Introduction

This is a practical guide to understanding—by re-creating—the forms of outstanding artwork of the early Insular tradition. Its intention is to explicate principles which underlie designs that have fascinated viewers for a thousand years and more. Such treasures as the Tara Brooch and the Lindisfarne Gospels, as well as the earliest ringed crosses and Anglo-Saxon verse texts, belong to the ‘Insular’ tradition, evolved in Ireland and England, seventh through tenth centuries.

Only recently discovered is the fact that the formal plans of the best pieces of Insular jewelry, ‘carpet’ pages, stone sculpture, and long poems have a common source: they are all generated with astonishing accuracy by ‘cumulative geometry.’ Simply, compass and straight-edge are the tools to produce configurations that are conceived by rules for achieving total coherence of ratios within the forms. They belong to an art that is pleasing to both eye and intellect.

Demonstrations of the method of design have appeared in separate publications over the past twenty years or so, beginning in papers on the formal divisions of long poems in Old English, on religious topics. Those divisions in the unique manuscripts had never been accounted for satisfactorily, explanations ranging through impressionistic guesses about scribal stints, duration of poetic inspiration, size of parchment leaves—or wax tablets—used in original composition, or transcribing of oral performance, pause points for reading in refectory or cell, and so on. No one had attempted to correlate any of the sectional divisions with any other sectional divisions of a text: that is, no one asked whether the sectional divisions comprised a formal scheme for the whole texts in which they occurred. Once the metrical linecounts were set in full array, a web of related ratios could be recognised, and a coherent form unifying the irregular sectional lengths became apparent. The striking thing was that the numerical ratios that linked into a comprehensive schema for a text were precise numerical approximations to the basic geometrical ratios involving $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, along with 1, 2, 3.

The next step was fairly obvious: to examine the formal features of carpet pages of the same culture of literacy, with their squares and rectangles and interlace, to see whether there were similarities or analogous patterns. From
this followed other papers on carpet-pages in the principal illuminated Gospels codices. Designs of these pages embodied and interwove the same simple ratios, found when measures 1 and 2 are combined in straight and right angles, that dominate the framed illuminations: $1, 2, 3, \sqrt{2}, \sqrt{3}, \sqrt{5}$. These pages—besides their extraordinary intrinsic interest—became a tool for studying the sectional divisions of texts. The graphic expression of the ratios in the carpet-pages provided a most useful analog to the verse-text forms. If 'geometrical' ratios among sectional groups in literary texts were now obvious, there was still a question of how they could have been planned and executed, especially in interlocking patterns. The graphic forms showed the way to finding an answer to that question, and particularly because construction marks in the parchment leaves took some of the guesswork out of reconstructing how the graphic forms were devised. And so the papers on divisions in poetic texts and the lengthening series of papers on page design became a dynamic enterprise, study of either one of the art forms leading to more precise and persuasive study of the other.

That was where things stood when I gathered and synthesised these parallel studies in *The Earliest Irish and English Bookarts: Visual and Poetic Forms before A.D. 1000*. Then a third art form came to my attention, the early sculptured crosses of Ireland. Slowly, one after another of these extraordinary artifacts answered to the same kind of formal analysis, as had the texts of English religious poems and the illuminations of the Gospels texts of Kells, Lindisfarne, Echternach, St. Gall, and others. They seem to belong to a period—in their first development, anyway—between the illuminated pages and the poetic texts. Again a series of papers followed, explicating the forms of a number of these crosses. And again, the further analyses entered into dynamic relationship with the two series that had preceded them. Other embodiments of the key ratios became apparent, along with other methods of linking them into a coherent geometry of design.

After these, at the prompting of someone who had seen some of the earlier analysis, some of the fine metalwork came to my attention. Its tradition probably precedes the objects in all three of the other art forms. Very slowly—since there were no overt right angles outside or inside the forms to anchor the analyses—the formal schemes of two superb pieces have been found to be built from the same simple ratios as were the others, and in plans perhaps even
more elegant. (There may be more of them.) They enhanced still further the understanding of the forms in the other media.

So at this point the fundamentals of the coherent geometry in early Insular art may be made more accessible to others, if the tools, the ratios, and the configurations are laid out in a systematic way. The pages that follow should be thought of as a handbook for resources and techniques and modes of designing within this singular tradition. (In no respect do they offer interpretations of designs, much less of their putative meanings.) The wonderful thing about this early tradition of art is that, once its conceptual basis is grasped, it is hard to make mistakes in analysis of individual works, so long as analysis is rigorous and precise. At the same time, it is easy to make analyses that are incomplete, inept, over-wrought, or otherwise in need of being dismissed. Hence this practical guide to re-creating—and in this way to understanding—the forms of outstanding artwork of the early Insular tradition.

The art of designing is just as mysterious now as it ever was, but the technique and the aesthetic rules of early Insular design are not. Students, amateurs, scholars, archaeologists—all should find this engrossing, and some have a professional need to understand it.