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I am currently working on improving and expanding this essay. Please send suggestions.

An Essay on Knowledge and Belief

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Abstract: This essay treats knowledge and belief, both in various senses. The focus is on propositional knowledge (knowledge-that) but it also treats both objectual knowledge (knowledge of objects in the broadest sense, or knowledge-of) and operational knowledge (abilities and skills, knowledge-how-to, or know-how). It begins with knowledge in a strict sense. In this sense, a given person knows that a given proposition is true only if the person's judgment that it is true was the culmination of a cognitive process which includes understanding the proposition, gathering sufficient evidence based on personal experience of the facts the proposition is about, and bringing that evidence to bear on the issue of whether the proposition is true. In this sense, every proposition known to be true is true. Moreover, knowledge in this sense is personal; it represents a cognitive accomplishment by the knower, and there is no way to buy knowledge or even to impart it. A teacher can assist by directing student attention and encouraging students to become

more autonomous by doing things for and by themselves. In this essay, belief that is knowledge in the strict sense is called *certain knowledge* or *cognition*. Other belief merits being called knowledge only to the extent that its acquisition approximates cognition, knowledge in the strict sense. Accordingly, propositional knowledge in the broadest sense spans a spectrum between two limiting cases; at one end we have cognition, which is rare outside of mathematics, and on the other end we have groundless belief, which is not [125] knowledge at all; it is called *credence* here. In this broad sense, knowledge includes cognition but excludes credence. Between the two extremes we have what is conveniently but awkwardly called *probable knowledge*. Somewhere along the spectrum of probable knowledge we have *moral certainty*, belief that is sufficiently grounded to serve as basis for responsible action and warranted assertion. A member of a jury should vote to acquit unless moral certainty has been achieved. *Scientific certainty* is an even higher level of warranted assertibility. We can have scientific certainty that smoking is deleterious to health.

Certain Knowledge

The distinction between knowledge and belief applies only to propositional knowledge (or knowledge-that) and not to either objectual knowledge (knowledge-of) or operational knowledge (knowledge-how-to). Each kind of knowledge involves the other two kinds. My propositional knowledge that no square number is twice a square number involves among other things my objectual knowledge of the system of numbers (positive integers) and my operational knowledge how to square numbers. It also involves further operational knowledge: my ability to count and to perform other arithmetic operations, my ability to understand propositions, my ability to make judgments, and my ability to deduce conclusions from premises – to mention a few of the skills used acquiring arithmetic knowledge.

In the strict sense of 'know', the sense used in this essay unless explicitly indicated otherwise but rarely used outside of mathematics and philosophy, every proposition known to be true actually is true, and, except in rare cases, was true before it was known. Truth is a precondition to certain [126] knowledge, which is objective in that it is of objective reality. Moreover, every proposition known to be true is known to be true by a person. There is no such thing as disembodied knowledge. Propositional knowledge is personal: it is subjective in the sense of being achieved by a knowing subject. Knowing requires that the knower accurately judge based on conclusive evidence. Philosophers can agree to use the words 'know' and 'knowledge' in the strict sense and yet disagree on whether a given proposition is known to be true by a given person or whether there is any knowledge outside of mathematics or even whether anyone has ever known any proposition to be true.

The verb 'believe' has broad and narrow senses. In the narrow or exclusive sense—sometimes signaled by a word such as 'merely' – no proposition is known to be true and believed to be true by the same person: "beliefs exclude knowledge". A person aware of merely believing will sometimes answer, "I believe so" where a person who knows would answer simply "Yes". In the narrow sense, belief is partly or entirely subjective in the sense of coming from within the believing subject: it includes a component, however small, going beyond objective evidence and deliberation. For

example, some or all of what was taken as evidence was in some sense constructed by the believer. However, nothing precludes subjective beliefs from being true—in some cases by accident, so to speak. Partly subjective beliefs are sometimes called *inferences*, especially if the objective component is significant; but the word 'inference' has other uses as will be seen below. Entirely subjective beliefs are what I called credences above. In the broad or inclusive sense used in this essay—sometimes signaled by suffixing words such as 'in the broad sense'—every proposition known to be true is believed to be true: "beliefs include knowledge". In order to speak of belief that a proposition is true, we [127] sometimes speak of *belief in* the proposition. Sometimes "I think that" is interchangeable with "I believe that".

