
http://radar.gsa.ac.uk/5455/

Copyright and moral rights for this dissertation are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This dissertation cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the dissertation must be given
"The Work of Charles Rennie Mackintosh and Robert Lorimer within national and international tendencies in design at the turn of the Century"
SYNOPSIS

CHAPTER 1
- Mackintosh and Lorimer and the international Arts and Crafts Movement

CHAPTER 2
- Mackintosh and Lorimer in a Scottish Context
- Illustrations

CHAPTER 3
- A comparison of the exterior designs of Mackintosh and Lorimer
- Illustrations

CHAPTER 4
- A comparison of the interior designs of Mackintosh and Lorimer
- Illustrations

CONCLUSION

Bibliography, Source, Notes and Illustration Sources
SYNOPSIS

This dissertation examines the designs of two of Scotland's most important architects, Charles Rennie Mackintosh and Robert Lorimer, based in Glasgow and Edinburgh respectively at the turn of the Century.

Their work is viewed in relation to international tendencies in progressive architecture and design, namely the Arts and Crafts Movement; also in relation to the existing strand of Romanticism in Scotland and the Scottish Baronial Revival which in some respects reported a particular manifestation of the same principles.

Having outlined the theoretical basis of both the international Arts and Crafts movement and National Romanticism in Scotland, I will go on to compare and contrast the design philosophies of Mackintosh and Lorimer through discussion of selected architectural and interior commissions.
"The Work of Charles Rennie Mackintosh and Robert Lorimer within national and international tendencies in design at the turn of the Century"
CHAPTER 1

Mackintosh and Lorimer and the International Arts and Crafts Movement

The principles of the Arts and Crafts movement were propagated largely by the British writers/designers, William Morris and John Ruskin. It was the dictates of these men which inspired designers all over the work to admire the work of the British movement. It is important to examine how the Arts and Crafts movement was defined.

In John Ruskins's first book entitled the 'Modern Painters' he described what I feel was the essence of the Arts and Crafts movement when he said that

"art should express the personality activity and living perception of a good and great human soul."

and that

"artists should convey their pleasures over the beauty of nature and the creatures of God." (1)

This delight in the beauties of human creativity was also an opinion held by J.W. von Goethe who was one of the German romantics and felt that art should be an

"expression of the primitive" (2)
and therefore saw this human expression as

"another nature". (2)

The Arts and Crafts movement was grounded on the

"Spirit of Gothic" (3)

the style which Ruskin referred to as

"That perfect and Christian style ... which is everlastingly the best." (4)

The gothic style was appropriate as it rejected the notion of

"servile ornament" (5)

which could be taught or plotted exactly from a book and therefore prompted a more human approach to building, allowing the craftsmen to enhance the work with an individual expression of himself, after all, Ruskin believed that when the text book details of other styles - classicism for example - were executed, then

"any work man could produce them if they were beaten hard enough." (6)
To Ruskin, the humanisation of men was essential and therefore he despised the use of machinery. In his book the 'Seven Lamps of Architecture' he wrote of mechanised techniques

"a determined sacrifice of such convenience or beauty, or cheapness as is to be got only be degradation of workmen and by equally determined demand for products and results of healthy emobling labour." (7)

The respect of nature which was so close to the hearts of the Arts and Crafts designers and artisans was expressed in the inherent simplicity of their work. This simple and natural form was exemplified in allowing the form of the building to follow its function and its style to be inspired by traditional local styles with appropriate and suitable materials used. In Morris's description of a gothic building he said that it should have

"walls that it is not ashamed of; and in those walls you may cut windows wherever you please; and, if you please may decorate them to show you are not ashamed of them." (8)

Morris saw this type of organic expression as the

"glory of the art building" (8)

The art of building in this case was inspired by buildings created by the people themselves and not by the power of money and status.
This was one of the reasons, along with a desire to reject everything that industrialisation stood for that the local styles of

"unsconscious cottages, almshouses and barns or ordinary medieval people" (8)

were remembered and revived.

This local revival also created forms of national and regional expression within the Arts and crafts movement through a need to produce a building which was not only unified within itself but which was unified within the region or county that it was built.

Peter Davy described by people involved in the Arts and Crafts movement as a

"highly individualistic lot who all shared Morris's affection for simplicity, truth to materials and the unity of handicraft and design." (9)

These were the prerequisites of a movement which William Wordsworth described as a

"creative art (whether the instrument of words she uses or pencil pregnant with ethereal hues) which demands the service of a mind and heart." (10)

The first British building to truly recognise the boundaries of the Arts and Crafts movement was William Morris's house, the Red House by Phillip Webb. The rooms in this house were arranged logically with a clear distinction between family and servants
quarters and a thoughtful separation between living and sleeping spaces. This arrangement formed an L-shaped plan which enclosed a courtyard and immediately gave the house a sense of intimacy. Cumming points out that the exterior use of

"simple pointed arches and, inside in the elongated wooden newel posts" (11)

were typical of gothic architecture, however, the style of the Arts and Crafts eventually developed into a reflection of its own principles which resulted in a fair amount of eclecticism.

Norman Shaw (1831-1911) according to Cumming was a "leading exponent of visual freedom" who studied the English vernacular and went onto create buildings with a mix of styles yet still with a typically English quality using half timber upper floor and lower floors of a local brick or stone as well as tile hung walls, decorative chimneys and steeply pitched roofs. His buildings were also asymmetric which added to the overall impression of a building that had evolved naturally over a long period of time.

(12)

The composition of windows and forms and the way in which materials were used in buildings at this time were expressions of their functional nature as Cumming says

"Design freedom also meant individual interpretation of shared principles - Architects emphasized construction and function through deep enveloping roofs, long bare walls and asymmetrical window patterns." (13)
Honest expression of structure was something inherent in the principles of Morris and Ruskin but his use of Modern machine principles was seen as an insult to the skilled craftsmen; the movement was attempting to rehumanise the workers and allow them to plan an equal role in the creation of art thus leading to a more unified approach.

These principles were adhered to in general, however, W.R. Lethaby (1857-1931) was renowned for his acceptance of new technology and its incorporation with traditional techniques. For example his house called Brockhampton had a roof of concrete construction which was thatched. Lethaby justified his use of Technology by stating that he saw concrete as

"only a higher power of the Roman system of construction".

Arts and Crafts architects saw beauty in the honesty of the materials but also in the craftsmanship which was used to enhance them.

