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Is There A Mechanics of Mind? ROBERT JONES, Emporia State University — In his book "Extending Mechanics to Minds" (Cambridge U. Press, 2006) Jon Doyle suggests that the human mind operates according to mechanical principles. Now in contemporary cognitive science operations in the cognitive or "knowledge level" are performed by lower level components of the program level. This decomposition continues from the program level down through the logic level, circuit level, and device level. Each level has its own components and each is described by its own laws of operation (Unified Theories of Cognition, Allen Newell, Harvard U. Press, 1990). The circuit and device levels could just as easily by fabricated out of mechanical elements such as linkage differentials and racks and pinions (Mechanisms and Dynamics of Machinery, Mabie and Ocvirk, John Wiley and Sons, 1975, ch. 8). These mechanisms would then be exactly those governed by the mechanical principles that Doyle focuses on. But Doyle's mistake is to apply the same laws to the cognitive level. Rather, I believe, the cognitive level is best described by operations like knowledge base search, analogy, classification, compression, etc. (R. Jones, Trans. of the Kansas Acad. of Sci., vol. 109, no. 3/4, pg 159, 2006).

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