The Path to Tolerance begins with Eliminating Certitude

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ABSTRACT

The nub of this essay is that all our certitudes are illusory. But first, let me explain certitude, an uncommon word. It means holding absolute certainty about a notion, which, though one may believe that conviction to be the result of an intellectual process, is actually a feeling generated by our subjectivities - our formative and environmental circumstances - consistent with and reinforced by them. For instance, if we are financially secure, we may believe utterly that stealing is wrong, a moral consistent with the preservation of our wealth and comfort; whereas those who are starving may be less convinced. In short, certitude is a rigid sense that no other view is arguable. Certainty is also a firm conviction about an issue, but may be reached after logical reasoning, without any involvement of emotion. For example, once we accept the premises that All men are mortal and Charles is a man, we conclude with certainty that Charles is mortal; but we probably aren't emotionally invested in that result. The availability of certainty in any enquiry depends much on the subject-matter and the methodology employed. Closed systems, like law and engineering, where accepted definitions and principles abound and deductive logic can be readily applied, offer a degree of certainty of conclusion on issues within the field. But with open topics, such as ethics, human rights, social behavior, politics and culture, both certainty and certitude about conclusions are unavailable. (The one exception is when those conclusions are dictated by religious belief, a situation which stands outside this discussion.) To say that certainty is unavailable is not to suggest that we should not hold firm opinions; merely that we should recognise that others may have contrary views for reasons no less arguable than our own.

1. Introduction

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But first, let me explain certitude, an uncommon word. It means holding absolute certainty about a notion, which, though one may believe that conviction to be the result of an intellectual process, is actually a feeling generated by our subjectivities – our formative and environmental circumstances – consistent with and reinforced by them. For instance, if we are financially secure, we may believe utterly that stealing is wrong, a moral consistent with the preservation of our wealth and comfort; whereas those who are starving may be less convinced. In short, certitude is a rigid sense that no other view is arguable.

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The availability of certainty in any enquiry depends much on the subject-matter and the methodology employed. Closed systems, like law and engineering, where accepted definitions and principles abound and deductive logic can be readily applied, offer a degree of certainty of conclusion on issues within the field. But with open topics, such as ethics, human rights, social behavior, politics and culture, both certainty and certitude about conclusions are unavailable. (The one exception is when those conclusions are dictated by religious belief, a situation which stands outside this discussion.)

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Why is certainty not achievable in respect of open topics? Because subjectivity enters the reasoning process, because language is ambiguous, especially when we address concepts themselves created by language, because truth is an abstract concept, and because of the limitations of the "tools", such as logic, which we use for reasoning.

If we rid ourselves of unjustified certitudes and certainties, what might follow?

2. Subjectivity

Subjectivity refers to the views and emotions of the individual and contrasts with objectivity and impartiality. In respect of decision-making, subjectivity describes the involvement of emotion when reasoning our way to a conclusion about a situation or issue and/or taking account of a pre-conceived notion, without regard to its origin or relevance.

When addressing the effect of subjectivity on decision-making, it helps to understand how subjectivity is inculcated within us. That our environment influences our mental development is not seriously doubted. Childhood, when our minds are particularly malleable, extends over nearly two decades. During this time, we absorb and internalise our culture, its values, its expectations. As psychologist Daniel Kahneman says, impressions often turn into beliefs.[1] From our childhood perspective, we come to believe we know how the world works. In an essay on Human Rights and Non-Western Values, Eliza Lee, of the Chinese University of Hong Kong said, …there is no human understanding that is free from historical or cultural contexts, that is, all understandings take place within traditions.[2]

Cognitive neuroscientist Mariano Sigman says: Of course, there is nothing within us that is exclusively innate; to a certain extent, everything takes shape on the basis of our cultural and social experience.

…the social fabric affects the very biology of the brain.[3]

So, as adults, internalised ideas may have roots of which we are not even conscious. In any event, our culture and environment continue to impact upon us.

