The Grammar of Ornament

Special Collections featured item for February 2009 by Fiona Melhuish, Rare Books Librarian.

Owen Jones. *The grammar of ornament. Illustrated by examples from various styles of ornament. One hundred folio plates, drawn on stone by F. Bedford, and printed in colours by Day and Son. London: Published by Day and Son, 1856.*

Item held in Printing Collection Large --745-JON, University of Reading Special Collections Services.

The grammar of ornament was the masterpiece of Owen Jones (1809–1874), a London-born architect and designer of Welsh descent, and one of the most influential design theorists of his time.

Following studies at the Royal Academy Schools and an apprenticeship with the architect Louis Vuillamy (1791-1871), Jones set out on a Grand Tour of the Continent. He travelled to Italy and then to Greece where he met the French architect Jules Goury (1803-1834), who was studying the use of polychromy (the use of paint and colour to enhance architecture and statuary) by the ancient Greeks.
Goury and Jones travelled to Egypt to study the Islamic architecture in Cairo, and continued on to Constantinople, before arriving in Granada in southern Spain in 1834 where they carried out their intense and ground-breaking visual record of the Alhambra palace, and its extraordinary Islamic decoration. Unfortunately, Goury died of cholera in Granada in August of that year, but Jones completed their study and published the finished work in *Plans, elevations, sections and details of the Alhambra*, which appeared in several parts (to form two volumes) between the years 1842 to 1845.

*Plate XLIII: ‘Moresque, no. 5’ from The grammar of ornament showing tile patterns from the walls of the Alhambra*

The standards of colour printing at that time were not sophisticated enough to do justice to the intricate studies, and so, at great personal expense, Jones printed the work himself, in collaboration with the lithographers Day & Haghe (later Day & Son), using the new process of chromolithography. This elaborate method of printing, demanding great precision, was patented by Gottfried Engelmann in Paris in 1837. It required up to twenty separate
lithographic stones and drawings, one for each colour, which were then overprinted one after the other. In her recent book on Jones, the architecture historian Carol A. Hrvol Flores has described the process as follows:

“First, the image to be printed is transferred to a lithographic stone. The lithographer retraces the outline on the stone in chalk or black ink, adding desired shading. The printer etches the image by applying acid to the stone. An impression on thin paper is made for each colour to be used; each impression is placed on a stone and passed through a lithographic press, imprinting the outline of the first, or key stone, on the other stones. An artist indicates the amount and location of colour to be used on each stone, one stone per colour. Finally, the image is printed on a sheet of paper and the impressed paper is attached to each of the stones successively and aligned so the colours fall in their proper places or “register”.

Jones’s publication on the Alhambra was to be the first significant published work to be printed using chromolithography. He proceeded to produce many illustrated and ‘illuminated’ gift books using the technique, and also produced a wide range of printed products for the firm of De La Rue.

Jones’s studies of the Alhambra were highly significant in the development of both his interest in ornament and his theories of flat pattern, geometry and polychromy. Jones and Goury observed that the harmony of Moorish decoration was achieved through the use of primary colours, with secondary and tertiary colours used in the background. Jones was appointed as one of the Superintendents of Works for the Great Exhibition of 1851, a showcase of manufactures and industry from around the world, which would provide inspiration to designers and craftsmen in the new industrial culture of Victorian Britain. Jones was responsible for the interior decoration of Joseph Paxton’s Crystal Palace, and also

Details from Plate LXIII: ‘Moresque’ from ‘The grammar of ornament’ showing tile patterns from the walls of the Alhambra

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the arrangement of the exhibits inside. This work enabled Jones to put his colour theories into practical use, and also brought Jones to the attention of the wider public. He developed a controversial colour scheme for the interior based on the primary colours of red, yellow and blue for the interior ironwork, based on his studies of primary colour polychromy in the architecture of Ancient Greece, Ancient Egypt and the Alhambra.