The honesty within the Arts and Crafts pallet of materials was derived from the appropriate nature of the material; the thatch in Lethaby's roof also created a warm dry interior. But the most obvious definition of an honest material is one which is
Lorimer and Mackintosh were good examples of this as they used their forms of Scottish tower houses, castles and cottages to evoke images of Scotland's past. This was also common in England where Edwin Lutyens (1869-1944) used the Elizabethan brick house as his model and adopted features such as tall brick chimneys mullioned windows and deep gables but also expressed the function of the interior on the elevations: Deanery Garden in Berkshire was a good example of this. Lutyens had close contact with Gertrude Jekyll who was a renowned garden designer of this period, Peter Davey quoted her as saying of Lutyens

"The architect has a thorough knowledge of local ways of using the sandstone that grows in our hills she described this as a well defined way of building the country." (17)

Mackintosh and Lorimer were clearly affected by the Arts and Crafts movement. Lorimer embraced almost all aspects of it and Muthesius described him as

"The only architect in Scotland practising within the Arts and Crafts tradition." (18)

However, despite Mackintosh being effected by the movement, Cumming points out.

"Mackintosh's vernacular inspiration and skillful manipulation of not only exterior form but interior space in the inglenook, window seat or box-shaped stairwell along categorize him as an Arts and Crafts designer." (19)
This was due to his concern that the use of traditional craftsmanship was too often ... synonymous with old fashioned methods and technique which interfered with his desire for progression and modernisation." (20)

According to Wendy Kaplan in her essay Regionalism in American Architecture, when

"England had issued the call for reviving the vernacular ... no country heeded it none fervently than the United States. The goal was organic architecture - one where hones expression of structure responsiveness to site nd the use of local materials would replace stale academic conventions." (21)

This was seen by Peter Davey as

"one of the most ingenious and integrated Arts and Crafts building experiments" (22)

which was demonstrated in a number of regional styles throughout the U.S.A.

On the West Coast of America the hot climate inspired the choice of Spanish Missions, on the East Coast, the architecture of English settlers created a colonial style. In the mid-West the buildings were inspired by the never ending flat planes of the prairies. According to Davey, these buildings had a

"mass of origins ranging from Californian missions, New England farmhouse and log cabins to Old English Voysey." (23)
The parts of Europe which had most in common with the British Arts and Crafts movement were Scandinavia and middle Europe. (Germany, Austria and Hungary) The work of the British was admired on the continent and the work of Morris and Ruskin was widely read in these countries. Many of the movements' leaders subscribed to the "Studio" Magazine and showed great interest in the work of Webb, Shaw, Bailie, Scot and Voysey. (24) Davey quotes Ashbey when referring to the UK/Europe relationship when he said

"we are all together at one in our principles. We guard in common the lamp of truth." (25)

The movement varied in style throughout Europe and differed from Britain in the respect that they did not reject the use of the machine with the same vehemence, after all

"countries that had never been industrialised had no cause to reject it." (26)

Neither did they reject Art Nouveau like Britain but they did not welcome it in the same way as southern Europe. Davey described the work in Northern Europe as

"simple straightforward and clearly expressed." (27)

this gave their work and aesthetic more similar to that in the U.K.
The Arts and Crafts movement was a reaction to the massive industrialisation of the 19th Century so within this movement the use of machinery was discouraged and the work produced was seen as an expression of nature.

In Sweden for example concentration was initially focused on historical literature and legends. Kaplan saw this, along with the discovery of even more antiques in the 1860s as creating the "Viking Revival" (also called the 'the dragon style') which was particularly popular in Norway and involved references to dragons and long boats on everything from roof structure on houses to ceramic bowls. (30)

This abstraction of indigenous historical styles and ornament and their incorporation into a variety of objects was observed by the textiles industry when the Foreningen Svensk Hernstojd (Swedish Handicraft Society) were focusing their attentions on the heritage of their Countries and the wide variety of peasant crafts that Kaplan claims lead the designers to

"rejecting the separation of fine and decorative art"
(31)

The school of fine art in Helsinki then began to apply the crafts to industry. The Svenska Slojdloforeningen (Swedish Society for Industrial Design) also held these opinions which lead to the creation of Skansen which was the world's first open air museum and displayed examples of the country's peasant life, held in
vernacular buildings. This celebration and use of the craftsperson to produce hand made art as an expression of a country's nationality was a direct connection between nature in the form of the human hand and the Arts and Crafts movement.

The forms of nature were also utilised within the Arts and Crafts movement, for example in Eliel Saarinen's (1873-1950) Finnish Pavilion in the 1900 Paris Expo he expressed its national identity through the abstraction of Finnish plants and animals in its decoration and enhances this national expression in the use of Finnish granite which was a stone strongly associated with the hand robust character of the Finnish people. (32)

An expression of nature was abstracted even further by Frank Lloyd Wright (1867-1959) the American architect who was famous as the founder member of the Prairie group. The prairie houses were organic expressions of nature in that they were inspired directly from the horizontality of the mid-western prairies, those houses adopted low roofs, shallow eaves and were visually anchored only by a huge chimney. The openness of their surroundings were followed through also in the interiors of these houses. Frank Lloyd Wright's Robie house for example was one of the first houses to allow rooms to flow into one another, effectively making them open plan and initiating what Kaplan described as

"the destruction of the box." (32)
Both Mackintosh and Lorimer used nature in varying forms within their designs. As far as the compositions of their buildings was concerned, they both used forms of Scottish vernacular. These large simple forms and multiple gables were seen, at least in the case of Ardkinglas, as a reference to the

"tumbling rhythms" (34)

of the Scottish hills. Nature as decoration was used by both. Mackintosh preferred to abstract the shapes he used, as in the window bracing in the north elevation of the Glasgow School of Art. Lorimer used natural forms in a literal way. For example, in the fruit carvings on the ceiling of the Salion at Ardlangless. Where the use of craftsmen was concerned, Mackintosh's only regular colleague was his wife, as he preferred to concentrate on the innovation with in his work, Lorimer, however, always re-used his craftspeople, seeing this as the only way to achieve a unified level of decoration.

The notion of re-humanising the worker was one of the main goals of the Arts and Crafts movement. This allowed the whole designing and building process to become more integrated and unified with the building becoming an expression of both the designer and the worker. In Europe their ideas on this integration were fairly advanced in that in some cases they also felt a need to integrate factory production with the hand crafted aspect.
Louis Sparre (1863-1964) for example was a Swedish artist who set up the iris Factory. This factor allowed much of the vernacular style furniture, ceramics and textiles to interact and utilise factory production and industrial techniques. Kaplan points out that these works

"embodied the Arts and Crafts ideals of design unity, called on the continent Gesamtkunstwerk. (35)

Joseph Hoffman (1870-1956) and Kolman Moser (1868-1978) were also part of a similarly inspired movement which they called Werkstatte. This organisation produced high quality artistically innovative works with the use of machines if needed. However, these goods were high prices also and were not available to the masses, a denial of one of Ruskin and Morris's main principles.

