Review of: "Unified Classical Thermodynamics: Primacy of Dissymmetry Over Free Energy"

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Potential competing interests: No potential competing interests to declare.

I am sorry, but I do not see any point in continuing to interact with Prof. Wang on this manuscript. My previous comments gave EVIDENCE that CONTRADICTS the main claim of this work, with one or two other commentators also raising similar points. Prof. Wang read and responded to my comments, but has chosen to completely ignore that evidence in this new version of the manuscript.

To be more explicit, this work's main claim is that "engineering thermodynamics" is flawed because it is based on the primacy of energy, when it should be based on the entropic version of the second law of thermodynamics (which states that entropy never decreases with time); a law that the author likes to call ``dissymmetry''. In this, Prof. Wang is claiming that the domain of engineering thermodynamics is fundamentally FLAWED because engineers still misunderstand a crucial law of physics that physicists understood 120 years ago. Any reasonable reader would require evidence to support such a HUGE claim.

Yet Prof. Wang provides no evidence at all to justify this claim! This is despite myself and one or two other commentators on this website saying that he was mistaken on this claim. Worse than this, my first comment (on the previous version of this manuscript) provided EVIDENCE that directly CONTRADICTED Prof. Wang's claim. Yet Prof. Wang's new version of this manuscript does not even mention that evidence.

My refutation of Prof. Wang's claim is based on looking at a few textbooks on "engineering thermodynamics" (see my first comment on the previous version); I found that they do NOT have the flaws that he accuses them of. Those textbooks ALREADY base their explanations on the entropic version of the second law, in exactly the manner that this manuscript is advocating for. While I did spot that Cengel and Boles ("Thermodynamics: An Engineering Approach", McGraw-Hill, 2008) were clumsy on this point in their chapter 1 (see again my first comment on the first version of this manuscript), they rectify it in their chapter 7. However, one clumsy formulation in one textbook is not enough to accuse the whole domain of engineering thermodynamics of being flawed.

I am sorry to say that I see no value in a manuscript that does not have the honesty to address clear evidence AGAINST its main claim.