![Plate LXIV: 'Celtic, no. 2' from 'The grammar of ornament' showing examples of Celtic ornament from manuscripts including the Lindisfarne Gospels.](image)

Jones went on to present his theories on decoration, ornament and polychromy via a series of lectures at the Society of Arts and at the Government School of Design, with encouragement from Henry Cole, mastermind of the Great Exhibition and founder of the South Kensington Museum (part of which was to become the Victoria and Albert Museum). At the request of Cole, Jones embarked on the publication that was to become his most well-known and most influential work, *The grammar of ornament*. Published in 1856, and issued in ten parts, this lavish imperial folio work is a compendium of nineteen styles of historic and
world ornament, concluding with a final chapter on nature. The book contains one hundred magnificent and highly detailed colour plates of ornaments drawn from architecture, textiles, tiles, rare books, metalwork, stained glass and many other decorative arts, and was described as ‘the horn-book of angels’ when it was first published. Many of the ornaments were taken from pieces which had been shown at international exhibitions. The Grammar is also a remarkable tour de force of chromolithography. The preparatory drawings were produced by Jones’s pupils, Albert Warren, Charles Aubert and a Mr Stubbs. These designs served as models for Francis Bedford and four other artists, who produced the final drawings on hundreds of lithographic stones. It was the first time that so many examples of ornament from such a wide range of countries and historical periods had been presented in colour in a single work.

Plate XLVI: ‘Persian no. 3 showing ‘ornaments from Persian manuscripts in the British Museum’.

The book is prefaced by thirty-seven “general principles in the arrangement of form and colour in architecture and the decorative arts”. The first of these principles, or ‘propositions’, stated that ‘The decorative arts arise from, and should properly be attendant
upon, architecture’, indicating that ornament should grow out of, and not compete with, architecture, one of Jones’s key principles, and a view which he shared with the influential architect and designer A.W.N. Pugin.

Jones was keen for the artists and designers of the new industrial culture to develop a new modern style. However, he did not propose that this should be achieved by reviving old styles or techniques, or by copying the designs in the Grammar, but by studying these styles to discover their underlying design principles – their grammar - to inspire new visual forms: ‘The principles discoverable in the works of the past belong to us; not so the results. It is taking the end for the means’ (Proposition 36). Jones perceived geometry to be fundamental to good ornament design: “All ornament should be based upon a geometrical construction” (Proposition 8). As Jones put forward in Proposition 4, ‘True beauty results from that repose which the mind feels when the eye, the intellect, and the affections, are satisfied from the absence of any want’. Abstract pattern was seen to lead the eye to move, while giving a satisfying structure and therefore being restful to the mind. Geometrical patterns were particularly used in Islamic ornament, such as in the decoration on the Alhambra, a source of inspiration for many of Jones’s theories. Jones also perceived patterns of flat colour to be suitable for reproduction by the new industrial machinery.

Plate XCV: ‘Leaves from nature, no. 5’.
The example of design in the natural world was a key universal principle and touchstone for Jones. The example of nature was referred to in the principles governing the use of curved lines, such as Proposition 11: “In surface decoration all lines should flow out of a parent stem. Every ornament, however distant, should be traced to its branch and root”, as in the veins of a leaf in nature. This feature is particularly found in Arabic and Islamic art, and is known as ‘arabesque’. A curved line should break away gradually from another curved line or a straight line, rather than in an abrupt fashion which would disrupt the repose of the eye. Jones praised Greek ornament [see below] as an example of this type of refinement of form.

Plate XVIII: ‘Greek, no. 4’ showing ‘ornaments from Greek and Etruscan vases in the British Museum and the Louvre’.

As Jones states in the preface to the volume “…whenever any style of ornament commands universal admiration, it will always be found to be in accordance with the laws which regulate the distribution of form in nature”. However, Proposition 13 reads “Flowers or other natural objects should not be used as ornaments, but conventional representations founded upon them sufficiently suggestive to convey the intended image to the mind, without destroying the unity of the object they are employed to decorate”. This idea
rejected the direct imitation of nature popular in Victorian decoration, in place of simplified or abstract representations of natural forms [see example below].

Detail from Plate XLV: ‘Persian, no. 2’ of ‘ornaments from Persian manuscripts in the British Museum’.

Colour was, of course, a key element for Jones, and a number of the principles referred to the use of colour, including Proposition 21 which put forward his theory regarding the harmonious use of primary colours: ‘In using the primary colours on moulded surfaces, we should place blue, which retires, on the concave surfaces; yellow, which advances, on the convex; and red, the intermediate colour, on the undersides; separating the colours by white on the vertical planes’.