The American company Cram and Goodhue were inspired by the Arts and Crafts Exhibition Society in London and set up their own society of Arts and Crafts (SACB). They often employed craftsmen from this society, as many very skilled people had become members of it along with similar societies throughout the U.S.A. These societies demonstrated one of the most fundamental aspects of the arts and crafts movement, namely the artist, craftsman and designer working alongside one another to create unified pieces of work within the bounds of the Arts and Crafts movement and appropriate to modern conditions and surroundings. (36)
Another American company famed for the unity they gained through the use of traditional craft techniques and methods were Greene & Greene. Charles Sumner Greene (1868-1957) and Henry Mather Greene (1870-1954) formed an architectural partnership which employed the preachings of the Arts and Crafts movement, however, their obvious strengths lay within their love and skill of hand crafted objects and finishes.

Both Greenes had attended Woodword's Manual Training High School, which was

"the first non vocational institution to consider hand work to be important as the liberal arts." (37)

Therefore, they gained practical knowledge before setting up their own architectural partnership. Their favourite medium was wood and according to Davey

"every member and every joint is made explicit"

and their work was

"wooden style built woodenly." (38)

The brothers did much of the carving themselves which was the most direct way to express their ideas through a craftsman. They included in the designs built-in furniture and inglenooks along with more american vernacular devices such as sleeping porches, pergolas and patios.
The expression of the good and great human soul as far as the rejection of machine processes was concerned was almost forgotten on some occasions. Irving Gill (1870-1936) for example used flat roofs and an early reinforced concrete technique called the tilt slap system to create his contemporary mission style houses, however when Davey describes him he says

"In this simplicity and in his affection for the focus of his architecture Gill was an Arts and Crafts architect. But in his methods he was more a forerunner of the modern movement." (39)

Frank Lloyd Wright, however, decided to speak his own mind where the subject of machine process was involved.

"by its wonderful cutting smoothing shaping and reinterpreting capacity has made it possible so (to produce) without wast that the poor as well as the rich may enjoy today beautiful surface treatment of clear strong forms." (40)

Where the question of the use of craftsmen and the unity created within the design process through their rehumanisation was concerned, it is apparent how Mackintosh and Lorimer relate to their international contemporaries. Lorimer was concerned with high quality craftsmen and often reproduction of beautiful pieces of work by skilled people, so he had much in common with the Greenes, Cram & Goodhue etc., however, Mackintosh was not really interested in highly crafted work as Bilcliffe said

"if traditional craftsmanship stood between him and the realisation of a design, then was craftsmanship that had to go." (41)
The morals which underpinned many of the Arts and Crafts principles existed to free the worker from the conservative production and intensive repetitive labour of the industrial society. The Arts and Crafts had a desire to create works of art that expressed great individuality and to reintroduce the joys of labour to the worker. Through this desire for individual expression, a desire for regional and national expression was born. These forms of expression occurred throughout the world with each country or region reusing vernacular forms and materials.

In Hungary in the 19th Century they felt that the sources of this romanticism ought to come from Transylvania as it contained Hungary's most ancient history. This vernacular revival was seen as a celebration of the heritage embodied in the Magyars and Attila the Hun. Transylvania was close to the hearts of the Giodollo artists colony, this colony used the Arts and Crafts theories to create ideals within their own society. Kaplan tells us that they

"believed strongly that making and using handcrafted folk objects would have a transforming power on peoples' lives." (42)

This followed the social aspect of the Arts and Crafts as it would form a labour intensive industry creating employment and stopping people from emigrating to the U.S.A. A revival of national crafts
was also seen as something which would install pride in people and be a true expression of the human soul. Physical examples of this were seen in the Tapestries of Korosfoi and the window designs of Wigand Ede Toroczkau.

Still in Hungary, the Architect Karoly Koz (1888-1977) was inspired by his nation's crafts and used a vernacular language throughout his buildings from its structure to its decoration. Koz's contemporary was Odon Liechner who expressed a Hungarian style, linked to a progressive modern style in his postal savings bank (1899-1901). Liechner merely used 'motifs' from Hungary's folk history and expressed his progressive tendencies through his use of exposed concrete and steel.

In America at this time similar relationships existed. For example Arthur Burnett Beaton (1857-1927) managed to sell the West coast to tourists with buildings like the Mission Inn at Riverside with its historically inspired bell towers, arches, cloisters, white walls and red roof tiles. Charles Lumming (1859-1928), the owner of a local magazine 'Land of Sunshine' stated of these types of buildings that

"they advertise the state as nothing else can. Our railroads (in) whom we can have no better advertisers have their mission folders, Mission stations and now their Mission Cars. Our Mission hotels are proving how great (is) the demand by tourists for something 'different'."
In 1902 'The Craftsmen' magazine claimed that the most commercial of Arts and Crafts ventures displayed

"patient handicraft and the loving sincerity of unskilled builders who had joy and faith in their work, truly in keeping with the Arts and Crafts love of selfless expressions of the human soul." (43)

Working on the same coast was Irving Gill (1870-1936) who also appreciated the 'Mission style' but saw it in a different way. He used its plain white surfaces and single forms to create a strong modern architectural style and he said:

"If we, the architects on the West, wish to do great work, we must dare to be simple, must have the courage to fling aside every device that distracts the eye from structural beauty, must break through convention and get down to fundamental truths." (44)

This attitude and Gill's obsession with cleanliness inspired what Marcus Whiffen called

"purity of shape and a reduction of every detail to its least obtrusive form"

which made

"Gill America's first minimalist architect." (45)

Both Gill and Benton express aspects of national identity and the Arts and Crafts in their architecture, however they both seemed to have different incentives. Benton saw the revival of Mission architecture as an expression of the regional vernacular but also
appeared to see it as a commercial device. Gill, however, was obsessive about the appearance of his buildings and the philosophies which gave them an identity, sympathetic to their surrounding.

