Trump, Truth, and Logic

Robert Hanna



Figure 1: Logical Trumpism in action (NYT, 2024)

A.J. Ayer wrote *Language, Truth, and Logic* in order to tell the world about *Logical Empiricism* (Ayer, 1935/1952). The purpose of this essay is to tell the world about what I call *Logical Trumpism*. To the extent that the Logical Empiricists held that the choice of a logic is non-cognitive because it's strictly determined by human self-interest, and that, as Rudolf Carnap famously put it, "in logic there are no morals" (Carnap, 1937: p. 52), then Logical Trumpism can be regarded as a reduction-to-absurdity of Logical Empiricism. But before we get to Logical Trumpism, I'll provide a brief tutorial about truth and logic.

Pontius Pilate mockingly asked "what is truth?," and as J.L. Austin archly, deflatingly, and wittily observed,

would not stay for an answer. Pilate was in advance of his time. For "truth" is an abstract noun, a camel, that is, of a logical construction, which cannot past the eye even of a grammarian. We approach it cap and categories in hand: we ask ourselves whether Truth

is a substance (the Truth, the Body of Knowledge), or a quality (something like the color red, inhering in truths), or a relation ("correspondence"). But philosophers should take something more nearly their own size to strain at. What needs discussing rather is the use, or certain uses, of the word "true." (Austin, 1964: p. 18).

So, Austin proposes to characterize the nature of truth via ordinary language analysis. Now, here's a *different* way that philosophers could "take something more nearly their own size to strain at" when characterizing the nature of truth.

First, by *a veridical appearance* I mean anything *X* that appears as *F*, or appears *F*-ly, or appears to be *F*, to any or all actual or possible rational human cognizers, *just insofar as*, *and precisely because*, *X is F*. For example, if I say "It appears that Sweetpea the cat is looking at me from the door of her cat-cave in my daughter's apartment in Los Angeles," and what I say is indeed the case, as per this picture—



Figure 2: Sweetpea the cat is looking at me from the door of her cat-cave in my daughter's apartment in Los Angeles.

and what I say is indeed the case, as per the picture at the top of this essay, or "It appears that 2 + 2 = 4," and again what I say is indeed the case, as per basic arithmetic, then all the things I'm talking about are veridical appearances.

Second, by the manifestly real world, I mean the world as it can veridically appear, or does veridically appear, to any or all actual or possible rational human cognizers or agents.

Then, third,

a statement (judgment, assertoric belief, proposition, meaningful sentence, theory, etc.) is true if and only if what it states (means, says, etc.) is manifestly real.

This characterization of the nature of truth (i) meets Austin's anthropocentric requirement on a philosophically adequate theory of truth, (ii) captures the pith-&-marrow of Alfred Tarski's intuitive linguistic characterization of truth (Tarski, 1943, 1956), and also (iii) specifically rules out any metaphysics of truth that requires the existence of non-manifest or "noumenal" objects.

What is logic? Once upon a time, in a faraway land, I published a book on the philosophy of logic, *Rationality and Logic* (Hanna, 2006a). In that book, I asserted that logic is the a priori formal science of the universal principles or laws of *truth-preservation* via the relation of *logical consequence* (aka *logical entailment*) between the *premises* and *conclusion* of any argument, a relation according to which there's no possible set of circumstances (or: no possible world) in which all the premises are true and the conclusion false. Now, every such argument is a *valid* argument; and necessarily, if all the premises of a valid argument are true, then the conclusion must also be true, which is a *sound* argument. Moreover, *logical consistency* is when one or more propositions that can be jointly true, relative to an "interpretation" whereby meaning and truth are assigned to every member of a set of statements, hence when no statements in that set are inconsistent with themselves or with one another. By contrast, *logical contradiction* is either when a proposition violates a logical law and is necessarily false, or when two or more propositions cannot be either jointly true or jointly false. Finally, *logical deduction* is any argument that unfolds strictly according to the relation of logical consequence.

Any formal science that generally models itself on logic as defined under that definition can be called a "logic," even if this formal science is either not strictly a priori, or does not generate strictly universal principles or laws, or does not operate strictly according to the relation of logical consequence. By *classical logical systems* I mean formal systems representing logical consequence and valid inference that are (i) *bivalent*, by

which I meant that (ia) there are two and only two truth values, true and false, (ib) every sentence has a truth-value (i.e., there are no truth-value *gaps*), (ic) no sentence has more than one truth-value (i.e., there no truth-value *gluts*, and (id) if a sentence isn't true then it's false, and conversely (i.e., there are no *extra* truth-values) (ii) contain the sentential logic of simple truth-functions ("not," "or," "and," "if... then," and "if and only if"), (iii) contain names of individuals and monadic (one-place) and polyadic (many-place) predicates, including identity, (iv) contain first-order quantification ("all" and "some") over individuals and/or second-order quantification over relations, including identity, and (v) contain universal principles of non-contradiction (no sentences are both true and false) and excluded middle (every sentence is either true or false, and there are no extra truth-values). Such systems are consistent (no contradictions, and there's at least one interpretation in which all statements are true), sound (all the provable statements are true), and complete (all the true statements are provable).