Certitude is the subjective feeling of assurance of the truth of a proposition. Certitude can be the result of thorough objective investigation which started from a suspension of belief or even from doubt or disbelief, and it can also arise without investigation or be the result of deception, rationalization, indoctrination, error, or hallucination, to mention a few. O. W. Holmes, Jr., reminded us that "Certitude is not the test of certainty". Certainty, as used by Holmes and in this essay, is not a feeling at all; it is the state of having knowledge in the broad. Absolute or mathematical certainty is the state of having knowledge in the strict sense. Moral certainty and scientific certainty are both forms of states of probable knowledge.

It is unfortunate that the words "I am certain" often indicate certitude not certainty and that certitude, the feeling, is often not distinguished from the mental states it is sometimes a reflection of. It is even more unfortunate that the two words 'certitude' and 'certainty' are sometimes used interchangeably with one meaning. It is confusing that sometimes when the two meanings are distinguished, the words are used with the meanings reversed.

As Holmes said, certitude is not always based on certainty. Moreover, certainty does not always give rise to certitude and when it does time might pass between the achieving of certainty and the feeling of certitude. Even absolute certainty is not always or not immediately accompanied by certitude – especially in cases where the knower is at first surprised, delighted or dismayed to find out that the proposition is true. In fact, for modest and objective investigators into important issues, the more certainty they achieve the more they grasp the complexities and the less certitude they feel. As implied above, philosophers disagree on whether absolute certainty is achievable. John Stuart Mill had certitude that "There is no such thing as absolute certainty". Belief [128] spans the spectrum starting with cognition or absolute certainty, the limiting case of entirely adequate evidence-based deliberation, after which knowledge in the broad sense begins, continuing through scientific certainty and through moral certainty, and finally ending with credence or groundless belief, the limiting case of total lack of evidence-based deliberation.

As an analogy consider the spectrum of beliefs to be represented by fractions between zero and one inclusive of end-points, where the sizes represent amounts of "evidentiality". The spectrum of probable knowledge excludes zero (the credences) and

one (the cognitions), but the spectrum of knowledge in the broad sense excludes only zero.

Many of my beliefs, including all those based on testimony, are not *my* knowledge, and some, even some that are true, are not knowledge for anyone. An example is the famous Fermat Theorem: given any three numbers that are all the same power exceeding two, no one is the sum of the other two. This implies that no cube is a sum of two cubes; that no fourth power is a sum of two fourth powers; and so on. I think that I am fully justified in believing this – mathematicians I have reason to respect have testified that it has been proved to be true by a proof that has been carefully studied and found to be cogent by qualified experts. Here is a justified and true belief of mine that is not my knowledge, i.e. not my cognition; it is of course one of my scientific certainties. But the proposition in question is a justified true belief of many mathematicians for whom it *is* knowledge. With regard to the Fermat, while I have certitude but not absolute certainty, some mathematicians have certitude and absolute certainty. I have probable knowledge that the Fermat Theorem is true. In fact, I think I have moral certainty, perhaps even scientific certainty.

How does a person go about arriving at knowledge of the truth of a proposition even if, in at least some [129] cases, knowledge in the strict sense is the ideal limit of a process that can never be completed—except perhaps in mathematics? Let us use the word 'hypothesis' for a proposition not known to be true and not known to be false by a given knower. In the first place it is necessary to understand the hypothesis to be investigated. Next, it is necessary to connect with the reality that the proposition is about in order to acquire from it evidence sufficient to ground a judgment that the proposition is true. Third, it is necessary to marshall the evidence, to bring the evidence to bear on the hypothesis. Finally, it is necessary to see that the evidence is conclusive and to accurately judge on the basis of the understanding and marshalling that the proposition is true. A belief that resulted from successful completion of this process is said to be *cognitively* grounded or justified.