In the case of the architects I have mentioned, along with many of their contemporaries, parallels are easily recognisable between them and Mackintosh and Lorimer which illustrates that the Arts and Crafts movement was truly and international one. However, the aspect of this which would like to look at in the next chapter is that of Mackintosh and Lorimer's sense of place or allegiance to and use of Scottish National Traditions.
Philip Webb - The Red House
Greene and Greene
Gamble House

Odon Lechner
Postal Savings Bank, Budapest
CHAPTER 2

Mackintosh and Lorimer in a Scottish Context

The previous chapter illustrated how, despite adhering to the principles of the Arts and Crafts movement, each country and each individual designer created a unique expression within its boundaries, as John A Walker comments, an artist's expressions

"are determined by their country/nationality as well as by the spirit of the age in which they live and by the individual temperaments." (46)

In this chapter, I intend to examine how ideas underpinning the Arts and Crafts movement and National Romanticism were taken up in Scotland. How Mackintosh and Lorimer drew on an eclectic range of sources when related to both Scottish traditions and the evolving Baronial revival, and to the international tendencies outlined in chapter 1. As Walker says,

"What could distinguish nations is not any one characteristic but a particular configuration of characteristics which achieves dominance of a certain time." (47)

A King states that

"Society produces its buildings and buildings, although not producing society, help to maintain many of its social forms." (48)
Therefore, because a building must also have a function and satisfy a variety of practical needs, it has a very direct relationship to the society which created it, and it seems logical that it should relate to the history which helped form this society and obviously the architecture and design of the this history.

It was this need to study that architectural origins of your own country which compelled Mackintosh

"to visit the various castles and palaces in this country (Scotland) not only under the balmy influences of summer but along the muddy roads and snowy paths, and with a glowing heat but shivering hand to sketch the humble cottages and more pretentious mansion or the mutilated though venerable castles with feelings of the most undescribable delight." (49)

According to Peter Savage, Scotland had a large effect on Robert Lorimer, he claimed that Lorimer

"found his inspiration in the people, the land of Scotland provided sites among mountains for hill top houses gazing on the magnificent views ... for mansions beside sealochs ... (and) long low unobtrusive cottages planted thick with rhododendrons and roses, the many dormers pushing against deep set sheltering roofs." (50)

Immediately previous to the period in which Mackintosh and Lorimer worked, Scotland had been exposed to the excesses of Victorian classicism. This style was integrated very successfully into Scottish culture by architects such as David Hamilton and Alexander (Greek) Thomson who adapted it by deepening their carvings to accommodate the weaker Scottish light and
concentrating the composition of his buildings more around a mass with penetrations thus referring to the forms of early scottish castles and lairds' houses. (51) With so much of Scotland's architecture being classical in nature how were styles inspired predominantly by the Scottish vernacular justified.

In Frank Arneil Walker's essay "The Significance of the Folk House", he explains how the preference of a traditional vernacular style was justified in relation to the classical forms already inherent within Britain by claiming the from the

"purified irreducible geometry" of "the antediluvian origins of classicism"

also came the

"rock-perched castle ruinous folly, rustic retreat or rambling vicarage" as well as "the folk house" (52)

also stating that the most basic starting point of all these styles was the same one which was simple geometry.

Walker says that within the 19th Century in France as well as in the U.K.

"the incipient indigenous germ of medievalism had begun to corrupt classicism with gothic fantasy" (53)

and that this conflict between the national and international styles was inherent in all building styles.
Frank Walker describes a building as "both an implement and a work of art" (art being of court a form of social expression.) The building should therefore use its 'art' as a means to communicate its relationship with society, its forms (should) embody a necessary concept of order, it (should) proclaim associations and, in doing all this, it (should) exhibit an expressional content which mediates values." (54)

During the 19th Century it was discovered through the excavation of ancient vernacular houses and buildings that their particular expression of society was not only derived from our appropriate and functional simplicity but also by the application of perfect geometry to their shapes and forms. This revelation defined the vernacular as a "work of art" as well as an "implement" but it also demonstrated that it had originated from the same initial concept as the classical orders. Walker claims that these attributes made the use of historical vernacular forms "more immediately radical and the fitter to survive consistently through the theoretical elaboration of the 19th Century." (55)

This appreciation of the past which was encouraged by the Arts and Crafts movement inspired romantic nationalism in Britain, this was demonstrated by an Elizabethan revival in England and a Baronial
revival in Scotland. Walker sites Lorimer and Mackintosh among others as being part of this revival and describes them as having

"maintained a genuinely Scottish contextualism at once retrospective and revolutionary." (56)

Mackintosh and Lorimer's allegiance to their own national histories then was apparent. This allegiance could also be seen in the work of other who laid the ground for the form of national romanticism which was seen in the late 19th Century.

In Frank Walker's essay on National Romanticism and the Architecture of the City, he describes the Baronial Style as a style which satisfied the need for

"good composition and appropriate character"

with a

"message relevant to political and cultural consciousness of 19th Century Scots Society." (57)

I feel that the 'message' given was that architecture should relate in some way to the Country it was built in and what better way to do this than to employ a national historical style. This style was seen by many as embodied in the forms, compositions and materials of early Scottish castles, tower house and Lairds' houses. Mackintosh and Lorimer were inspired by the characteristics of many of these buildings and both architects would have read 'The Castellated and Domestic Architecture of Scotland' by MacGibbon and Ross aswell as 'The Baronial and
Ecclesiastical Antiques of Scotland' by Billings which were, at the time, the definitive descriptions of Scottish historical architecture. Along with these books, Mackintosh and Lorimer both read magazines like 'The Studio' and 'The Builder' which kept them informed on the art and architecture of the time.

The type of building which expresses national character, therefore installing and reflecting a relevant political and cultural consciousness into society is a building whose only true function is to convey a message. In this respect, a national monument is the best example and the Wallace monument near Stirling does this very well.

However, forty years previous to the completion of the Wallace monument, in 1822, the proposal for a national monument in Edinburgh was one based exactly on the Parthenon in Greece. There was controversy and debate at the time which expressed the beginning of the dissatisfaction with classicism but the building went ahead (at least until the budget ran out) 12 years later when a memorial for Sir Walter Scott was required in 1940, a gothic spire was built in Edinburgh, designed by George Meikle Kemp, this illustrated how indigenous medievalism was beginning to regain popularity in Scotland. (58)

In 1861 the Wallace monument was built in Stirling which was
considered the geographical centre of Scotland. It was heralded as a

"celebration of nationalist character"

and described by Abbey Craig as the

"Scotch Wallhalla" (59)

It was designed by J T Rochead in a true Scottish fashion which was described by Robert Kerr in 'The Gentlemans House' of 1864 as having

"Small turrets on the angles of the buildings, sometimes carried up from the ground and sometimes built on corbeling, crowstepped gables, battlemented parapets, small windows generally, the introduction almost always of a main tower, and over the whole in one form or another a severe, heavy, crude castellated character" (60)

So the Wallace monument embodied the true character of the baronial revival, as James MacCaulay said, Scotland was

"where the historical tradition found its finest expression in the native castles and tower houses." (61)

however, this expression was embodied in different ways. For example, at Abbotsford which was Sir Walter Scott's house, we saw a

"prototype for Baronial Architecture." (62)
using a selection of features, directly copied from history and mixed with Tudor and Jacobean styles this style suited. Scott as he was a collector and a Romantic. Architects like David Bryce and J J Burnett, however, "recalled" (63) the forms and materials of Baronialism as opposed to borrowing them literally, the also mixed them with appropriate gothic features, for example in Bryce's collegiate Church at Carnworth (1865-69) and St Mungos at Lockerbie (1874-77). J J Burnett used crow steeples at the Barony in Glasgow (1886-90) similar to Kings College in Aberdeen or St Giles in Edinburgh. Scottish forms were abstracted even more by the likes of James Maclaren in his Stirling High School (1887) for example, with its

"simple massing and uncluttered verticality" (64)

merely hinting at its historical source.