Kurt Gödel famously or notoriously showed that every classical logical system, plus the Peano axioms for arithmetic, contains undecidable, unprovable statements and is consistent if and only if it's incomplete (the first incompleteness theorem), and also that no such system can demonstrate its own consistency or contain its own truth-definition (the second incompleteness theorem) (Gödel, 1931/1967). Therefore, mathematical logic is inherently incomplete, and mathematics cannot be explanatorily reduced to logic. Moreover, whereas, after A.N. Whitehead's and Bertrand Russell's *Principia Mathematica* (Whitehead and Russell, 1910/1962), it was generally assumed by philosophers and mathematical logicians that there must be *One True Logic*, it actually turned out that there are not only conservative extensions of classical logical systems, that add one or more new principles or laws to classical logic, for example, classical modal logic, while remaining consistent, sound, and complete, but also deviants of classical logical systems, that reject one or more of the principles or laws of classical logic, for example, (i) intuitionist logic, which rejects the universal law of excluded middle and contains some sentences that are neither true nor false, either because they have some other value, or have a range of such values, aka three-valued logic, or many-valued logic, or because they have no truth-value, aka truth-value gaps, and (ii) dialetheic logic, which rejects the universal law of noncontradiction and contains some provable sentences, aka theorems, that are both true and also false, aka truth-value gluts.

So, it seems, not only isn't there One True Logic, there's also an unrestricted multiplicity of logics, and that *anything goes*: this is known as *the pluralism problem* (see, e.g., Hanna, 2006a: ch. 2). Nevertheless, whether complete or incomplete, and no matter how deviant, necessarily, *all* of these logical systems preserve at least a minimal version of the principle of non-contradiction: *not every statement is both true and false* (Hanna, 2006a; see also Putnam, 1983). Therefore, in my opinion, there must be a *universal proto-*

logic, containing the minimal principle of non-contradiction and all the other logical notions presupposed and implied by this principle, which *isn't* The One True logic, but that's *also* used procedurally in order to construct every other logic, *and* furthermore it's (i) a priori by virtue of being innately specified in the cognitive and practical capacities of all actual and possible rational human animals (i.e., it's *transcendental*) and (ii) non-instrumentally and unconditionally normatively grounded in human dignity (i.e., it's *categorically normative*) (Hanna, 2006a: chs. 4-7).

Leaving aside the problems of incompleteness and pluralism, however, the deepest and hardest philosophical problem about logic is what's called *The Logocentric* Predicament: in order to explain or justify logic, logic must be presupposed and used, hence any explanation or justification of logic is circular, and therefore logic is rationally inexplicable and unjustified (Hanna, 2006a: ch. 3; Hanna, 2024: section 16.2.2). The Logocentric Predicament is closely related to what's called the problem of justifying deduction (see, e.g., Dummett, 1973/1978; and Haack, 1976), which unfolds as follows. It seems that there are only two relevant options for rationally justifying logical deduction: either (i) a deductive justification, or (ii) a non-deductive justification, for example, an inductive justification. But an inductive justification is too weak, and a deductive justification is circular and more generally falls into The Logocentric Predicament. This isn't the place to argue for an adequate, definitive solution to The Logocentric Predicament; but one promising possibility is that although the universal proto-logic is indeed presupposed and used in the justification and explanation of every other logic, whether classical or deviant, it's neither circular in any vicious way, nor unjustified, nor inexplicable, precisely because it's (i) transcendental and (ii) categorically normative (Hanna, 2006a: ch. 3).

Correspondingly, one of the core theses of *Rationality and Logic* is that rational human thinkers are rationally capable of constructing any "alternative" or "deviant" logic whatsoever, *provided that* the constructed logic obeys one simple principle, the minimal law of non-contradiction, which, as we saw above, says that not every statement is both true and false. Violations of the minimal law of non-contradiction yield a logical phenomenon called *explosion*, which is universal inconsistency, or *logical nihilism*.

Now, ever since his election as US President in 2016, and especially since the beginning of the 2024 US Presidential election campaign, it has become self-evident that Donald Trump is self-consciously operating with a highly deviant, highly devious, sophistical logic that is in fact in violation of the minimal law of non-contradiction. This logic was fully on display, for example, during the first presidential candidates' debate with Kamala Harris, as per the image at the top of this essay.

I call Trump's logic, the logic of mindfuck. The logic of mindfuck has two basic principles.