In the case of the proposition that no square number is twice a square number, which was probably known to be true by Socrates, Plato, Aristotle, Leibniz, Pascal and many others, the evidence phase included reviewing previously known arithmetic propositions and the marshalling phase included inferring the hypothesis from them by logical deduction.

Knowledge is cognitively justified true belief. In this context the word 'true' is redundant in the sense that every cognitively justified belief is true. My belief that a given proposition is true is cognitively justified once I have successfully completed the four-step method or its equivalent. Moreover, a proposition that is a true belief of mine not now knowledge can become cognitively justified and thus knowledge if I successfully complete the four-step method.

The verb 'justify' is ambiguous. In other senses the word 'true' is not redundant in the sentence 'knowledge is justified true belief', which then expresses false and misleading propositions, as I show below in agreement with Plato, who is thought to have

criticized such formulations toward the end of the *Theatetus*. In [130] some of the other senses, justifying a belief involves explaining something to others: perhaps why I should not be blamed for having the belief or why other people in my circumstances would have come to the same conclusion. No matter how these explanatory senses of justification are spelled out, it is clear that knowledge is not justified true belief. Gaining knowledge that a proposition is true does not require explaining anything to anyone.

More generally, in any sense of 'justify' in which a false belief of mine is justified there are indefinitely many propositions that could become justified true beliefs without becoming my knowledge. The reason is based on the fact that from any false proposition indefinitely many true propositions are deducible. If I justifiably believe that you own a new pen when in fact your pens are all old, then I could justifiably believe without knowing the true proposition that you own a car—if I were to deduce the latter truth from the former falsehood. My belief that you own a pen would have been formed by a flawed process – in this case inferring from a false premise, one form of begging-the-question.

In the cognitive sense of 'justify' every justified belief is true and, in the strict sense of 'knowledge', justified belief is knowledge; knowledge is justified belief. To be even more explicit, cognition is cognitively justified belief.

Cognitivism, Probabilism, and Skepticism

Among the tensions that pervade discussions of knowledge and belief is the perennial issue of whether knowledge in the strict sense is ever achievable or whether it is merely an ideal to which objective people can only strive but never fully reach. My personal opinion is that it is achievable but only rarely. I believe that the *main* role of the concept of cognition in our lives is serving as an ideal standard by which to [131] measure our performances and as a constant reminder of the shakiness of most of our beliefs.

With respect to any given proposition, we can distinguish three philosophic viewpoints a given person might have: cognitivism, probabilism, and skepticism. Cognitivism holds that the proposition is or can be known in the strict sense, i.e. that it or its negation is or can become certain knowledge or cognition. Probabilism holds that the proposition cannot be known in the strict sense, but that it or its negation is or can become morally certain or even scientifically certain. Skepticism holds that the proposition cannot be known in the strict sense, and that neither it nor its negation is or can become even morally certain much less scientifically certain. I agree with cognitivism with respect to many but not all mathematical propositions. I agree with probabilism with respect to many but not all propositions about the material world. For example, I think that I have scientific certainty that smoking is deleterious to health. I agree with skepticism with respect to most but not all philosophical propositions. For example, I think that it is impossible to know even with moral certainty whether there is cosmic justice, i.e. whether each good act will be rewarded in proportion to its degree of goodness and each bad act will be punished in accord with its degree of badness.

Understanding Propositions

Understanding a proposition is grasping its truth-condition, knowing what its being true would be. Before a person can begin to acquire evidence by which to judge that a proposition is true it is necessary to understand the proposition. In fact, it is necessary to understand a proposition before one can wonder whether it is true or false, before one can become aware that it is a hypothesis. There are many propositions that are widely understood but are not known to [132] be true and not known to be false by anyone – or so it is said. Clearly in most if not all cases it would be impossible to known with absolute certainty, to have a cognition, that a given proposition is neither known to be true nor known to be false by anyone. This would require exhaustive knowledge of the mental states of every person now alive.

