

Are credences a measure of belief or rather subjective guess at the probability the belief exists?

Abstract

There have been arguments concerning the ability to measure rational belief. In this debate, a credence or belief has been determined as being measurable by some authors and subjectively orderable by others. I would argue that our conceptual evaluation of belief is more accurately expressed as a level of belief in the credence itself. That is, individuals choose to believe that they hold a level of belief. Moreover, truth is objective in nature, but individuals select credences that may be at odds with the determination of a true state.

I credences truly

A belief in the level of belief?

An individual values a proposition with a degree of belief.¹ This belief in the belief is a credence.² Generally, this is defined to be merely the degree of belief that that individual has on the proposition and not the belief of the belief.³ However, none of us knows the true workings of our inner mind and best can construct a concept of what we believe at a point in time following a set of events.⁴ In technical philosophical discussions, grievances are generally conveyed using probabilistic values.⁵ Here, an individual will believe a proposition to be certainly false when it attains a value of zero. Conversely, the value of one is a belief in certainty in the truth of the proposition.⁶ Hájek would define a probability of zero point five where the individual believes that the proposition is as likely to be true as false.⁷

When evaluating credence for the degree and belief, it is generally assumed that each of these values is stable at a point in time.⁸ Sinan Dogramaci investigates the question of where credence is rational documenting the differences between traditional and Bayesian epistemology and providing the example of offering whether a person believes that coffee is good for them.⁹ This issue begs the question in assuming that the individual has direct knowledge of the probability or at least an ordinal relationship between different beliefs. Even the concept of a degree of certainty is itself a probabilistic belief.¹⁰ Each of the structures and credence is best thought of as a function of a function. In this, at a point in time and a place it could be seen that we rationally believe that we have a selected level of belief.

For this reason, if an individual is placed in a different circumstance, they believe may change. Human cognitive processing and memory does not instantly access all memories. Over time, it may be that unconscious processes allow us to reconsider information that was not a part of our original credence. Further, the mere act of stating a level of belief may be determined in setting a dogmatic statement that is then taken to be the level of belief that existed. From this, doxastic justification may derive as a post-hoc process.¹¹ The original belief structure may have been lightly believed but with the belief that the individual rationally wants to believe that they are a type of individual that they see that belief associated with. So, when asked or placed in a position where a choice needs to be made, as with Schrödinger's cat, the decision to make a belief could collapse the function to set the value that is then determined to be associated with the belief at a time.

The concept of imprecise credences involves decision-making when an agent's degree of belief is imprecise.¹² However, the notion that an individual can represent a credence with an arbitrarily high

¹ Lund, F.H., 1925. The psychology of belief. *The Journal of Abnormal and Social Psychology*, 20(1), p.63.; Kyburg, H.E., 1968. Bets and beliefs. *American Philosophical Quarterly*, 5(1), pp.54-63.

² Smith, G.H., 1947. Beliefs in statements labeled fact and rumor. *The Journal of Abnormal and Social Psychology*, 42(1), p.80.; Carnap, R., 1966. The aim of inductive logic. In *Studies in Logic and the Foundations of Mathematics* (Vol. 44, pp. 303-318). Elsevier.

³ Good, I.J., 1950. *Probability and the Weighing of Evidence* (No. 519.2/G646). London: C. Griffin.

⁴ Murphy Jr, J.W., 1953. Evidence--Burden of Persuasion. *Ky. LJ*, 42, p.258.; Bruner, J.S., 2009. *Actual minds, possible worlds*. Harvard university press.

⁵ Gopnik, A., 1993. 15 How We Know Our Minds: The Illusion of First-Person Knowledge of Intentionality. *Readings in philosophy and cognitive science*, p.315.; Ross, J. and Schroeder, M., 2014. Belief, Credence, and Pragmatic Encroachment 1. *Philosophy and Phenomenological Research*, 88(2), pp.259-288.

⁶ Buchak, L., 2014. Belief, credence, and norms. *Philosophical studies*, 169(2), pp.285-311.

⁷ Hájek, A., 2003. Interpretations of probability. In *The Stanford Encyclopedia of Philosophy* (Zalta). <https://plato.stanford.edu/entries/probability-interpret/>

⁸ Leitgeb, H., 2017. *The stability of belief: How rational belief coheres with probability*. Oxford University Press.

