In the paper “Computers, Complexity, and Controversy” we see the author Colwell Expresses the concerns that many of the advancements in the which have come along with RISC architecture are attributed to RISC only and that they have no application within the CISC architecture. The authors go into detail about what they define as a RISC architecture and some of the reasons that CISC architecture was initially motivated by. They then go on to explain that the entire debate shouldn’t be thought of as CISC vs RISC but rather a design space that can benefit from implementing similar architectures and concepts to different approaches. Showing that in specific MCF evaluation RISC does not necessarily outperform CISC in all design scenarios. They further mention that universities where much of the RISC research came from does not need to produce a viable product that can be sold and marketed, thus they can claim a technology is useful and better than current existing but can fail in making such designs. They further argue that a specific feature of RISC architecture MRS can be implemented in all processors and provide simulations of processors previously mentioned (VAX) that it also provides benefit from this design implementation. Closing off their arguments that CISC can still be improved by bridging that gap with a better compiler and minor changes to its implementation by showing the example of the intel 432. Patterson and his team then respond that their analysis of RISC vs CISC is flawed and that they mislead an uneducated reader. They show Colwell specifically choses the smallest recursive programs which would benefit the most from MRS. Deciding to not include the differences between the RISC and MRS simulated VAX on the different benchmarks. Colwell then returns Saying that Patterson missed the point of their argument. Stating that the purpose of the paper is to expose the fact that the researchers need to extrapolate all the differences between testing machines and show how different RISC and CISC architectures really are. Essentially Saying that there needs to be more scientific rigor in discerning if an improvement in performance is due solely to RISC or something which can be applied to both RISC and CISC architectures.

Overall I think that this is a solid paper that has one or two flaws, those being that the paper is certainly hard to follow and some information feels unnecessary to the argument they are trying to make as well as agreeing with Patterson that it feels an uneducated reader could be misinformed by the information provided at hand by Colwell's paper. One thing that I would definitely change is the section including MCF evaluation to another section in the paper as its location confused me as a reader. Other than that i agree with colwell that a rigorous approach to discerning what exactly makes RISC architecture is better rather than things which can be applied to both RISC and CISC.