The Goldbach Hypothesis is that every even number exceeding two is the sum of two prime numbers. This proposition is easy to understand but difficult to settle. Despite the fact that many able mathematicians have spent long hours trying to determine whether it is true, none have succeeded.

Knowing That One Knows

I believe that I know that every [geometric] square is equal in area to the sum of two smaller squares of different sizes. And I know that each such square is equal in area to the sum of two smaller squares that are equal to each other. If you draw the two diagonals, you make four isosceles right triangles, any two of which make a square. I remember discovering this and proving it in connection with one of my many readings of Plato's Meno. This geometric proposition is related to some supposedly discovered and proved by Pythagoras. In order for me to know that this proposition is true it was not necessary for me to recall the details of my own thought process. But for me to know that I know this proposition to be true it is necessary for me to be able to recall the processes by which I gained that knowledge and to verify that the steps were properly carried out and completed. For example, I must verify that at that exact time I understood the proposition, that I gathered sufficient evidence, that I properly brought that evidence to bear on the issue of the truth of the proposition. I doubt whether this is even possible. The proposition itself is about geometric squares; it is not [133] about me and it is not about a proposition. The proposition that I know that it is true is about me (my past cognitive history) and about the proposition; it is not about geometric squares. Knowing that one knows is different than knowing, and far more complicated and problematic.

Similar points apply in the case of belief. I imagine that there are propositions that I believe but concerning which the issue of *whether* I actually do believe them has never come up. In such cases, I believe that it is true but I do not even believe that I believe it.

One of the most confusing mistakes that we can make regarding cognition or even knowledge in the broad sense is thinking that in order to know it is necessary to know that we know. There are many people who have cognitions who do not even understand, much less know to be true, the proposition that they know the cognition to be true. A

person who knows that five plus seven is twelve need not understand the proposition that the proposition that five plus seven is twelve is known to be true. The idea that knowledge that a proposition is true requires knowledge that the proposition is known to be true leads to an infinite regress and thus to skepticism, the view that knowledge is impossible. Persons who know that I am writing about knowledge and belief need not know that they know that they know that I am writing about knowledge and belief. Why anyone should have thought otherwise has baffled me for years. By the way, we should never forget that the skeptics do not feel bound by logic or by the requirement of testifying in accord with their own knowledge—which they deny they have.

The problem of knowing whether one knew is closely related to the problem of knowing how one knew. For example, can we determine of a given cognition whether it was inferred from previous cognitions or whether it was achieved by some other means? [134]

Beliefs formed by logical deduction from previous beliefs were called *inferences* and those formed without deduction were called *intuitions*. Some philosophers from previous centuries have believed that it is possible for people who have gained knowledge that a proposition is true by inferring it from previously known propositions can tell that that is so. Moreover some have even held that in such cases the knowers have the capacity to trace their chains of reasoning back and back until they come upon propositions that they knew to be true without inference. These propositions known to be true without inference were called axioms or first principles. Even though the overwhelming majority of mathematical cognitions were held to be the results of inference from axioms or first principles not one example of such backwards tracing has been presented and no one has proposed a criterion for determining of a given belief that it had not been established by inference.

Results, Intuitions, Inductions, and Inferences

We need a word for a belief that is the result of a cognitive process however complete or incomplete, successful or unsuccessful it may have been. In other words, we need a word for beliefs that are not credences. I propose *result*. Every cognition is a result and so is every moral certainty and every scientific certainty. Every result that is not the conclusion of a chain of deduction is believed on the basis of experience, however accurate or inaccurate. I propose *induction* for a belief arrived at through experience and not through deduction. I am not the first to adopt this usage. Using this [135] terminology, we can say that every belief is either a result or a credence. Further, we can say that every result is either an inference or an induction.