That we humans also tend to have a herd mentality – doing what others do rather than deciding independently – has been long recognised in psychology; more than a century ago, Wilfred Trotter wrote Herd Instinct and its bearing on the Psychology of Civilised Man,[4] and current neuroscience endorses his view. The proposition that others steer our thoughts and actions no doubt riles many of us. We tell ourselves that we are not unquestioning followers, not sycophants nor weaklings; if we perceive the majority wrong, we say so. And this we may well do. However, as Michael Bond, writer on psychology and behavior says, our attraction to the thoughts and emotions of

others is due to subtle and complex factors, evolutionarily and physiologically based. It is subconscious and instinctive, and we follow others because doing so advantages us. Thinking like others comforts and reassures us. Indeed, we establish identity from our perception of what others reflect to us of ourselves. Moreover, emotional empathy and consistency with group views increases cooperation and aids communication and rapport. In his book, The Power of Others: Peer Pressure, Groupthink, and How the People around us shape everything we do", he says: analysis by numerous psychologists and social scientists, found that social context consistently plays a major role in shaping behaviors and attitudes.[5]

The constant change in social context explains why ideas such as social mores, ethics, even rights considered fundamental, have always changed and will continue to do so. However, that context spawns ideas does not of itself explain why we largely tend to regard current ideas with conviction of their rightness, as the best ever on topic, even the best possible. Why is this so? Again, psychological factors – illusions of progress and our sense of self – play significant roles.

As to progress, Ludwig von Mises, (1881-1973), Austrian economist, logician and social philosopher pointed out that the notion of progress only makes sense if there is a goal or purpose towards, or away from which action can be measured. Humanity, said von Mises, lacked a goal; thus, it was easy to confuse change with improvement.[6]

As to our sense of self, across humankind our individual lives unfurl through the egocentricity of childhood, to the vitality of our adulthood, where we see ourselves as in the vanguard, taking humankind forward. It is easy to believe the current age incorporates all the wisdom of the past, and that we live in the best of times so far. But we forget that we are organic beings, we err, we generalize, we hold shallow understandings of history and think it only tangentially bears on the present. We do not bring to mind that no evidence shows us smarter than our forebears or better off, because as von Mises said, progress is immeasurable. Mere modernity provides no basis for certainty about current ideas.

Other sources of environmental influence that may contribute to subjectivity include parents and siblings, indoctrination and cults, ideology and several subconscious intuitions; the desire for certainty, the desire to avoid unsavoury consequences and the desire for justification.

Whatever the sources of influence, no two people will have identical experience in their formative years and as no two people have an identical genetic mix – perhaps apart from identical twins – no two people will be identical in subjectivity.

With this understanding, we return to the question, what, if any, is the effect of subjectivity on decision-making?

The 18th century Scottish philosopher, David Hume, opined that emotions were thoughts which could form part of the reasoning process.[7] Even such a committed logician as Bertrand Russell (1872-1970) acknowledged that our reasoning is to some degree affected by subjectivity.[8] They have been proven right.

Modern neuroscience demonstrates that, at least initially, our feelings are involved in the mental decision-making process. Hayley Bennet, neuropsychologist and lawyer and Tony Broe, neurologist, in a paper entitled in part, The neurobiology of judicial decision-making, delivered in 2009, describe brain function during decision-making.[9] In short, the first area of the brain to be involved in the reasoning process links with parts of the body where emotional states are experienced. The thinker may or may not be aware of this involvement of feelings. Once feelings have been absorbed, another area of the brain consciously sifts prioritised information. At this stage, inappropriate emotional bias may be considered and excluded. In other words, the invasion of subjectivity does not mean that there can be no such thing as objectivity. Objectivity means the exclusion of emotion and pre-conceptions from decision-making, attempting to reason to a conclusion using only those considerations relevant to the issue.

But while inappropriate emotions may be excluded, feelings considered appropriate may well not be. Kahneman describes our reasoning in making decisions succinctly, cognition is embodied; you think with your body, not only with your brain.[10]

For centuries, in the Western world, the concept of judicial impartiality necessarily implied the notion of the judge setting aside preconceptions, personal attitudes and emotions – in other words, being objective. Thus, judges were ideal subjects for a study of decision-making. Bennet and Broe examined the decision of the High Court of Australia in a landmark

case commonly known as Mabo, dealing with whether indigenous people in Australia retained any title to land.[11] The case was decided in favour of the indigenous plaintiff, by a majority of six, with one dissenter. Save for one, the judgments of the majority included emotive statements. For example, Justices Deane and Gaudron say; An early flashpoint with one clan of aborigines illustrates the first stage of the conflagration of oppression and conflict which was, over the following century, to spread across the continent to dispossess, degrade and devastate the aboriginal peoples and leave a national legacy of unutterable shame (para.50) and; The nation as a whole must remain diminished unless and until there is an acknowledgement of, and retreat from, those past injustices. (para.56). These remarks express emotions and subjective values which are consistent with the choices the two judges made when discussing competing prior authorities or conflicting principles. Bennett and Broe were unsurprised. Addressing the results of research in neuroscience, they say: A major finding, that some may consider antithetical to historical and philosophical conceptions of reason and logic, is that emotion often plays an intrinsic role in deliberation and decision-making.

