological explanation could again be given for our pervasive and almost involuntary entertainment of the instinctive desire of self-preservation. It is not difficult to imagine how this evolutionary explanation would go. Our ancestors that had this instinctive desire for self-preservation would have had better chances of survival from those that didn't because they would have taken more interest in themselves and their survival. Agents that didn't have the instinctive desire for self-preservation would have had substantially less chances of survival as they would have taken less or even no interest in themselves and their survival.

This understanding of the desire for self-preservation, though, should not give the wrong signals. It should not be assumed that our ancestors were pretty much Hobbesian egoists thinking only of themselves. For, there is nothing inconsistent in having both the instinct of self-preservation and other-regarding instincts (altruistic instincts, sympathy etc.). Actually, for reasons we need not pursue here it is quite plausible that there may be an evolutionary explanation for the reality of such other-regarding instincts as interpersonal cooperation and reciprocity would have often proved to be mutually beneficent for the agents of a community[19]. An agent, therefore, may very well have both, even though these may psychologically conflict in certain occasions.

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[18] There can be an evolutionary explanation here for why we tend to desire what we take to be good. If we act on the principle of what we take to be good and action requires a desire, as the prominent Humean theory of action suggests, then if we didn't tend to desire what we take to be good we would be rendered practically paralysed and this, clearly, would mitigate our chances of survival. For an influential defence of the Humean theory of action see M.Smith (1994).

[19] See Z.Ernst (2008) for how evolutionary game theory approaches the phenomenon of altruism.

If then our ancestors had this desire for knowledge for its own sake and channelled to some substantial extent this desire towards practical knowledge of how to satisfy their pressing sustenance needs (due to the desire for self-preservation), then they would have significantly enhanced their chances of survival. Obviously, if you are motivated to amass knowledge of where abundant prey is, trees with edible fruit, what sort of mushrooms are poisonous, how to make traps, use a bow, skin a bear to use its fur etc. you amplify your chances for survival and reproduction because it is more likely that you will succeed to satisfy your basic needs.

Instead, our ancestors that weren't equipped with such a psychological mechanism and didn't have such an instilled disposition to value and desire knowledge for its own sake would have significantly less chances of survival in the hostile environment of the war of nature; even if they did have the desire for self-preservation. Reasonably, if you are not much motivated to amass knowledge about where you can find clear water, fresh fruit, possible places like caves that would function as sheltering positions or hideouts in a case of emergency, which areas host dangerous predators like lions, how you can hunt, make traps, use tools etc. then your chances for survival are much less than one who thirsts for knowledge.

This evolutionary explanation seems to explain why we find various instances of knowledge to be finally valuable, that is, valuable for their own sake without any direct practical purport. We have the intuition that knowledge is valuable for its own sake because we acquire by means of genetic inheritance the intuition and desire for knowledge per se, that is, for its own sake[20]. We find various instances of knowledge valuable in the final value sense because we have a psychological mechanism disposing us to value knowledge for its own sake and this mechanism is constitutive of our cognitive architecture for evolutionary reasons. It has been ingrained in our architecture by natural selection because of adaptation pressures.

If this is to the right direction, then we have a nice evolutionary explanation why 'the value of knowledge intuition' is often entertained in the final value sense. Still, this says nothing of why the value of knowledge intuition is often entertained in the practical value sense and, as we have diagnosed in section II, any adequate explanation of the psychological mechanism operating behind 'the value of knowledge intuition' should explain why we entertain 'the value of knowledge intuition' in both senses. Otherwise, it would be incomplete and thereby inadequate.

[20] D.Papineau (2003: 73-80) makes a parallel point about how evolution could have selected a desire for true belief per se, as he says.

Perhaps, the most simple and elegant way to explain why we have the intuition that knowledge is also practically valuable is not to invoke any further evolutionary considerations, but instead invoke learning processes as these are being studied by cognitive and developmental psychology. That is, build on how our instinctive disposition to value and desire knowledge *interacts* with learning processes to provide us with the practical value sense of the value of knowledge intuition. If this idea is to the right direction, then our intuition that instances of knowledge are valuable in the practical sense is the product of interaction between our instinctive disposition to find knowledge valuable for its own sake and learning processes. But let us belabour the idea first.

Start from what seem to be empirical facts. It seems to be a fact that from infancy we find ourselves oriented towards satisfying our basic sustenance needs. We cry if we are not fed or watered on time, if we are cold etc. One idea then is that as animals with biological needs from tender infancy we exhibit the disposition to channel our desire for knowledge towards knowledge of how to satisfy our sustenance desires. We exhibit such disposition because, as we have canvassed, we also seem to have the instinctive disposition for self-preservation. We instinctively cling on what is life-preserving and refrain from what is life-endangering. We indulge, for example, in pleasure and refrain from despicable pain.