An example of an induction is Archimedes' belief in his Law of Buoyancy that an emersed body is buoyed by a force equal to the weight of the displaced fluid. My initial belief in Archimedes' Law was also an induction in this sense, but unlike Archimedes' belief, mine involved very little experience: it was largely based on my father's testimony and the experiment he showed me how to do.

There is an important difference between inductions involving sense experience such as the Archimedes example and those based on abstract experience such as those traditionally attributed to Thales, Pythagoras, Euclid and other mathematicians. Those involving sense experience are not normally given a special term, but those involving abstract experience are often called *mathematical intuitions*. Every mathematical cognition is either an inference or a mathematical intuition.

Truth and Knowledge

Every proposition is either true or false. But not every proposition is either known to be true or known to be false, by me or by any given person. In fact, not every true proposition is known to be true: I know that there is a true proposition not known by me to be true. I say this even though I know that I cannot give an example that I know to be a true proposition not known by me to be true. Truth includes knowledge and goes well beyond knowledge.

No proposition is both true and false. And no proposition is both known to be true and known to be false, by me or by any given person. In fact, no proposition is both known to be true by me and known to be false by some other [136] person. Nevertheless, there are many propositions believed by me to be true and believed by others to be false.

There are many modern philosophers who believe that I am wrong when I say that I have strict knowledge of the fact that no square number is twice a square number. It is not that they have any doubt of the fact, rather they disbelieve that I have absolute certainty of it. I am glad to discuss the issue with them. Without them this essay would less interesting.

What do I mean by saying that the proposition "No square is twice a square" is true? Better what do I mean by saying that the proposition "No number which is the sum of two numbers of the same power exceeding two is also of that same power" is true? Even better *would* I mean by saying that the proposition "No perfect number is odd" is true? The reason I moved through these example has to do with the following facts: I think I know the first to be true, I think that the second is true but that it is not known to be true by me, and I neither believe nor disbelieve the third. Moreover, I think that the third is not known to be true nor to be false by anyone.

Nevertheless, I am fully warranted in asserting the following.

The proposition "No perfect number is odd" is true if and only if no perfect number is odd.

The proposition "Every perfect number is even" is true if and only if every perfect number is even.

These contrast with the following.

The proposition "No perfect number is odd" is known to be true if and only if some person knows that no perfect number is odd. The proposition "Every perfect number is even" is known to be true

if and only if some person knows that every perfect number is even.[137]

In order for these propositions to be true it is not necessary for anyone to do anything. In order for these propositions to be *known* true it *is* necessary for someone to do something—something very difficult that no one has yet managed to accomplish.

Beliefs and Disbeliefs

Saying I *believe* a proposition amounts to saying I believe it to be true, or it is one of my beliefs. Saying I *disbelieve* a proposition amounts to saying I believe it to be false, or it is one of my disbeliefs. It is important to be explicit about some elementary points. Although every proposition that is not true is false, it is not the case that every proposition not one of my beliefs is one of my disbeliefs. There are many propositions I have never thought of and among those I have thought of there are many I have no opinion concerning. One way this point is missed is that the words "I do not believe it" are used to say that I disbelieve it not simply that it is not one of my beliefs. It would be better either to say "I do not believe it; I need to see how the evidence available is sufficient for concluding it" or else to say "I disbelieve it; I have sufficient evidence to the contrary". The atheist disbelieves what the theist believes; the agnostic does not believe or disbelieve what the theist believes.

In judging I form a fresh belief, often a belief in the truth of a proposition not previously believed by me, but I often [138] form a *new* belief in the truth of a proposition previously believed by me. Beliefs are usually dated. The belief I formed years ago as I first learned that ten degrees Celsius is fifty Fahrenheit is years older than the new belief I formed of the same proposition today. Each belief comes into existence sometime during the life of person who believes it and perishes no later than the death of the believer. Each belief depends for its existence on its believer. No two persons have the same belief although in many cases two persons have beliefs with the same propositional content. The word 'belief' is frequently used elliptically for "the content of a belief". In this sense, there are beliefs that no one still believes: there are beliefs in the *non-temporal* sense that are not beliefs in the *temporal* sense. In the temporal sense none of my mere beliefs can ever become anything else; it can never become a cognition even if I subject the propositional content to a cognitive process that produces knowledge. In such a case the belief in the non-temporal sense became a cognition, but the cognition is a belief with a later starting date. These should be familiar points.

