of recursion theory. Broadly speaking, there are two possibilities. Firstly, we can try to generalise our recursion theory from $({}^{\omega}\omega)^m \times \omega^n$ to $({}^{\omega^\omega}\omega)^\kappa \times ({}^{\omega}\omega)^m \times \omega^n$, and so on. Once the "correct" definition of "recursive" has been made, many of the results considered in the book can be generalised, and Hinman provides several such generalisations. The second generalisation arises when we try to replace ω by a larger ordinal number. Not all ordinals α admit a reasonable "recursion theory". Those that do are called "admissible ordinals". Much is now known about such ordinals, and they play an important role in Set Theory as well as Recursion Theory–indeed some of the arguments employed in recursion theory on admissible sets have a distinctly set-theoretic flavor!

It should be said that, despite our brief reference to this section given above, Part C occupies fully one half of the book, and contains a vast amount of material. Indeed, as Hinman says in his Preface, this is the material of which his volume was originally intended to consist!

So how did I find the volume? Well, let me first of all admit to being a reluctant reader (of any serious text); as well as one with a marked tendency to miss all sorts of errors. Consequently, I read the book in a fairly "shallow" fashion, and gained a fairly good impression of an area in which I am not at all expert. Armed with a reasonable foreknowledge of basic recursion theory and set theory as I was, I found the going not too bad. But the book is plainly intended for the more dedicated reader, with most proofs given in some detail. My feeling (prejudice?) here is that the lone reader may well find the going heavy (I would have, had I tried to read through it in depth), so that it would be preferable to couple the reading with a series of seminars or discussions on the material. There is a large selection of exercises, distributed throughout the text, some easy, some not so easy, and some with hints. So as a "standard text" the book stands very well indeed.

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On uniformization of complex manifolds: The role of connections, by R. C. Gunning, Mathematical Notes no. 22, Princeton Univ. Press, Princeton, N. J., 1978, ii + 141 pp., $6.00.

In a celebrated inaugural address at Erlangen in 1872, Felix Klein defined geometry as the study of those properties of figures that remain invariant under a particular group of transformations. Thus, Euclidean geometry is the study of such properties as length, area, volume and angle which are all invariants of the group of Euclidean motions. In Klein's view, by considering a larger group one obtains a more general geometry. Thus Euclidean geometry is a special case of affine geometry. The latter in its turn is a special case of projective geometry. In any of these geometries, the group is relatively large. What Klein had in mind must be geometry of homogeneous spaces. For this reason, a homogeneous space G/H of a Lie group G is sometimes called a Klein space.