⁹ Dogramaci, S., 2018. Rational Credence Through Reasoning. *Philosopher's Imprint*, 18(11).

¹⁰ Ramsey, F.P., 2016. Truth and probability. In *Readings in Formal Epistemology* (pp. 21-45). Springer, Cham.

¹¹ Kahane, G., 2011. Evolutionary debunking arguments. *Noûs*, 45(1), pp.103-125.

¹² Bradley, S., 2019. A counterexample to three imprecise decision theories. *Theoria*, 85(1), pp.18-30.

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degree of position even using scoring rules is highly unrealistic.¹³ Even the use of Bradley and Steele's imprecise range function is far more realistic but not accurate.¹⁴ Even choosing an arbitrary confidence interval merely provides an arbitrary bound. Suppose for instance; the individual selects the confidence interval believing that they have an alpha equal 5% confidence that the true value of the confidence they express is a credence lies within the given bounds. In that case, this is an expression that the individual is 95% confident that the range covers their true belief. Hence, the individual is expressing a belief about a belief.¹⁵ Where the individual is to provide a sharp subjective probability, this would be illogical as this is a low confidence belief.¹⁶

The rational principles defined by Elga argue against a sequence interview that states rationality must necessarily follow as per the scenario:¹⁷

1. An individual has been offered BET A.
 - a. A choice has been made to refuse BET A,
 - b. A decision needs to be made whether to accept BET B.
2. The individual has not been offered BET A.
 - a. The decision needs to be made on whether to take BET B.

In this, Elga defines a decision tree.¹⁸ As argued by Elga, each corresponding branch of the tree leads to a commitment that limits rational choices. However, this presumes a definite ordinal structure to each bet's evaluations, and I defined outcome or probability. The more precise interpretation would be to incorporate a ranged probability function detailing the hypothesis that can be tested against the individual's belief.¹⁹ This hypothesis function formulates a belief as to the strength of the underlying belief or credence. As a former professional Bayesian statistician, the level of precision applied in arbitrary calculations seems to belie reality. The formation of Bayesian games involves guesswork.²⁰

In doxastic logic, terminology such as $B(x)$ is determined such that the statement derives the function "it is believed that x is correct". The set B defines a set of beliefs. In doxastic logic, belief acts as a modal operator.²¹ The difficulty in this formulation is that the set function is a defined value that is assumed to be known. Even when asserting a statement with certainty, individuals do not honestly know the value of their beliefs. Instead, each belief of the value of a belief is subject to a range of possible values that are determined probabilistically. Such a function could be logistic, Gaussian or any other possible probability distribution. In this, before the declaration of a statement made as to the belief, the

¹³ In reference to scoring rules - Rosen, D.B., 1996. How good were those probability predictions? The expected recommendation loss (ERL) scoring rule. In *Maximum Entropy and Bayesian Methods* (pp. 401-408). Springer, Dordrecht.

¹⁴ Bradley, S. and Steele, K., 2014. Should subjective probabilities be sharp. *Episteme*, 11(3), pp.277-289.

¹⁵ Bortolotti, L. and Broome, M.R., 2008. Delusional beliefs and reason giving. *Philosophical Psychology*, 21(6), pp.821-841.

¹⁶ Pollock, J., 2008. Irrationality and cognition. *Epistemology: new essays*, pp.249-275.; Morey, R.D., Hoekstra, R., Rouder, J.N., Lee, M.D. and Wagenmakers, E.J., 2016. The fallacy of placing confidence in confidence intervals. *Psychonomic bulletin & review*, 23(1), pp.103-123.

¹⁷ Elga, A., 2000. Self-locating belief and the Sleeping Beauty problem. *Analysis*, 60(2), pp.143-147.; Elga, A., 2005. On overrating oneself... and knowing it. *Philosophical Studies*, 123(1-2), pp.115-124.; Elga, A., 2007. Reflection and disagreement. *Noûs*, 41(3), pp.478-502.; Elga, A., 2013. The puzzle of the unmarked clock and the new rational reflection principle. *Philosophical Studies*, 164(1), pp.127-139.

¹⁸ Arntzenius, F., Elga, A. and Hawthorne, J., 2004. Bayesianism, infinite decisions, and binding. *Mind*, 113(450), pp.251-283.