Such practical knowledge is surely to be considered very valuable as it is substantial for survival. For example, if as infants our crying is efficient in making our parents satisfy our desires then, in some sense, we learn by association that with crying we can satisfy our desires and we come to value crying and deploy it when we see fit. This is why infants seem to be particularly spoilt as they cry when their desires are not readily satisfied.

But this happens during infancy. As we grow up and acquire a first natural language and conceptual powers in the context of a community, we go on seeing practical knowledge as something good because it allows us to satisfy desires that often go far beyond the basic sustenance desires. Among other things, we desire a TV, a computer, a car and many other technological products that advertisements bombard us with in the settings of our modern society.

Thus, in time we come to associate practical knowledge with value and acquire the unconscious habit to consider knowledge that allows us to satisfy our desires as something good. We come to habitually correlate practical knowledge with value and see practical knowledge as something valuable. Actually, the habit is so deeply

internalized and unconscious that it takes some philosophical reflection to acknowledge its underlying reality. We need to exercise our conceptual powers for reflection in order to acknowledge the reality of the unconscious habit of association between practical knowledge and value.

If this psychological explanation is to the right direction, then explaining the psychological mechanism operating behind 'the value of knowledge intuition' is partly evolutionary partly cognitive and developmental. It is evolutionary to the extent we have an innate disposition to value and desire knowledge per se and is both evolutionary and cognitive-developmental to the extent we channel this desire towards practical forms of knowledge because of the self-preservation instinct. The product of this interaction is the formation of a deeply-rooted, unconscious habit to see knowledge as practically valuable because it allows us to satisfy our desires, fulfil our plans etc.

In conclusion, Aristotle's famous opening sentence of his *Metaphysics*, namely, that 'all men by nature desire to know' is quite to the point, albeit, for evolutionary reasons that in all evidence Aristotle, despite his teleological understanding of nature, was not aware of. For, although Aristotle was often saying that 'nature does nothing in vain' implying that things have a *telos*, a functional purpose they are made to serve he was still unaware that at least many of these functional purposes have been shaped by the mechanism of natural selection. A mechanism whose operation Darwin first famously made explicit.

**3 Preview of the Argument and Conclusion**

The goal of this essay was to engage on exploratory evolutionary ruminations on the origins and function of the psychological mechanism operating behind 'the value of knowledge intuition', that is, our disposition of finding knowledge valuable. Such an evolutionary psychological explanation would account why we human beings find so pervasively knowledge to be valuable.

In the first introductory section I made explicit my goal and outlined the structure and content of the essay. In section II I explained how 'the value of knowledge intuition' gives rise to 'the core value problem' and in which senses knowledge is to be considered valuable, namely, instrumentally and finally. Afterwards, I explained than any adequate psychological explanation of 'the value of knowledge intuition' should account for both senses in which we entertain 'the value of knowledge

intuition' and took this to be a desideratum for any adequate psychological explanation of 'the value of knowledge intuition'.

In the third section, I applied evolutionary consideration on the psychological mechanism operating behind 'the value of knowledge intuition'. By appeal to evolutionary considerations I attempted to account both for the practical sense and the pure epistemic sense of the value of knowledge, as the desideratum identified in section III prescribed.

As I explained, we could speculate that the psychological mechanism behind 'the value of knowledge intuition' has evolved to be a constitutive feature of our psychological architecture because it was chosen by means of Darwinian natural selection due to adaptation pressures. We have been endowed courtesy of Mother Nature with a psychological mechanism that disposes us to find knowledge valuable for its own sake because such a psychological mechanism would amplify our ancestor's chances for survival and reproduction.

It would have amplified our ancestors chances for survival and reproduction because such disposition to value knowledge would have been wed with a desire for knowledge and this coupled with the instinctive desire for self-preservation would have channelled our desire for knowledge per se towards practical knowledge of how to satisfy our basic biological needs.

This evolutionary psychological explanation seems to explain the origins and function of the psychological mechanism operating behind the disposition to find knowledge valuable. Still, this explains only why we find knowledge valuable for its own sake as the psychological mechanism disposes us to find knowledge valuable for its own sake. To account for the practical value sense of 'the value of knowledge intuition', I have appealed to the interaction between the disposition to find knowledge valuable for its own sake and learning processes as these are being studied by cognitive and developmental psychology.

The idea was that we come to have the practical value sense of 'the value of knowledge intuition' because from infancy, due to the self-preservation instinct, we learn that knowledge of how to satisfy our basic biological needs is valuable. As we grow up and our desires multiply and go beyond our basic biological needs, we come to form a deeply-rooted, unconscious habit to associate practical knowledge with value because such knowledge allows us to satisfy our desires.

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[21] I cited only the name of D.Pritchard for this work because the part of the book devoted on the value of knowledge is written exclusively by him.

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