First, the principle of alt-facts: you can assert or deny (or assert and deny) any statement whatsoever, in any context, as desired. These assertions or denials are called "alternative facts" or "alt-facts" (CNN/Conway, 2017). According to Harry Frankfurt, bullshit is speech that systematically manifests a blatant disregard for truth, alongside a pretended concern for truth (Frankfurt, 1988). Therefore, by virtue of the principle of alt-facts, basically everything Trump asserts is bullshit. More generally, the purpose of the principle of alt-facts is to mess with the mind of anyone who cares about truth, and therefore sharply disagrees with Trump — whom he then calls "creators of FAKE NEWS."

Second, the principle of unrestricted entailment: you can infer any and every statement from any and every other statement, as desired. So, by virtue of the principle of unrestricted entailment, Trump is not merely a *truth-hater* but also a *logical nihilist*. The purpose of the principle of unrestricted entailment is to mess with the mind of anyone who cares about logic and (minimal) consistency, and therefore sharply disagrees with Trump—whom he then calls "COMMUNISTS" or "LIARS."

In my opinion, as rational human animals, we're not only rationally obligated but also *morally* obligated to care about truth and logic (Hanna, 2006b). Therefore, as rational human animals, we're not only rationally but also morally obligated to identify, criticize, and reject Logical Trumpism and Trump's logic of mindfuck; and this is *particularly* important and indeed urgent during a US Presidential election year.¹

¹ I'm grateful to Scott Heftler for drawing my attention to the so-called debate between Donald Trump and Kamala Harris on 10 September 2024 (see NYT, 2024), which I'd been resolutely ignoring.

REFERENCES

(Austin, 1964). Austin, J.L. "Truth." In G. Pitcher (ed.), *Truth*. Englewood Cliffs NJ: Prentice-Hall. Pp. 18-31.

(Carnap, 1937). Carnap, R. *The Logical Syntax of Language*. Trans. A. Smeaton. London: Routledge & Kegan Paul.

(CNN/Conway, 2017). Bradner, E. *CNN*. "Conway: Trump White House Offered 'Alternative Facts' on Crowd Size." 23 January. Available online at URL = http://www.cnn.com/2017/01/22/politics/kellyanne-conway-alternative-facts/index.html>.

(Dummett, 1973/1978). Dummett, M. "The Justification of Deduction." In M. Dummett, *Truth and Other Enigmas*. London: Duckworth. Pp. 290-318.

(Frankfurt, 1988). Frankfurt, H. "On Bullshit," In H. Frankfurt, *On the Importance of What We Care About*. Cambridge: Cambridge Univ. Press. Pp. 117-133.

(Gödel, 1967). Gödel, K. "On Formally Undecidable Propositions of Principia Mathematica and Related Systems." In J. Van Heijenoort (ed.), *From Frege to Gödel*. Cambridge, MA: Harvard Univ. Press. Pp. 596-617.

(Haack, 1976). Haack, S. "The Justification of Deduction." Mind 85: 112-119.

(Hanna, 2006a). Hanna, R. *Rationality and Logic*. Cambridge MA: MIT Press. Available online in preview at URL =

https://www.academia.edu/21202624/Rationality_and_Logic>.

(Hanna, 2006b). Hanna, R. "Rationality and the Ethics of Logic." *Journal of Philosophy* 103: 67-100. Available online in preview at URL = https://www.academia.edu/7940609/Rationality and the Ethics of Logic>.

(Hanna, 2024). Hanna, R. *Science for Humans: Mind, Life, The Formal-&-Natural Sciences, and A New Concept of Nature*. Berlin: Springer Nature. Available in hard copy and ebook at URL = https://link.springer.com/book/10.1007/978-3-031-61113-1>.

(NYT, 2024). Goldmacher, S. and Rogers, K. "Harris Dominates as Trump Gets Defensive: 6 Takeaways From the Debate." *The New York Times*. 11 September. Available online at URL = https://www.nytimes.com/2024/09/11/us/politics/trump-harris-debate-takeaways.html>.

(Putnam, 1983). Putnam, H. "There Is At Least One A Priori Truth." In H. Putnam, *Realism and Reason: Philosophical Papers, Vol. 3.* Cambridge: Cambridge Univ. Press. Pp. 98-114.

(Tarski, 1943). Tarski, A. "The Semantic Conception of Truth and the Foundations of Semantics." *Philosophy and Phenomenological Research* 4: 342–360.

(Tarski, 1956). Tarski, A. "The Concept of Truth in Formalized Languages." In A. Tarski, *Logic, Semantics, and Metamathematics*. Oxford: Oxford University Press. Pp. 152–278.

(Whitehead and Russell, 1910/1962). Whitehead, A.N. and Russell, B. *Principia Mathematica to* *56. 2nd edn., Cambridge: Cambridge Univ. Press.