

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

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There are some interesting thoughts here, but the structure and organization of the paper make it quite hard to figure out what those thoughts are. A large fraction of the paper is giving a historical account of the development of certain aspects of thermodynamics. As I was reading those parts, I often did not know WHY I was reading them because it was not clear what they had to do with the premise of the paper. There are several things the author could do to alleviate that problem: 1) Give the reader more guidance. For each section, tell the reader what they are about to read and how it is relevant to the thesis of the paper. 2) Cut down on the length of the paper. I see the value of some of the thermodynamic derivations and quotes from historic thermodynamicists, but there is simply so much of that that the paper often meanders rather than focuses on the thesis. 3) Reorganize the paper. The various sections felt disconnected from each other. For the most part, each section of the paper makes sense on its own, but I think the paper could benefit greatly from a rewrite with a strong focus on how to logically guide the reader from one point to the next. If I were trying to write a paper like this, I would spend some time coming up with a concise, focused outline that would help me see the essential points and the order of those points necessary for guiding the reader to the intended conclusion.

Big picture takeaway: The author makes an interesting case for a different lens for thinking about and using thermodynamics, but the paper is not written in the best way for clearly making that case. I think this paper could make its point in half as many words, maybe even less than half. A tighter focus would make a much stronger and more coherent case. Perhaps the author is smart enough to keep all this info in their head at once, but not all the readers are (myself included)!

P.S. Just my stylistic preference, but in my opinion some of the writing is pretty 'fluffy.' For example, "a Gaian state of the Earth," "mankind indoctrinated by the Prometheus myth of fire," etc.