¹⁹ Henry, P.J. and Saul, A., 2006. The development of system justification in the developing world. *Social Justice Research*, 19(3), pp.365-378.

²⁰ Smith, W.D., Baum, E.B., Garrett, C. and Tudor, R., 1996. Experiments with a Bayesian game player. *submitted for Publication, also at <http://www.neci.nj.nec.com>*.

²¹ Smullyan, R.M., 1986, January. Logicians who reason about themselves. In *Theoretical Aspects of Reasoning about Knowledge* (pp. 341-352). Morgan Kaufmann.

individual would merely hold a probabilistic function determining how much they believe a particular belief structure.²²

In this, if it is assumed that a particular belief structure for the sake of argument is Gaussian in nature and is centred on the purported level of the credence, it can then be argued that the true level of belief is unknown and that the individual makes a hypothesis test using a Bayesian process to determine the level of belief of the belief. In this, the individual holding a credence is not certain of the belief but is sure they believe that they hold a level of belief.²³ From this, it would seem more reasonable to present the value of a credence as a belief in a most probable copula family from a given set.²⁴ Such formulation would most likely satisfy the accuracy diversity trade-off and improve guessing and the accuracy of belief.²⁵ In this, an extension of the Kolmogorov-Smirnov test would provide better testing processes.²⁶ Mathematicians such as Geisser have attempted to formulate more detailed guessing processes in both Bayesian and non-Bayesian problems of logic concerning statistical inference.²⁷ Similarly, other discussions of rational strategic decision-making have been extended to ranged base guesses.²⁸

Elizabeth Jackson sets out several examples stating that "While I am roughly 100% confident that $1 + 1 = 2$, I am closer to 99% confident my car is in the parking lot outside, and more like 50% confident that a Republican candidate will win the next US election".²⁹ Firstly, no system can be without some doubt. In this, the most improbable scenario would make the first example of 100% confidence demonstrably unable to be obtained. Next, it is not possible to determine that you are 99% confident. Human cognition does not allow us to scan all computational aspects of our memory and determine an accurate result. Consequently, a correct credence would be that the individual is confident that they are 99% confident. The measurement of a 99% confidence interval is in itself an ordinal statement given a numerical value.

This value should be argued to be ordinal for the statement that somebody is 99% confident means that they believe that 99% of the time they will be correct in their assertions. There is no manner of measuring this statement other than through an analysis of prior acts. Human rational thought and reasoning processes do not allow us to review all prior decisions.³⁰ Moreover, our memory of what we believe changes over time. As such, we may believe that we never misplace our car whereas it may be the case that four times out of ten the individual who believes that they are 99% confident of where they placed the car, in fact, misplaces it. In this, the car may not be far from where it is believed to be, and the memory of spending an extra minute or more searching may be readily forgotten.³¹ In this event, the person's rational belief in the level of their accuracy is erroneous but leads to a heightened belief in the level of belief of another action.³²

²² Howson, C., 2000. *Hume's problem: Induction and the justification of belief*. Clarendon Press.

²³ Wasserman, L.A., 1990. Belief functions and statistical inference. *Canadian Journal of Statistics*, 18(3), pp.183-196.

²⁴ Huard, D., Évin, G. and Favre, A.C., 2006. Bayesian copula selection. *Computational Statistics & Data Analysis*, 51(2), pp.809-822.

²⁵ Re, M. and Valentini, G., 2001, 1. 1 Ensemble methods: a review 3.

²⁶ Hájek, J., 1965. Extension of the Kolmogorov-Smirnov test to regression alternatives. In *Bernoulli 1713 Bayes 1763 Laplace 1813* (pp. 45-60). Springer, Berlin, Heidelberg.

²⁷ Geisser, Seymour. *Biometrics* 23, no. 2 (1967): 371-73. Accessed January 8, 2021. doi:10.2307/2528174.

²⁸ Williams, J.D., 1986. *The Compleat Strategyst: Being a primer on the theory of games of strategy*. Courier Corporation.

²⁹ Jackson, E.G., 2020. The relationship between belief and credence. *Philosophy Compass*, p.e12668.

³⁰ Cumming, G., 2009. Inference by eye: reading the overlap of independent confidence intervals. *Statistics in medicine*, 28(2), pp.205-220.