Within these examples we can see parallels between them and Mackintosh and Lorimer. In the respect that Lorimer often borrowed directly from historical sources and created Scottish forms from these whereas Mackintosh preferred to imply where his buildings had been derived from within their spirit as opposed to direct physical features. This is clear when their architecture is examined carefully as I intend to do in the next chapter.
A Comparison of the Exterior Designs of Mackintosh and Lorimer

The most unpredictable influence on an architectural work is often the client, therefore, the relationship, amount of contact, and the trust that is developed between designer and their client is very important. In the case of Mackintosh and Lorimer, I shall examine how the respective relationships were initiated and developed in very different ways, with reference to their domestic work. Information on this aspect of the design process is not always easy to unearth.

Mackintosh preferred to have a very intimate relationship with his client in order to

"judge what manner of folk he was to cater for" (65)

as William Blackie observed in the early design stages of the Hill House.

In the case of Windyhill, Mackintosh met William Davidson several years previous when he had contributed furniture and art for his house in Kilmacolm. Consequently, the family chose him to design their new house at Windyhill. A short time after the completion of this project, Mackintosh was recommended to William Bblackie by Talwin Morris, the art director of Blackie's firm.
Davidson trusted Mackintosh with the design of their houses and allowed him to create uncompromised homes which were designed around their clients. An achievement obviously appreciated by Blackie who said that

"Every detail inside and out, received his careful, I might say loving attention." (67)

In general, Lorimer's attitude to his clients was much more business-like. Despite eventually getting to know his clients and often being recommissioned by them, as in the case of Miss Guthrie Wright, it was unusual for him to make a huge effort to realise the intricacies of their live. One exception was his friendship with Burrell whom he frequently visiting Europe with, in search of antiques.

Lorimer's clients normally approached him after having seen his work or having read about it in magazines like 'The Builder' or 'The Studio', magazines which Lorimer made a concerted effort to get his work into. However, in the case of Sir Andrew Noble he was recommended by work of mouth, albeit in a rather impersonal way; Lorimer was described to Sir Andrew as

"a promising young architect whom you well might consider." (68)

This pragmatic attitude was probably a link that Lorimer made with
most of his clients as they were normally successful business people to whom Lorimer could relate. Lorimer saw architecture more in the light of a business profession that an art form. He saw it as a career which he could

"rise to the top of an not be a mere hack"

and gain himself a reputation for

"doing fine work." (69)

Because of this attitude Lorimer became a far more commercially successful architect than Mackintosh and was extremely prolific in comparison. Also, despite the Colinton style cottages being of comparable size to Windyhill and Hill House, most of Lorimer's work was larger and more expensive that Mackintosh's domestic work due to his constant use of expert craftsmen and more expensive materials.

Ardkinglas was a good example of the comparative extravagance involved in Lorimer's work. The disadvantage with Ardkinglas was that it was on a remote site, making the transport of materials and labour an awkward affair. "Some" stone could be extracted from a nearby quarry, but not sufficient size, so the dressed sandstone for windows and gables had to be transported from Dumbartonshire by steam boat, however, in order for it to be off loaded, a new pier had to be built. Also built on site was a temporary hutted village for the two hundred men employed on this
huge job. Another disadvantage was the pressure from Sir Andrew Noble, who wanted the whole job completed in fifteen months. This was clearly a challenge that Lorimer took great delight in rising to, as he told Dods

"I mean to handle this job; as I have never handled a job before"

and speaking of the time limit, he claimed that if he managed it,

"it would be a record."

Through meticulous organisation, and continual adaptability in the design and building process, the house was completed on time, in order, as Lorimer said for

"the dear old gent ... to eat his dinner in on 1st August, 1907" (70)

In Mackintosh's case, however, deadlines were things that had to wait. In the case of Hill House, Mackintosh had specified Ballachulish slate, but a strike at the quarry meant that the slate was unattainable, however, Mackintosh was adamant that this was the only slate for Hill House and waited for the strike to life and the slate to arrive, therefore making the house overdue. work on Windyhill also went slowly with the clients again having to wait longer than expected for their home. Problems in Mackintosh's practice continued, indeed worsened. The evidence suggests he had a drink problem to contend with, which made him increasingly unreliable and was perhaps the main reason underlying his switch from architecture to painting.
The choice of site for these particular houses was something outwith the architecture's say. However, the way in which they orientated the building and how the environment around them was contorted, affects our perception of the building, both as part of the landscape and as a place to view the landscape from. Both architects were indeed "organic" creations and arose from the natural shape and materials of the land.

Windyhill is situated on top of a steep hill which falls away severly to the south of the house. From the base of this hill, Mackintosh initiated a relationship between the man-made and the natural. This was created by the rhythmic punctuation of cut out squares on the lawn and the rectangular layout of a terraced planting, these forms were consequently translated onto a vertical plane in the guise of garden furniture composed from simple rectangular boxes and a gridwork screen forming the back of a chair. These forms then take their most literal place within the windows and the window boxes of the house itself, which stood at the top of the hill. The application of man-made forms on the grass at the rear of the house is matched at the front by the curving natural form taken by the rubble wall at the front. This wall formed an enclosure that becomes the entrance of the house. This space contains yew trees which frame a square pond and give the suggestion of a courtyard or walled garden, a feature common in Scottish architectural history, along with geometric garden layout.
The Hill House's sloping site was rather more gentle and in this case the house was *married* with the landscape by the terrace which it was built on. This terrace was faced by a stone retaining wall which ran the length of the house and terminated in a tool shed with a conical roof, its horizontality was then reiterated below with a terraced garden and tennis court. This composition was seen as

"... less the result of the natural beauty of the situation itself than that of the artistic exploitation of every opportunity that offers itself." (71)

by Fernando Agroletti at Glasgow University.

