

## ON DIFFERENCES OF CERTAIN STRUCTURED SETS

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*The author dedicates this paper to the memory of Evariste Galois on the occasion of the 150th anniversary of that mathematician's birthday, 25 October 1811.*

*Introduction:* The activities of modern algebra are in accord with the traditions of the scientific method in that they stress the similarities (e.g., isomorphisms) of various canonic algebraic structures (e.g., groups and rings) thereby largely ignoring, for eminently practical reasons, differences between algebraic structures. This paper commences, in a modest way, some investigations into differences between certain structured sets. Such inquiries can only be a supplementary testament to the abundance of fine works performed by the many researchers in studying similarities between algebraic structures. Indeed without those earlier works to draw upon, the present kind of study would be impossible. It is, also, a tribute to the scientific method that such an investigation as the present one is quite natural, and not the product of an attempt to produce novelty, which is a poor reason to recommend any inquiry.

*Definitions:* As is well known one structured set is *similar* to a second structured set if the second is a homomorphic image of the first. They are *abstractly identical* if each is an isomorphic image of the other. Now if *no* mapping from one structured set into another structured set can be a homomorphism then the second set is said to be *anhomomorphic* to the first set. If *no* mapping from one structured set into another structured set can be an isomorphism then the second set is said to be *anisomorphic* to the first set.