³¹ Langdon, R. and Bayne, T., 2010. Delusion and confabulation: Mistakes of perceiving, remembering and believing. *Cognitive Neuropsychiatry*, 15(1-3), pp.319-345.

³² Jolley, D., Douglas, K.M. and Sutton, R.M., 2018. Blaming a few bad apples to save a threatened barrel: The system-justifying function of conspiracy theories. *Political Psychology*, 39(2), pp.465-478.

Jason Konek addresses imprecise credence.³³ It is stated that where evidence is not explicitly delivered, only imprecise credence can be obtained. Ian Hacking has addressed several analogous problems in "personal probability" that align with philosophic credence.³⁴ Moreover, the simplified assertion of a credence does not take all of the input functions into account. In comparing independence and dependence and functions, the typical Bayesian evaluation is between input A and input B. An individual's assertion about their beliefs may be predicated on potentially millions of independent or interdependent variables. Each seemingly would be insignificant but when combined, provide a significant effect. For instance, Winkler tackled the problem of combining distributions into a single distribution allowing feedback and updates to subjective probability, creating a method that would determine approximate solutions at a point in time and place.³⁵ Similar studies were conducted by Novick interpersonal probability and the resulting logical probability that can be derived.³⁶

Next, the individual's testimonial credence may differ significantly from the true belief credence. I may say I believe that Boris Johnson will win the next election with a 90% confidence level. Conceptually, I may not be confident in this assertion internally but may express my confidence based on a desire to be classed in a certain way. For instance, if my parents had been conservative voters and I have friends who are conservatives, and I believe that conservative principles are the most likely to benefit my long-term desires, I may state that I am confident in Boris Johnson winning the election when I hold doubts that I do not admit even to myself consciously. In this manner, it would not be possible for me to express a 90% confidence level in this credence definitively.³⁷

Further, being that a credence is a belief in or acceptance of some condition as a form of truth, the nature of truth itself must be investigated when discussing credence. Truth itself must necessarily exist if we are to take the world to be real. However, our belief in truth is itself axiomatic. Taking the assumption that the world truly exists, that existence is not solipsistic. That reality follows set precepts that do not arbitrarily change; it would follow that truth itself must exist in some format.³⁸ Given all of the prior conditions, this statement itself is probabilistic and indeterminate.³⁹ However, for the assumptions following, it shall be assumed that reality exists. In that event, the truth will also follow to exist. The truth of each statement will thus be determined but unknown. In this, the individual may believe that they are close to the truth, but the reality of all human understanding would preclude perfect knowledge.

Objectivism holds that every truth is an absolute.⁴⁰ I do not disagree with this statement; however, I do not believe that any truth can be fully known. What we may do is maximise our understanding of truth. In this, we may find credence in a concept that is more likely to be true than another and equally disavow concepts that can be demonstrated to be not likely to be true.⁴¹ Much of this develops from a process analogous to Bayesian hypothesis testing. Critically, it is arguable that the weight of evidence could rightly justify the decision not to investigate a held set of beliefs further even when it is known that these do not adhere to perfection or could knowingly be investigated to provide more accuracy. The cost of investigation may outweigh the benefit.⁴²

³³ Konek, J. (2019). Epistemic conservativity and imprecise credence. *Philosophy and phenomenological research*.

³⁴ Hacking, I., 1967. Slightly more realistic personal probability. *Philosophy of Science*, 34(4), pp.311-325.

³⁵ Winkler, R.L., 1968. The consensus of subjective probability distributions. *Management Science*, 15(2), pp.B-61.

³⁶ Novick, M.R., 1964. On Bayesian logical probability. *ETS Research Bulletin Series*, 1964(1), pp.i-27.

³⁷ Bortolotti, L. and Broome, M.R., 2008. Delusional beliefs and reason giving.

³⁸ Deely, J., 2009. *Purely objective reality* (Vol. 4). Walter de Gruyter.

³⁹ Levi, I., 1975. On indeterminate probabilities. *The Journal of Philosophy*, 71(13), pp.391-418.

⁴⁰ Dent, E.B., Parnell, J.A. and Carraher, S.M., 2018. Developing an Instrument to measure Objectivism. *The Journal of Ayn Rand Studies*, 18(1), pp.1-27.

⁴¹ Hiller, J., 2016. Epistemological foundations of objectivist and interpretivist research.