Hill House is approached from the South and entered from the west with its south facade overlooking the Clyde estuary, whereas Windhyhill is approached and entered from the north with panoramic views of the surrounding farmland to the south.

Despite Lorimer's expertise as a landscape gardener and his frequent use of walled and formal gardens, topiary and garden furniture to enhance the setting of the house, these skills hardly feature at all in the layout of the Colinton and Pentland cottages. This was due to the extremeties of the site (both cottages effectively being on the same site, as Miss Guthrie Wright bought both sites to make certain of an enjoyable view from her own cottage.) Lorimer did not consider a formal garden
appropriate for a sloping site of comparatively modest proportion. Both cottages were laid out to create an inspired enclosure at their north entrance, the boundaries of which were the house and the garden walls and path of entry. (73)

In contrast with the cottages, the site that Ardkinglass lay on was spectacular. It offered the perfect balance of enclosure, created by huge trees on three sides and dramatic vistas across Loch Fyne to the mountains beyond. As with Hill House, the building was anchored and enhanced by horizontal terracing and landscaping of a scale proportional of the imposing elements of nature. The first row of terracing closest to the house was balustraded but the two below allowed to take the form of grassy slopes. The terraces ran from north east to south west and the stone terrace was finished with an elegant curving staircase which lead to a pleasance and hanging garden.

The aforementioned sites of both Mackintosh and Lorimer's houses all had a sense of vast space yet a feeling of the close proximity of nature, which were the qualities that lended to the enjoyment of a country dwelling. Both architects enhanced that feeling in similar ways yet with contrasting attitudes. Due to the comparable sizes of Windyhill and the Colinton cottages and the drama of their respective sites, both architects created fairly modest surroundings allowing simple bushes and indigenous plant life to ease the transition between man-made and nature. Lorimer's layouts were subservient and complimentary to his buildings. Despite being successful with the repetitive geometry on the south
face of Windyhill, Mackintosh began to create a feeling of unrest between the sculptural rubble wall and the north facade of the house, a feeling which was only partially conquered by our curiosity in the retrospective yet revolutionary forms of the house beyond. (74) Mackintosh was more successful however in the composition of Hill House's terraces and retaining walls echoing the forms of the walls at Arklinglass, and the planar simplicity of them contrasting with the elaboration in the form of the balustrades at Ardkinglass. This contrast was also apparent in the use of harling at Hill House and exposed stone at Ardkinglass.

The overall composition of both architects' work in these cases was fairly similar, however, the difference in attitudes lay within Mackintosh's desire to constantly modernise and simplify forms and Lorimer taking pleasure in using traditional techniques and methods but always producing a casual, restful, yet completely controlled finished building.

Hill House and Windyhill were planned logically with Ruskin and Morris's theories, that a building was an expression of social needs as opposed to a drawing board creation, firmly in mind. Therefore, both plans have developed its similar L shapes, credited by the main wing running east to west and the service wing at right angles to this; also the rooms were layed out in a similar way, with both houses having their public and private spaces arranged pragmatically and their rooms accessed from generously sized hall and staircase. In both buildings the staircase played a large part in the planning, as Howarth put it,
was endlessly spacious through its vistas over Helensburgh. These spaces were perfectly balanced by the piano recess thus clarifying the relationships between the three spaces and creating a room perfectly suited to its function as a space for the family.

The shape of the master bedroom was also arrived at directly from its function. The bed was given a large alcove with vaulted ceiling (a vaulted ceiling being a traditional Scottish feature) (77) this was an intimate space with the soft lines of the ceiling and the modestly sized adjacent bay window creating a perfect space for sleep and thereby defining the rest of the room as a changing space.

Robert MacLeod expressed Mackintosh's achievement in the bedroom perfectly when he said that

"because of the real grasps and control of the actual functioning of the rooms, they do not have the oppressive imobility often associated with this degree of architectural autonomy." (78)

The layouts of the Pentland and Colinton cottages were also distinguished by their separation of private and service quarters, however, at the Colinton cottage Lorimer has also had to make allowances for stable and carriage facilities, therefore, the plan of the Colinton cottage was essentially the same L-shaped plan of Mackintosh's houses with the addition of the carriage wing thus forming a Z shape. However, the Pentland cottage was more compact with the service and private areas forming the main block and the coach and courtyard wing branching out from this. The most
immediate difference in Lorimer and Mackintosh's planning was the treatment of the entrance. This is most apparent when we look at Colinton cottage, where the act of entering the building becomes an act of progression within the house itself. Firstly, the entrance was situated in the implied spaced between the arms of the service and the public wing, its location sheltered by the bay of the stair. The progression of entrance from outside to in is then initiated by the porch and continued by the lobby, then hall with adjacent staircase - a similar relationship between half stair to Mackintosh's houses. Lorimer catered well for the relationship between the family spaces but not in the same concise manner that Mackintosh handled his. Lorimer placed his dining room next to his drawing room as does Mackintosh, but Lorimer creates links between them and enhances the spatial flow throughout the house. By linking the two rooms with a veranda, the was offering the inhabitants the experience of outside again, after having brought them in so carefully. It is not until we look at the Ardkinglas that we see how Lorimer catered for the internal function of the rooms through spatial manipulation.

The basic plan for Ardkinglas was a large but simple one around an enclosed courtyard with the public rooms on the west allowed views of Loch Fyne. It was in the Billiard room that Lorimer allowed the function of the room to give it its distinctive shape. However, the distinction of spaces is made on section with a raised level allowing spectators to watch the billiard players without creating a distraction, (79) the higher level, obviously
having a lower floor to ceiling height, was a more intimate space and accordingly has a fire place and seating area; this creates, as with Mackintosh's rooms, a small space looking onto a large one, albeit alone in a more elaborate and obvious manner.

Mackintosh's tactics for planning were governed by logic and function, allowing the elaboration of his perfectly composed spaces to be created by his treatment of surface and form. He also saw every room with an identity of its own and was consequently more inclined to closed planning. Lorimer, however, allowed his spaces to flow together more, despite defining the function of spaces in a more conventional way.

