Meeting: 998, Houston, Texas, SS 17A, Special Session on Coding Theory and Cryptography

998-94-277 **Jay A Wood*** (jay.wood@wmich.edu), Office of the Provost, 1903 W. Michigan Ave., Kalamazoo, MI 49008-5204. *An Essay on Equivalence of Linear Codes, III.*

Monomial equivalence of linear codes defined over finite fields is undergirded by the extension theorem of MacWilliams, which says that linear isomorphisms that preserve Hamming weight extend to monomial transformations. I will discuss various extensions of these ideas to other weight functions and to linear codes defined over rings or modules. (Received March 01, 2004)