Axes of Construction

1. Richard Mills, "Axes of Construction: An Analysis of Dutch Art Nouveau Carept Designs by T. A. C. Colenbrander," *Studies in the Decorative Arts* 10, no. 2 (Spring-Summer 2003): 69-135. The analyses in this book document a variety of techniques that Colenbrander used in the creation of his carpet designs. His use of axes was arguably the most innovative. A previous article by the author explores this technique in great detail. A brief overview of the technique is presented here for readers of this book who are unfamiliar with the article.

Colenbrander's carpet designs are what is referred to as quarter designs. This means that the design comprises one fourth of the complete design; the other three quarters of the design are produced by mirroring the quarter design three times along and across the length and width of the quarter design. The length and width can be considered to be primary axes.

In many of his carpet designs, Colenbrander marked a number of axes in the margins of his designs. Such markings indicated that smaller versions of the design could be generated by mirroring the design three times along these other axes. Colenbrander classified the axes as one of three types: small, large, and intermediate. All three types can be seen in Figure 7. The small axis (labeled "KI: as", with a left-pointing arrow) is seen on the far left of Figure 7. The large axis (labeled "Gr: as", with a right-pointing arrow) is on the far right of Figure 7, and is coincident with the right end of the quarter design. The intermediate axes (labled "tusschen assen") are the axes located between the small and large axes, are marked with a small "x," and are coincident with the thicker lines printed on the point paper.

The axes, which can be along the width and/or length of a design, specify subsections of the design that can be mirrored three times to produce a full design. The smaller the subsection, the smaller the carpet made from the design will be. Figure



Figure 7. Detail of Steil/Rigide, author's collection.

8 shows the design Steil/Rigide with the axes specified by Colenbrander shown as white lines (added by the author).

Colenbrander specified ten axes along the longer side of this design and twelve axes along the shorter side, for a total of one hundred and twenty subsections. Figures 9 and 10 show two examples of *Steil/Rigide* when mirrored three times at the points defining the largest and the smallest subsections. Figure 9 shows the largest subsection, which is the full design, whereas Figure 10 shows the smallest design version. Figures 9 and 10 show the size difference between the largest and smallest versions of the design.

A comparision of the two versions of the *Steil/Rigide* design demonstrates the power of Colenbrander's use of axes. One hundred and twenty sizes of this single design could be made to accommodate rooms of varying dimensions without needing to do anything more than subdividing the design. Colenbrander oriented the motifs used in *Steil/Rigide* around the placement of the axes, thereby enabling the motifs to be subdivided at places that preserve their composition. This innovative design technique using axes was originated by Colenbrander and does not appear to have been used by any other carpet designer.