In contrast, the act of stating per se does not form new beliefs although there are simple cases in which judging and stating are simultaneous, or very nearly so. Usually the date of a statement is not the same as that of the belief stated. Sometimes the statement is made before the belief is formed. Of course, propositions are not dated at all even though, as just mentioned, the word 'belief' is sometimes used non-temporally to refer not to the dated belief but to the undated proposition believed. This is the case when we say that Euclid and Pythagoras had the same belief about right triangles even though one was born centuries after the other died. [139]

Lying and Telling the Truth

This section is about deliberate statements. It excludes inadvertent remarks, misstatements, statements made under distracting conditions, and the like. The two expressions 'telling a falsehood' and 'telling the truth' can be misleading. The first does not mean "saying something false", and the second does not mean "saying something true". Telling a falsehood is lying, and that is not necessarily saying something false. And a person can say something false without lying. Likewise, telling the truth is stating what one believes to be true and beliefs are not necessarily true. And a person can say something true without telling the truth. Lying and telling the truth are forms of statement-making: they are human actions called *speech-acts*. Some philosophers have misunderstood the nature of the lie. A lie is a speech-act, not merely a sentence, or a proposition. A lie is a statement of a proposition that is not a belief of the speaker. Speakers who state their false beliefs are not lying. Likewise, speakers who state true propositions that they do not believe are lying--regardless of whether the non-belief is disbelief. Persons who state propositions on which they have no opinion are lying as much as those who state propositions they believe to be false.

Lies of ignorance are statements that are neither believed nor disbelieved by the speaker. Lies of knowledge are statements contrary to the speaker's beliefs or disbeliefs. Lies of ignorance can be just as harmful as lies of knowledge and just as effective in promoting the aims of the liar. Moreover, because of confusion about the nature of lying it is often easier to get away with lies of ignorance.

Perhaps paradoxically, there is often no way to tell a lie of ignorance without indirectly telling a lie of knowledge. The reason is that any given statement that something is the case carries with it the indirect statement that the speaker believes the given statement. When speakers *know* that they do not [140] believe the direct statement, the indirect statement is a lie of knowledge.

Objectual Knowledge and Operational Knowledge

In order for me to have propositional knowledge, e.g. knowledge that two is the only even prime number, it is necessary for me to have objectual knowledge of several objects including but by no means limited to the following: the number two, the properties of being even and of being prime, the system of numbers, and the *exemplification* relation, i.e. the logical relation of a number to a numerical property that belongs to it. The number two exemplifies the property of being even. The word 'object' is being used in a very broad sense. Objectual knowledge is knowing of objects, including properties, relations, concepts, and anything else. I have objectual knowledge of everything I am acquainted with directly or indirectly as well everything I know of by inference or reflection, such as the concept of truth. Some philosophers have implied that it is possible to know of an object by describing it, but this has always seemed to me to have the facts reversed. I do not see how I could describe something I did not know of and thereby acquire knowledge of it. At this point it is not necessary to be more precise about the limits of objectual knowledge.

In the process of acquiring propositional knowledge that two is the only even prime number I used various know-how, skills, or abilities that I had acquired previously. The expertise, skills, or abilities that I have are what I have been calling my operational knowledge or knowledge-how-to. In the case being discussed, several items of operational knowledge might have come into play: the ability to factor a number, the ability to survey the progression of numbers starting with one, the ability to deduce consequences of propositions, [141] the ability to understand propositions, the ability to make judgments.