⁴² Adler, M.D., Posner, E.A. and Posner, E., 2006. *New foundations of cost-benefit analysis*. Harvard University Press.

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I will argue not that absolutes do not exist, but instead, we can never achieve them. The speed of light in a vacuum is an absolute, but it is not something we can ever reach.⁴³ Truth itself is absolute and immutable.⁴⁴ The universe does not reset and changes itself at whim. There is no evidence to suggest this. Consequently, only one version of reality truly exists.⁴⁵ The error that is applied is in perception and understanding. No individual, no community and no society can either alone or in conjunction with each other ever capture all elements of any event.⁴⁶ No matter how many cameras and how many observers, it will never be possible to know all information. The knowledge to make this statement has been derived because of quantum theory. In quantum theory, it is not possible to measure both the position and the object's speed.⁴⁷ On a larger scale, it is never possible to capture all elements of an event.

The error is in a belief that we can capture truth completely.⁴⁸ However, no matter how accurately we may seek to measure an event, there will always be an error.⁴⁹ As such, this presents limitations in the level of knowledge and understanding that will apply both because of the human mind and the fundamental nature of the universe itself. For all of this, it does remain possible to maximise our understanding of truth and our belief in an event. For while the result may be multiple interpretations, only one truth exists. It is not the truth that errs but rather our understanding and interpretation of the events that we state to be truth.⁵⁰

When individuals state that everybody has their truth, this is mere equivocation.⁵¹ Everybody can have their own opinion and their interpretation, but this does not make them true. As noted, there is one and only one truth.⁵² It may be irrational and economically wasteful at some point to attempt to perfect information further. This is particularly the case given a technological and economic state at some time.

As an example, Euclidean geometry states that parallel lines do not meet. Given the axiomatic description of a Euclidean universe, this statement could be held true. Following the creation of non-Euclidean systems, including spherical and hyperbolic geometries, it is well-known that the axiomatic foundation of geometric systems is not representative of our universe.⁵³ Preferably, a system such as the upper-half plane model and the disk model by Henri Poincaré or Felix Klein and the Klein-Beltrami model's development is a better representative of spatial dimensions. Riemann space and Riemann geometry (also called elliptic geometry) provide domains in which Euclidean geometry can approximate calculations and other systems such as Lobachevskii geometry.⁵⁴

Euclidean systems are not so much as wrong but rather inaccurate. This scenario is analogous to Newtonian physics. At standard scales as used in daily life, Newtonian physics provide good results.

⁴³ Lloyd, S., 2000. Ultimate physical limits to computation. *Nature*, 406(6799), pp.1047-1054.

⁴⁴ Clark, M.T., 2000. Augustine on immutability and mutability. *American Catholic Philosophical Quarterly*, 74(1), pp.7-27.

⁴⁵ Bhaskar, R., 2013. *A realist theory of science*. Routledge.

⁴⁶ Mollick, E. and Nanda, R., 2016. Wisdom or madness? Comparing crowds with expert evaluation in funding the arts. *Management Science*, 62(6), pp.1533-1553.

⁴⁷ d'Espagnat, B., 1979. The quantum theory and reality. *Scientific American*, 241(5), pp.158-181.

⁴⁸ A justified belief is distinct from truth, Cohen, S., 1984. Justification and truth. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 46(3), pp.279-295.

⁴⁹ Herrnstein, R.J., 1990. Rational choice theory: Necessary but not sufficient. *American Psychologist*, 45(3), p.356.

⁵⁰ Shah, N., 2003. How truth governs belief. *The Philosophical Review*, 112(4), pp.447-482.

⁵¹ Bavelas, J.B., Black, A., Chovil, N. and Mullett, J., 1990. Truths, lies, and equivocations: The effects of conflicting goals on discourse. *Journal of Language and Social Psychology*, 9(1-2), pp.135-161.

⁵² Wyatt, Jeremy W., "Pluralism and the Absence of Truth" (2014). *Doctoral Dissertations*. 345. <https://opencommons.uconn.edu/dissertations/345>, p. 82.

⁵³ Bonola, R., 1955. *Non-Euclidean geometry: A critical and historical study of its development*. Courier Corporation.

⁵⁴ Coxeter, H.S.M., 1998. *Non-euclidean geometry*. Cambridge University Press.

