

of a trans-  
versal/

surfaces. Of course, the plane surface had been described as one that contains its straight lines in their entirety. But it is not that description that makes a plane surface Euclidean; it is the universal rule that coplanar straight lines will meet on the ~~side~~ on which the included angles are less than two right angles.

As the necessary conclusions of arithmetic are not surprising, so the necessary conclusions of geometry cannot surprise. The significant terms are higher terms constructed according to universal rules. The rules that govern the construction of the terms necessitate the properties and relations of the terms.

Now there is nothing to prevent the higher terms of an explanatory system being employed as the residual terms for ~~axxi~~ the construction of still higher terms.

But what is done once, can be done again. Just as one proceeds from residual terms to higher terms, so one can proceed from these higher terms to still higher terms. As the higher terms introduced a second level of systematization, so the still higher terms will introduce a third level; from the third level one can proceed to a fourth; and so forth! Thus, arithmetic gives way to elementary algebra, ~~and elementary algebra to higher algebra, to the theory of functions, to general geometry~~ and elementary geometry to more general geometries, and so forth!