The Honourable Michael Kirby, himself a former judge of the High Court of Australia, said:

Decision-making in any circumstance is a complex function combining logic and emotion, rational application of intelligence and reason, intuitive responses to experience, as well as physiological and psychological forces of which the decision-maker be only partly aware.[12]

Given that decision-makers – all of us – may be unaware of emotional influences, and if aware, may think them appropriate, the chances of their exclusion from the reasoning process seem small. In any event, when a choice between objectively relevant factors falls to be made, subjectivities decide the result.

Because of the individuality of our subjectivity, when emotions enter the reasoning process it is unlikely that any two people will reason about the same issue using only identical factors to which each gives identical weight. If we acknowledge this, we may regard our conclusions as more personal, not based only on objective factors available to anyone. Can we then dismiss all contrary opinions of others – be certain that ours is the only truth?

In any event, subjectivity is only the first of the constraints that diminish the strength of our conclusions.

3. Ambiguity of language

I do not speak of ambiguity of language that may be cured by adding context, or correcting syntax or sentence structure, but rather of words which of themselves are imprecise or vague – words the reach or boundaries of which are not readily or at all delineable, that are always susceptible to alternative definition. As Professor James Raymond is fond of saying, ordinary language is rotten with incurable ambiguity.[1]

Here's the problem for those wishing to reason about an open issue like ethics, or social behaviour. Ethics don't exist without language. We necessarily reason about concepts created with language, using language in our minds. Reasoning involves coherent thinking. Steven Pinker, psycholinguist and cognitive scientist says. Though the claim that good prose leads to good thinking is not always true….it may be true when it comes to the mastery of coherence. In effect, language and reasoning may be linked.[2]

Yet the very words that describe concepts and values are often incurably ambiguous. While much can be done to reduce ambiguity of words and phrases by qualifying and clarifying the meaning that the author intends, attempts can easily turn into quagmires. To succinctly and coherently convey the implications and limits of a proposition like Infidelity is immoral requires substantial discourse – definition of infidelity, description and foundation of the body of ethics which renders infidelity immoral and explanation of any exceptions to the rule. The exercise demands skill, because whenever a value-laden term or new concept such as marriage is used, potential for further ambiguity arises, e.g., what if married persons agree on an open marriage, or a culture approves of extra-marital copulation. Professor Raymond warns that many a verbose and convoluted passage has resulted from a desire to be perfectly clear.

If our language used when reasoning is at any point imprecise, then our thinking at that point must also be imprecise, and we cannot rationally be certain of any conclusion resting upon imprecision.

I suggest the following words carry doubt as to what they include or exclude and/or allow more than one definition: pornography, immoral, treacherous, civil, improper, cheating, dishonourable, justice, justification, sin, love, loyalty, torture, cruel, degrading, privacy, economics, psychology, political, slavery, freedom, equality, sovereignty, violence (and thousands more)

Many philosophers agree that ambiguity of language bedevils the expression of abstract ideas. In the twentieth century, an entire school of philosophers, the linguistic analysts, held that many problems which philosophers had debated over centuries should be reinterpreted as problems about the meaning of words. And even unbelievers in linguistic analysis, like Bertrand Russell, acknowledged ambiguity of language as a problem limiting certainty.[3]

Ludwig Wittgenstein came to acknowledge that vagueness of language and its dependence on context militated against unity of meaning.[4] German-born Rudolf Carnap thought language in relation to some fields was so uncertain that no unchallengeable propositions could be formulated.[5] Jacques Derrida, an Algerian-born Frenchman, maintained that language was riddled with generality to the extent that text could not convey fixed meaning.[6] British philosopher Bryan Magee says language is certainly problematic in a great many ways, and its uses impose limitations.[7] Indeed, the proposition that language is ambiguous may be agreed among philosophers to a greater extent than any other.

Thus, to unavoidable subjectivity, we can now add incurable ambiguity in language, as significant impediments upon our capacity to reason our way to certainty, especially in respect of open issues.

4. The idea of truth

Truth is but a concept which essentially asserts the absolute correctness of a proposition.