The functional nature of the plan was of course expressed by the massing of forms and composition of openings on the exterior of the building. Therefore, because form was following function there was no guarantee of a rhythm of a link between these elements. The architects task was to create a convincing building through it's three dimensional layout. For Mackintosh and Lorimer, this method of composition relating to the function of the interior and consequent irregularity of the exterior was embraced as this was the precedent for the less self conscious styles of Scottish historical buildings. (80)

The entrance facade of Windyhill was created by the long rectangular face of the family wing and the gable end of the service wing. The service wing was very traditional in character with the steep formers of the gable protecting the slated roof and
the low eaves line broken by two conventionally shaped dormers, however, the relationship with the family wing was immediately made uncomfortable by the close proximity of a square roof dormer, cluttering the junction between the wings. This restlessness between the facades was further enhanced by the random sizes and shapes of the windows on the family wing and their unconventional modern composition. The elongated varieties in form of these windows was daringly unconventional and the composition of this modern facade is undoubtedly exciting, however, the lack of unity was the failing point throughout, with the impression of a "modern farmhouse" given, but the links between old and new rather uneasy. (81)

The relationship between modern and historical features on the Hill House were rather more accomplished in their execution. With the modern feature of the main stair fitting in comfortably with the traditional forms of the house. Also in contrast with Windyhill the south facade was a friendly informal affair (the owners of Windyhill eventually fitted shutters to the south facade due to its over austere regularity). The friendliness at Hill House was implied by the window embracing overhang of the eaves and the curiosity of the three storey gable of the service wing, with its circular stair tower. The windows on the south facade were again of different shapes and sizes but an attempt was made to group them with their character in mind and link them with sill heights. (82)
This facade contained the French windows of the Library, linked vertically to the small bay window of the master bedroom, this bedroom window makes an amusing reference to baronial history and expressed the privacy of the room with fixed concrete shutters on either side. More references were made to the defensive nature of Scottish Baronialism with the inclusion of a slit window on the west facade. This was the entrance facade and its composition was once again inspired by history; the plain gable end with its slit window and the bold form of a chimney stack anchoring the house to the ground, in this case, however, the chimney was moved to create an asymmetry and to assist the rest of the blank facade in the task of framing the entrance, therefore, the composition was being created by the positioning of the four windows on this gable. Viewing this facade from the south east gives us the strongest image of Hill House, however, from the south west, its weaknesses are illustrated. From this angle the service wing dominates the main wing and the circular stair on the corner (Mackintosh's most literal historical reference) begins to create problems. The main problems is, that in order to make sufficient space for the stair tower, the right angle of the building had to be inverted which immediately started to confuse the relationship between the blocks. The overall effect was not helped by the uncomfortable closeness of the neighbours chimney. (83)
Once again, however, the building was so successful within its innovative abstraction of simple historical forms, used to create a thoroughly modern composition that a lapse of unity is easily overlooked.

Lorimer's references to history within the forms and composition of his buildings were more conventional than Mackintosh, but he allowed himself more scope within his eclecticism. In the case of his works at Colinton, borrowing from an English cottage idiom whilst making nationalist statements with forms and devices used within Scottish history.

At the Colinton cottage, the four horizontal roof of the south facade and the lack of dominant formers, along with the overhanging eaves, gave it the less austere and almost picturesque appearance that Mackintosh made efforts to avoid. However, the north facade took on the vertical forms derived from the Scottish idiom and created a shadowy space for the entrance which was formed at the base of a circular stair tower with circular roof. The stair tower was situation at the junction of the principle wings of the house and was accessed through a triangular courtyard. Through simplicity of form and careful composition, again using the vertical emphasis of the chimney stack, Lorimer manages to strengthen the angle between the blocks and enhance the composition of the house as a whole. This was done in a more obviously historical way, but with such control and perfection that it is difficult to fault. (84)
The playful composition and massing that Lorimer used in the Pentland cottage made it his building closest in appearance to Mackintosh's work, principally in the treatment of the chimney stack on the west facade. Lorimer managed to transform what was essentially a rectangular facade with two symmetrical windows, into a charming and easily understood asymmetric composition. This was done by individualising the principle window, belonging to the morning room, with a segmental archway and reducing the importance of the drawing room's second window by surrounding it with the chimney stack and detracting from its importance with the small bedroom window above. (85) Also in common with Mackintosh was the overall restless play of horizontal and vertical, large and small windows on the entrance facade all positioned beautifully around gables, set backs and drainpipes.

The interaction of simple forms and broken roof lines of Scottish baronial architecture that Mackintosh's buildings also found the form of, were epitomised by Lorimer at Arklinglas. Hussey described this building as an

"expressionistic composition evocative of the surrounding mountains" (86)

The apparently random shapes frozen within the roofscape of Arklinglas were in fact composed by a simple method which showed the great skill that Lorimer used to mix the ingredients of the national style, to create a truly Scottish mansion.
The massing at Ardkinglas basically uses a tactic which Savage described as 'a rule of three'. This rhythm was created by the corbic stepped gable of the entrance block, reiterated behind an higher by a bedroom gable, then once again at the highest level by the watch tower, this draws the eye up and creates a verticality towards the centre of the building. This emphasis was balanced by three west facing gables of entrance block, servants' bedrooms and saloon. These two movements were checked and tied together by the curving line and softer shapes of three bell cast roof caps which showed the depth of the house stretching from the gate house to the saloon. These tumbling rhythms as Savage described them were enhanced by the 'varying inflexions' created by chimney stacks, corner towers and dormer windows, again illustrating the Scottishness of the house. (87)

Whereas Mackintosh managed to distract our attention from the intricacies of composition and craftsmanship with a never ending selection of idiosyncratic flowing sculptural forms and details, confidently abstracted from history and nature. Lorimer produced buildings which were impressive as expressions of perfectly considered and executed examples of Scottish country house architecture.

The area where Mackintosh and Lorimer had most in common was their choice of materials. Both architects followed Arts and Crafts principles and built from materials that were attainable locally.
The materials were therefore, in theory, readily available and easy to get to the site, also allowing the building to be far more sympathetic to the colours, shapes and scales of the surrounding architecture and countryside.

Mackintosh and Lorimer were both keen to use similar materials. Consequently, the materials that we see used in their respective houses were very, almost exactly, the same and clearly of local origin. With the exception of Arklinglas, for which harling was specified and refused, these houses were all harled and with the exception of Windyhill, they all used dressed local stone to some extent around openings.

The difference lay once again with the attitude which the materials were applied and the most obvious comparison lies in the harling. On Lorimer's houses, the harling was painted white, whereas on Windyhill and the Hill house it remained its natural shade of grey. By these differences, Lorimer was following the dictums of the Arts and Crafts movement by treating a material appropriate to its function whereas Mackintosh was expressing the material as itself.

Both Mackintosh and Lorimer were influenced by the Arts and Crafts movement but each expressed this in a very different way, especially in relation to their buildings, use of history and sense of nationality. Lorimer expressed a need for "evolution through tradition" (89),
whereas Mackintosh showed a desire to progress but still retain the spirit of a building's origin. These respective characteristics were also obvious in their creation of interiors.
Ardkinglas From the West.