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Equally, these fail at the quantum level or more considerable distances and mass. In this, Einsteinian relativity provides a far superior estimate. Yet, even these improved models are not the truth and merely come closer. In this, the inability to know the truth does not set a limitation on our ability to act as rational agents. A credence is merely a belief.⁵⁵

Each of us may hold a subjective interpretation of what we believe to be the truth.⁵⁶ Some interpretations are closer and maximise the value of information and come significantly closer to the truth than any variance from that opinion towards the truth is inconsequential. However, many people believe that the subjective interpretation of evidence that they hold must allow them to stay truth or that their personal interpretation is truth. Neither of these can be correct. In this, the credence held by those individuals is a mental attitude that their subjective belief should be accepted as being true.⁵⁷ The error that many people make is in fully interpreting their subjective experience as complete evidence and truth.⁵⁸

To some, the notion of a single objective truth will seem rigid or intolerant.⁵⁹ The concept of allowing only a single truth has been called closed-minded.⁶⁰ These viewpoints are in failing to differentiate the distinction between interpretation and existence. Analogously to not being able to measure both the position and the speed of a particle, we cannot determine all aspects of an event. Yet, the inability to perceive truth does not relegate the truth to nonexistence. Nor does it create multiple versions of an event. The intellectually challenging point for many people is to accept that they can always be in error and that they will always be an error and the best that they can achieve is to minimise error throughout their existence slowly.⁶¹ Each credence is merely a belief that if structured correctly sets a range of guessed values or ordered sets of outcomes determined given the knowledge not known by the individual but at hand and to mind at the point in time.⁶²

A distinction lies in value.⁶³ Whereas truth is objective, individual values are subjective.⁶⁴ Whether any particular value can be rationally supported and defended is a separate question.⁶⁵ Contradictions do not exist.⁶⁶ Where an individual credence leads to a contradiction, the only rational scenario is to analyse and re-evaluate the cause of the contradiction. In this, one or more credence may need to be rejected or changed. Unfortunately, few people are willing to investigate and reject the contradictory ideas and concepts they may hold.⁶⁷ In this, many individuals would prefer to maintain respect and reject the conflict by ignoring it. The individual may choose fashion and popularity or even political power to grasp status and position and reject the truth. In doing this, an individual is acting irrationally in that they are self-deluding. Where the individual actively accepts that truth does not matter, it may be

⁵⁵ Jackson, E., 2018. Belief, credence, and evidence. *Synthese*, pp.1-20.

⁵⁶ Anscombe, F.J. and Aumann, R.J., 1963. A definition of subjective probability. *Annals of mathematical statistics*, 34(1), pp.199-205.; Davidson, D., 2013. Knowing one's own mind. *The American Philosophical Association Centennial Series*, pp.389-409.

⁵⁷ Davidson, D., 2001. *Subjective, intersubjective, objective* (Vol. 3). Oxford University Press.

⁵⁸ Jacoby, L.L. and Kelley, C.M., 1987. Unconscious influences of memory for a prior event. *Personality and Social Psychology Bulletin*, 13(3), pp.314-336.

⁵⁹ Stanley Budner, N.Y., 1962. Intolerance of ambiguity as a personality variable 1. *Journal of personality*, 30(1), pp.29-50.

⁶⁰ Riggs, W., 2010. Open-mindedness. *Metaphilosophy*, 41(1-2), pp.172-188.

⁶¹ Colander, D., 2009. "Moving Beyond the Rhetoric of Pluralism. *Economic pluralism*, 122, p.36.

⁶² Rothschild, D., 2012, April. V—Expressing Credences. In *Proceedings of the Aristotelian Society (Hardback)* (Vol. 112, No. 1pt1, pp. 99-114). Oxford, UK: Blackwell Publishing Ltd.

⁶³ Harsanyi, J.C., 1977. Morality and the theory of rational behavior. *Social research*, pp.623-656.

⁶⁴ Rolston, H., 1982. Are values in nature subjective or objective?. *Environmental Ethics*, 4(2), pp.125-151.

⁶⁵ Horowitz, S., 2014. Epistemic akrasia. *Noûs*, 48(4), pp.718-744.

⁶⁶ Friedman, B., 1993. Dialogue and judicial review. *Michigan Law Review*, 91(4), pp.577-682.; Simpson, S.G., 2000. Logic and mathematics. *The Examined Life, Readings from Western Philosophy from Plato to Kant*, edited by S. Rosen, Random House, pp.577-605.