What we as individuals regard as truths may stem from a variety of sources, some of which we've identified: culture, family, education, associates and media, to list just a few. The reliability of every one of these sources may be in question. Moreover, as we will see in the next section, even if we make our own analysis of an issue, the methods and validity of our reasoning will be critical to the worth of our

conclusion. On both these accounts, we should hesitate before concluding we have found the truth. But the main reason for withholding certainty is the nature of truth itself.

Bryan Magee summarises the philosophers of the Age of Reason this way: The search for certainty that had been the central preoccupation of Western philosophy since Descartes was an error; it was a search for something that it was logically impossible we should ever find. Human knowledge, as it actually is and can only ever be, is not a revelation of something objectively and timelessly true, an assured grasp of something existing out there independently of ourselves. It is what we have the best grounds at any given time for believing.[1]

Thomas Hobbes, (1588-1679) in his treatise Leviathan, said, True and False are attributes of speech not of things, so where there is no speech there is neither truth nor falsehood.[2]

We ask, is any proposition the truth?

Scientific conclusions command the peak of certainty. This is largely due to the nature of the subjects that science explores, and the methodologies used. Fields such as chemistry and physics enquire into the physical world – matter, the interactions of substances, energy, forces and the nature of time and space. In contrast to open topics, the subject matter has not been created by humans.

Science uses types and degrees of scrutiny unavailable in other spheres of enquiry. Firstly, given the tools available to modern scientists, the concern of philosophers arising from the limitations of our senses has substantially dissolved – thanks to technology, our sight reaches into the depths of the universe and to particles thousands of times smaller than a pinhead: our hearing likewise.

Secondly, scientific method involves experimentation designed to disprove the hypothesis as a way of testing its reliability. Testing is extensive. Eventually, an hypothesis may become a theory. Thirdly, by using symbols, science avoids much of the ambiguity of language.

Yet, scientists themselves do not regard theories as certainties, but as understandings with which they work until those theories are shown to be in doubt.[3]

Once we move to other scientific fields, such as biology and zoology, which study forms of life,

conclusions are even less certain, especially if behavior is the subject of enquiry.

Historical fact also deserves a fair degree of certainty, yet history is sometimes rewritten.

What of conclusions about open topics? How different the circumstances of enquiry are. The subject matter is not from the material world but is about concepts and values. The enquiry does not proceed from repeated experimentation. Few starting points for reasoning as solid as empirical data present; rather, we apply imperfect patterns of reasoning to propositions expressed in language which is often imprecise.

We have already seen that because of our subjectivity and the ambiguity of language we should seldom, if ever, hold our opinions with certainty. That Truth is but a scale of probabilities on which opinions about open issues do not rank highly, is but a further reason for withholding certainty from those opinions.

5. Patterns of Reasoning

Reason logically, is useful but incomplete advice for most of the questions that confront us. Logic only functions with propositions from which inferences can be drawn. If competing inferences may be drawn, we can only draw a conclusion on the basis of possibility or at the strongest, probability.

Traditionally, logicians recognised only two patterns of logic, deductive and inductive. Induction moves from the particular (propositions or observations) to the general (the conclusion). For example, a biologist observes magpie geese in Norway for some years – the particular– and concludes that geese are a pair-bonding species – the general. But that conclusion can only be one of probability. The observer has not seen every magpie goose on the planet and in any event, other conclusions may be available from the observations of goose behavior. In earlier times, many logicians rejected inductive logic because it did not produce an unchallengeable result i.e., the truth.

In contrast with inductive logic, deductive logic proceeds from the general to the particular. The general proposition or premise is assumed to be true – a given. Inferences are drawn and result in the conclusion – the particular.

Take, All lions are carnivores. The verb, are, operates to equate the subject, lions, with the object, carnivores, allowing inferences to be drawn, e.g. at least some lions eat meat and/or at least some lions eat some meat. And given the quantifier, All, we can go further, and infer that, No lion is a vegan. Logicians would say that this conclusion is true but mean only that the inference is validly drawn from the premise. However, within these constraints, we can be certain of the conclusion. In deductive logic, the answer is contained within the premises. Thus, in one sense we learn nothing new from applying a deductive pattern to a proposition.

In any event, weaknesses lie at the core of deductive logic. Firstly, in most situations, we do not wish to assume the truth of any proposition, but rather do the best we can to establish its validity. Secondly, arguably more than one proposition from which to reason deductively may be available. Where there is choice between propositions, or doubt about their truth, there can be no actual certainty of conclusion, though the deductive method may be validly applied.