It might well be that my some or all of my objectual knowledge derives from exercising operational knowledge, for example that I learn of numbers by counting, or conversely that some or all of my operational knowledge somehow derives from or depends on reflecting on my objectual knowledge, for example that I learn how to count through reflecting on numbers. It is beyond the scope of this essay to reflect on such issues. However, to forestall possible confusion it is important to notice that I have objectual knowledge of propositions and of skills, which of course are objects in the broad sense. As is evident from the above, I know of propositions concerning which I do not have propositional knowledge, for example the Goldbach Hypothesis. In addition, I know of skills that I have not acquired, that I do not have operational knowledge of, for example playing the violin or touch-typing.

Choosing Beliefs and Disbeliefs

Forming or shedding a belief and holding or lacking a belief are not acts like turning a switch on or turning it off. Forming and shedding beliefs are more like waking up and falling asleep. Holding and lacking a belief are more like staying awake and staying asleep. Turning a switch is voluntary and arbitrary in a way that belief formation is not. Once a proposition has been understood and the evidence gathered and marshalled, the judgment is almost automatic—if it happens. Sometimes no result is reached. When a result is reached, it could be contrary the desires of the believer. Likewise, once there is awareness of a serious deficiency in the process that lead to a belief, say that the source of testimony has been discredited or the instruments used found flawed, the belief is lost or at least diminished regardless of how attached to it the believer [142] is. I can never form a belief in a given proposition by deciding to believe it and then throwing some sort of switch. Judgment is voluntary, but it is not arbitrary.

If a coin is flipped and the outcome covered, as long as the evidence is unavailable there is no way for me to form the belief that it is heads, say, no matter how much I might want it to be heads. More generally, there is no way for me to form a belief in a proposition that is now a hypothesis simply by deciding to believe it. The statement that some people believe what they want to believe is a misleading half-truth. We may not decide what to believe but we may indirectly influence our believe formation, for instance, by our selective attention. Similarly, we may not decide to be healthy but we may indirectly influence, for instance, by avoiding smoking. To the extent that it is true, it is just as true that some people believe what they want to disbelieve. Confusing hopes and fears with evidence happens. The expressions "too awful to be true" and "too good to be true" are common enough.

Forming a belief is not like deciding to purchase a given item and then putting it in the shopping cart. Some philosophers have disagreed. They held that credence such as a religious belief is an exception, that a belief can be chosen when there is no hope of finding evidence. However, religious thinkers have disputed these conclusions saying that humans are powerless to construct such beliefs, that humans must await divine intervention and that "the gift of faith" cannot be chosen but is freely bestowed.

Persons who find that two or more of their beliefs are inconsistent have all of those beliefs undermined. They might be free to decide which they prefer to keep and which to drop. Nevertheless, there is no switch to pull that reinstates some as beliefs and others as disbeliefs.

Some pundits recommend that we adjust our degrees of certitude so that they are proportional to our degrees of certainty. They say that the more certainty we have of a belief the more certitude we should feel and, accordingly, the less certainty we have the less certitude we should feel. However, we have no more control over the intensity of our feelings of certitude than we have over our judgments. Moreover, no way of measuring relative certitude or relative certainty has been devised. The pundits might as well have recommended that we adjust our levels of fear in proportion to the level of danger.

The above should not be taken to deny that we often choose to try to understand one proposition while choosing not to understand another. Selective attention and willful ignorance are common enough. Nor should it be taken to deny that we can choose to seek evidence or arguments for one proposition while choosing to ignore evidence and [143] arguments for another. The reality of partisanship, rationalization, and self-deception must be admitted and it is just to hold people responsible in such cases. There is something unsavory about trying to choose a belief; it seems to violate intellectual integrity. Choosing to adopt or shed a belief seems to be a kind of self-deception, a kind of lie of ignorance.

Accordingly, with the exceptions just noted, it is absurd to blame people for holding, lacking, or shedding belief in a given proposition regardless of how deleterious or beneficial we might think it would be. It is even more absurd to try to require someone to adopt or shed a belief in a given proposition. Attempting to coerce belief or disbelief compounds absurdity with injustice.

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