⁶⁷ Schoenfield, M., 2019. Permissivism and the value of rationality: A challenge to the uniqueness thesis. *Philosophy and Phenomenological Research*, 99(2), pp.286-297.

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possible to act rational and in a contradictory manner.⁶⁸ The desired outcome is not truth but rather power, and hence status or some other transitory concern.⁶⁹

It is only through our mind through our own belief that any of us can judge truth. In this process, we form measures of probability. In doing so, we take a risk. All actions have some risk. Where others dissent and disagree with what we see as the most likely version of truth, there is a way to judge. The outcome will always be judged by reality.⁷⁰ No individual can see or judge acts through the eyes of another.⁷¹ Consequently, the only judgements we can make come from ourselves when we align our beliefs against reality. In this process, we can adjust our credence is using our belief that we must remember that our belief is merely a subjective belief of what we might hold.⁷²

Those who refuse to accept truth can exist or twist it intentionally into a lie do not gain power over another. The victim of a lie may be harmed, but so is the liar. The liar enters an act of self-abdication by surrendering reality in the creation of the lie. In this, the liar believes they gain power but, in actuality, condemn themselves.⁷³ This condemnation derives from the requirement to continue the fraud that the lie has started. A lie may be small but, in all events, has consequences.⁷⁴

For individuals to say that everybody has their own truth is to create an extended form of solipsism. It is best to reject an external reality in an abeyance of truth that seeks to promote the ideas in one's head as the sole truth. To simply state that everybody has their own truth is taking a position, the truth does not matter and what you believe act in its own reality. At worst, it is an embracing of nihilism and an acceptance that nothing matters.⁷⁵ For, if anything exists, there must be a unifying truth, or there cannot be unifying reality. If all individuals can maintain truth, either that truth is correctly aligned, and all people believe the same, or there is a contradiction between the beliefs, and hence that cannot be one truth.⁷⁶ If existence is uniform and consistent then but a single truth may exist. Many individuals may feel an elephant while blindfolded and come up with different descriptions and ere in what they describe yet it remains an elephant.

Few people accept rationality and all that it requires.⁷⁷ To do so is to accept a message and meaning and a reality that you can never truly find truth. Simultaneously it requires an adherence to conformity that few can achieve. To hold a credence or a belief that you can deterministically evaluate a sharp probability to 20 decimal points is, in itself, irrational.⁷⁸ No evidence has been presented that any guess of an outcome's probability or rational belief has been completely defined within human knowledge. Such a position is a testable assertion. Yet, it remains argued without testing. Moreover, it would be in the individual's realm, asserting the ability to guess to demonstrate this scientifically deterministically.

⁶⁸ Frankfurt, H.G., 2009. *On bullshit*. Princeton University Press.

⁶⁹ Rouse, J., 1994. Power/knowledge. *The Cambridge Companion to Foucault*, 2.

⁷⁰ Peikoff, L., 1993. *Objectivism: the philosophy of Ayn Rand*. Penguin.

⁷¹ Schroeder, M., 2012. Stakes, withholding, and pragmatic encroachment on knowledge. *Philosophical Studies*, 160(2), pp.265-285.

⁷² Goldenberg, M.J., 2009. Iconoclast or creed?: Objectivism, pragmatism, and the hierarchy of evidence. *Perspectives in Biology and Medicine*, 52(2), pp.168-187.

⁷³ Nietzsche, F., 1979. On truth and lies in a nonmoral sense. *Philosophy and Truth: Selections from Nietzsche's Notebooks of the early 1870s*, pp.79-97.

⁷⁴ Giddens, A., 2013. *The consequences of modernity*. John Wiley & Sons.

⁷⁵ Gertz, N., 2019. *Nihilism*. Mit Press.

⁷⁶ Boler, M. and Zembylas, M., 2003. Discomforting truths: The emotional terrain of understanding difference. In *Pedagogies of difference* (pp. 115-138). Routledge.

⁷⁷ Byrne, R.M., 2007. *The rational imagination: How people create alternatives to reality*. MIT press.

⁷⁸ Good, I.J., 1992. Rational decisions. In *Breakthroughs in statistics* (pp. 365-377). Springer, New York, NY.

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