For example, assume we wish to decide whether capital punishment is ethical or wrong. One may believe that all human life is sacred or that the right to life is a fundamental, inalienable human right. On the other hand, one may adopt the proposition that justice lies in an eye for an eye. Either of the first two of these views could be a starting point to reason deductively to the conclusion that capital punishment is wrong. The third proposition could be used to reason that capital punishment is ethical. To be certain of either conclusion one must assert that the contrary starting point is objectively inarguable.

One might also form a view about capital punishment because one thinks that it is not a deterrent, that an innocent person might he executed or that the cost of keeping criminals imprisoned for life instead of their execution, is unacceptable. But these are merely factors that might be taken into account when deciding about capital punishment. None can form a premise for deductive reasoning, and therefore are logically incapable of leading to a certain conclusion.

From around the 18th century to date, the number of methodologies in the field of logic has hugely expanded. Many result in conclusions of probability only, but of those which claim certainty, some further

comment on their utility in decision-making may be made.

Systems of formal logic generally replace the language of propositions with a set of symbols. Practitioners claim that this substitution enhances concentration on the form of argument rather than on the meaning of the actual words. Further, while in a few systems, rules expressed in ordinary language are used to test validity of conclusions, formal logic commonly tests validity by various mathematical, tabular or graphic representations. Practitioners claim that if the rules of logical thought are expressed in ordinary language and require memorisation, interpretation, selection and application, too much room for error arises. They argue that their methods are more mechanical and therefore more accurate.

But, If the words of a proposition are ambiguous, vague or incurably imprecise, substituting a symbol for them does nothing to remove those deficiencies. Indeed, substituting a symbol for the words of a proposition may impede analysis because it removes the actual words from continued scrutiny while the logical method is in use. Further, often logic can be applied only to some of the questions that we must consider before reaching a conclusion overall and in such cases the remainder of our analysis will be in language and any advantage of symbolization will be confined.[1]

But the most severe limitation of the methodologies of logic is that they cannot be applied to all factors in the majority of decisions we make. Questions such as: should I change my job, should I marry Alex, should I have another child, should I cheat in the exam, should I fudge my tax return, how should I react to my neighbour whose rotten mangoes fall from his tree into my yard. To sensibly reach conclusions about such issues we may need to: decide the relevance of propositions; choose between them where they conflict; assign weight to those selected and make predictions about future events.

Today, cognitive scientists and psychologists challenge the very utility of deductive logic. French cognitive scientist, Hugo Mercier describes the certainty achieved by deductive process as ecologically dubious. [2] The one logical method that could produce certainty of conclusion has fallen into disfavour.

There is a second problem with rationality for those who seek certainty. A fundamental principle of sound reasoning is that we must consider all factors relevant to the issue and no factor irrelevant to the issue. Moreover, not all relevant factors will deserve the same weight. But what are all the factors relevant to a question like, Should I raise with my marriage partner that I have cheated on her/him? Or should I marry this person? Should or should I not condemn a person who expresses support for a cause with which I disagree. And what is the ranking or hierarchy of relevant factors?

No set of rules guides us. In respect of open topics relevant factors and their weight are always debatable and personal choices may depend on underlying attitudes. (Decision theory provides a means of ranking, but no criteria for the choice of factors)

Thus, a paradox presents; in logically deciding an issue, the concept of relevance demands the selection and ranking of factors or propositions, yet it does not tell us how this can be done.

Certainty of conclusion in respect to open topics is therefore simply unavailable.

So much for the methods traditionally recommended for sound reasoning. How do we actually reason when making most of our decisions?

Extensive research has been conducted into the way we think. In Thinking, Fast and Slow, Kahneman describes thinking fast as the initial part of a dual mental process which throws up immediate responses to situations. These he calls heuristics – rules of thumb or intuitions – and we tend to use them to make judgments and decisions. While heuristics may generally serve us well, especially when rapid decisions are needed, we make poor choices not only because we allow feelings too much weight or to illogically affect our choices but because , for example, we over-simplify or suffer confirmation bias, substitute an easy question for a hard one , make inconsistent decisions about the same issue merely because of the way the problem is presented, are influenced by irrelevancies, or take into account only the knowledge that comes to mind. As to the last deficiency, Kahneman says that even though our initial approach is to search for a coherent answer, what we arrive at may not be the best answer if that coherence is limited to whatever information is before us.[3]