Plate V: ‘Egyptian, no. 2’ showing fans, head-dresses, boats and other decorative objects and motifs from Ancient Egypt.
The chapters of the *Grammar* presented key examples of ornament, arranged chronologically, which exemplified the principles of good design which Jones sought to promote. These included chapters on Egyptian [see above], Greek, Byzantine and Persian styles of ornament, and many others, with colour plates and an essay on each style. Contributors included M. Digby Wyatt, one of Jones’s colleagues at the Crystal Palace, who wrote the essays on the ornament of the Renaissance and the Italian periods.

Plate LIII: ‘Indian, no. 5’ showing ‘specimens of painted lacquer work from the collection at the India House’.

Half of the chapters were devoted to ornament which originated outside Europe, with Islamic ornament, such as Arabian, Moresque ornament from the Alhambra, Persian and Indian [see above] ornament, particularly strongly represented. As the writer John Kresten Jespersen has noted, “the *Grammar* is an original work in the main, not simply for its analytic approach to ornament, nor only for its colour, but in precedent of illustration and comprehensive treatment of ornament outside the western European tradition”. 1
Jones’s chapter on the ornament of ‘Savage Tribes’ was particularly significant in his recognition of the merit of their designs [see Plate III shown above], and his belief that such ornament was the result of instincts and aims common to all mankind. He published a drawing of a tattooed head of a New Zealand Maori woman [shown below] as an example of good design principles in practice, where every line of the tattoo was adapted to develop and enhance the natural lines and features of the human face.
The plates for the ‘Savage Tribes’ chapter were also important in that it was the first time that such images had been published at a time when ‘primitive’ art and ornament was seen as backward and uncivilised. According to Flores, Jones “was the first architect to consider the ornament of undeveloped nations worthy of study”. 2

Jones was also an extraordinarily versatile designer, and applied his skills to a wide range of design in the decorative arts including textiles, furniture, interior design, wallpaper, carpets and printed products, such as calendars and food packaging.

Plate LXXVIII: ‘Renaissance, no. 5’ showing ornaments from ‘earthenware held in the South Kensington Museum’.

His publications and ideas were very influential to many artists, designers and architects both in England and abroad, including Christopher Dresser, William Morris, and later, the architects Frank Lloyd Wright and Le Corbusier. Jones also contributed indirectly to the Arts
and Crafts, Art Nouveau and Aesthetic art movements. However, Jones had a number of critics, particularly the eminent writer and art critic John Ruskin who dismissed Jones’s principles as the “dregs of corrupted knowledge”. The ideas of Jones and Ruskin were frequently at odds with one another. In particular, Ruskin’s ideas favoured historicism, the revival of historic styles, especially the Gothic style, whereas Jones saw the reinstitution of Gothic as adopting a “galvanized corpse”, inappropriate for the modern industrial age. However, the Grammar has proved to be both an influential and enduring work, and is still in print today and also available as a CD-ROM.

The University of Reading Special Collections Services hold a number of other publications by Owen Jones in various rare book collections, most notably the two-volume ‘Plans, elevations, sections and details of the Alhambra in the Overstone Library. The Great Exhibition Collection also contains publications which refer to Jones’s involvement in the Great Exhibition. Examples of original artwork by Jones for diaries, calendars and food packaging are also to be found within the records of the De La Rue printing firm, also held at Special Collections Services.

Plate LXXXVI: ‘Italian, no. 1’ showing ‘a series of arabesques, painted in fresco … selected from the decorations of the Loggie, or central open arcade of the Vatican, Rome’.
References

2. Flores, Carol A. Hrvol, Owen Jones : design, ornament, architecture and theory in an age of 

Additional reading

- Bettley, James (ed.) The art of the book : from medieval manuscript to graphic novel. London : 
- Sloboda, Stacey, ‘The grammar of ornament : cosmopolitanism and reform in British 
- Snodin, Michael and Maurice Howard, Ornament : a social history since 1450. New Haven 
  ; London : Yale University Press, 1996.

Detail from Plate XXXIV: ‘Arabian, no. 4’ showing 
a ‘design from a copy of the Koran in the Mosque El Barkookeyeh’.