In recent years experts have described many discrete patterns in our reasoning which are far

removed from the application of traditional logic. These include:

Abductive reasoning, which seeks the most plausible explanation for an event, taking into account not just observations, but background information and beliefs considered reliable, all measured against the range of possible explanations. Furthermore, development of a tentative conclusion may bring into focus a need for further data, which in turn may affect plausibility, and so the reasoning re-opens.[4]

Naturalistic decision-making, which is the way experts make decisions, taking account of the urgency and confused environments in which professionals often operate and the way they apply expertise, but that otherwise closely resembles abductive reasoning.[5]

Category-based inductive reasoning, which uses our knowledge about categories to draw inferences, whether about members of a category or about the likelihood of a feature being common across categories. In such reasoning, pitfalls abound, but tests show that we seek rationally to measure the strength of potential inferences against the nature of information given or known about features of the category or categories.[6]

Segmentation of the ways we reason into such discrete types may obscure a more general and useful picture of the way we reason. These types are basically plumped-out versions of inductive reasoning, and all indicate that much of our rational thought has the nature of judgment, through a balancing of any factors perceived as relevant and worthy of weight, rather than, as in formal logic, controlled by rules devoid of content and context. We do not reason with unadulterated logic because it is insufficient for most purposes.

Why do we reason the way we do? Because our brain and body is an organism. Biological factors, such as weariness, stress and preoccupation impact our ability to analyse and decide. Metacognitive processes govern the nature of cognition; theories include that we stop thinking as soon as we are satisfied our conclusion is correct, or that we can do no better.[7] German psychologist Gerd Gigerenzer argues that our rationality is not purely logical.[8] He built on the work of American economist, political and social scientist Herbert A Simon, who also regarded imperfect reasoning as inevitable, our innate cognitive limitations confining us to bounded rationality.[9] In a brief discussion of rationality, Kahneman says, An inconsistency is built into the design of our minds.[10]

Cognitive scientists increasingly understand this. At least two of them say:

Our belief that we can, in principle, access every piece of knowledge in any given situation may be an illusion. We may not be general-purpose reasoning systems at all.[11]

We can now see why most of the decisions we make and opinions we form are ones of which we should not be certain. Yet certitude and certainty live on.

6. What flows from our certitude and what might follow if we rid ourselves of it.

Bryan Magee wrote, of the thoughts of David Hume,

The wise course, he says, is to eschew all forms of dogmatism and be permanently prepared to revise our expectations in the light of experience, while at the same time acting as boldly and resolutely as getting the most out of life requires us to do…in practice the adoption of this approach has certain very large implications. One is a massive, humane tolerance…His writing penetrated almost uncannily into the nooks and crannies of our certitudes, prising them apart.[1]

Implicit in this view is the connection between dogmatism (fundamentalism) and certitude, the one reinforcing the other. Fundamentalism shares features with ideologies. Both fundamentalists and ideologues take a system of ideas and elevate it to pre-eminence above all other factors that might otherwise bear upon how they act. For them, the end justifies the means, often reprehensible on all other considerations.

Another regrettable result of certitude and unjustified certainty is that the ideas so held act as premises for deductive reasoning, producing conclusions taken as true, when the premises and conclusions are only arguable at best. Take the assertions that human rights are innate and inalienable. One may deductively reason that therefore every human already possesses them. So, believers may even take up arms against those who ignore them, claiming that they are justified in so doing. If human rights are merely aspirational, then those who act in this way are misled by their own certitude.

Finally, as Magee's summary of Hume's ideas implies, certitude and undue certainty generate intolerance. Conversely, forgoing our certitudes implies massive humane tolerance.

Can we change?

Russell posed the question, How to live without certainty and yet without being paralysed by hesitation and he acknowledged, Uncertainty, in the presence of vivid hopes and fears, is painful…[2]

Yet, with awareness of the subjective underpinning of our own worldviews, we may acknowledge that others see things differently in the light of their own subjectivities. If we accept what has been said in this paper, then we might abandon, at least intellectually, the certainty with which we once held many notions.

But our certitudes will not be easily shed, given they are embedded in the subjectivities that give us our identity. Because of this, certitudes are seldom deterred by logical argument to the contrary of them. To forego them takes courage and introspection, as we must first come to understand the circumstances that shaped us. But dispel them we can, for as David Mc Raney says in How Minds Change, ….Changing our minds became our greatest strength as a species.[3]

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