East

Plans

[32] FIRST FLOOR PLAN
CHAPTER 4

A Comparison of the Interior Designs of Mackintosh and Lorimer

The interior designs of Mackintosh and Lorimer reflected their respective intentions quite clearly. I intend to examine their individual styles within the context of British domestic interiors of the same period.

In examining the layout of the typical 19th Century middle class house, the clearest statement being conveyed was the separation between residential family rooms and servants' quarters. It was always the case that houses were divided like this, with the servants' facilities (kitchen, laundry, etc) taking their place in the basement or at the side of the house on the ground floor, sometimes incorporating the stables and courtyard. (90) In this respect, the designs of Mackintosh and Lorimer were no exception. At Windyhill and Hill House, for example, Mackintosh was able to split the two functions clearly by placing the blocks at right angles, Lorimer used the same tactic at Colinton Cottage where the plan eventually became Z-shaped due to the incorporation of the carriage and stables facilities. At Arklinglas, Lorimer split the private and public as effectively by positioning the servants quarters as far from the entrance as possible, however, due to the large scale and complexity of Lorimer's project, the plan appeared more complicated and rambling. So, in both cases the architects dealt with the separation of servants and private quarters in a
traditional way. However, in general, Mackintosh's planning was far simpler, perhaps comparable to the extreme simplicity of farmhouse planning, with Lorimer's more elaborate, perhaps evocative, of the nature of a traditional country mansion.

In Herman Muthesius's book 'The English House', he explained how the relationship between the rooms of a house on the continent were often articulated by adjoining doors directly linking them. However, he expressed a preference for the British system which involved using only a hall (a space which eventually became a room in itself) and a corridor to link spaces internally. It should be noted traditionally in Britain, rooms were often connected by outside spaces like terraces or verandas. (91)

Lorimer used this system in both Ardkinglas and Colinton cottage. The hall became a room in its own right which linked all the main rooms on the ground floor to the staircase and to the front entrance. Mackintosh, however, did not employ this type of hall in his buildings, preferring, in the case of Hill House to enlarge part of the linking corridor, creating what I would describe as a generous lobby. I think already we can see a different approach within the two architects work. With Lorimer allowing his ideas to evolve from tradition and Mackintosh applying his thought process in a far more organic way, allowing form to follow function.
The country houses of the 19th Century installed each room with features that related not only to the function of the room, but to its gender associations and to its relative importance within a house. The rooms which most attention was paid to were the drawing room, dining room, hall, bedroom and library. (92) The basic considerations for these spaces included: the orientation of a room in relation to the sun and its vistas; the treatment of surfaces and the colours, materials, and forms of the furniture and fittings within.

The most important room in the 19th century country house was undoubtedly the drawing room. The reason for its importance was due to its being associated with the woman of the house, and as Muthesius says, the

"English woman was the absolute mistress of the house, the pole around which life revolved" (93)

The woman received guests in the drawing room in the afternoon and it was used by the whole family in the evening as a living room.

The importance of the drawing room was such that it was always the largest room in the house and occupied the most prominent place on the exterior. It was always given a south facing aspect which was taken full advantage of with the use of a large bay window. Outside there would have been a terrace or garden which was accessed from a door located somewhere other than the bay. Muthesius stated that the fireplace was the focal point of any room and that, therefore, it was to be well lit and the area
around it free from draughts so that the family could sit beside it and keep warm. The need for good lighting normally meant it was positioned near a window but the draught aspect was not as simple to control. The largest draughts were created by the air flow between the door and the chimney, around the fireplace had to avoid being caught in this path. (94) This brought about the development of the ingle-nook and the use of high backed armchairs.

I would like to examine how Lorimer's drawing rooms related to Muthesius's description of his contemporaries' works. (However, due to the books on Lorimer by Hussey and Savage not describing his interiors in a complete manner, my assessment of his treatment of the drawing was derived from the pieces of information that I could glean from several of his works.)

In the case of the drawings rooms at Balmanno castle or the House at the Hill of Tarvit, both rooms were the most prominent in the house and both had southerly aspects with access to the garden or terrace. The Hill of Tarvit drawing room had two bay windows whereas Balmanno's windows were quite small, however, I feel that this was because Balmanno was a work or restoration so there was less control over large physical aspects. In both cases, however, Lorimer managed to position the fireplace in a central and well lit location. Draughts were avoided in the case of Tarvit by keeping the fireplace on the same wall as the door and in Balmanno by keeping it as from the door as possible.
Lorimer's drawing rooms confirmed to the traditional principles of
the drawing room. If we look at Mackintosh's drawing room at Hill
House, we can see he is just as faithful to examples of his
contemporaries and predecessors.

The Hill House drawing room was one of Mackintosh's most
accomplished and elegant domestic interiors, the character of
which was most definitely one aspiring to the future and also one
using historical sources only for inspiration and where tradition
was appropriate.

These historical references were easily identifiable within the
drawing room at Hill House. For example, it was the largest room
in the house, it had a bay window facing south, white walls, with
architectonic decoration and a fireplace providing the predominant
internal focus. It also had a space for a grand piano and allowed
access to the garden from the bay window. These were the main
features which it had in common with the other drawing rooms of
that period.

As far as the layout was concerned, Hill House's starting point
could be seen in terms of established contemporary conventions in
that the room concerned itself with the relationships between
fireplace and bay window. Mackintosh used this relationship to
structure the space, the connection between fireplace and window
being mediated and balanced by the piano bay. This structuring
divided the room into a light and dark space. (summer and winter
spaces - Billcliffe), so despite putting the fireplace into the dark section of the room, and reacting against the examples of well lit fireplaces that his contemporaries often used, Mackintosh was creating the 'cosiness' of a living room as Muthesius had implied. However, Mackintosh had put the exit in the bay window and the structured nature of the room was in itself a denial of the ad-hoc character of the traditional drawing room which Muthesius described as "light/mobile (and) casual" (95)

The femininity of a space was largely to do with the treatment of surface and the creation of a casual yet delicate elegance as expected in a 19th century drawing room. This effect was created primarily by the walls which were painted white, if wood panelling was used, but were often covered with a light material, sometimes silk, this material was framed in and decorated with a delicate repetitive pattern. The ceiling had mouldings of a similar nature and were finished in stucco or were often painted with white beams. The floor surfaces were wooden (with parquet being very popular) and rugs placed around the room where appropriate.

Muthesius claimed that the delicate character of the drawing room was created by the woman but that this character was confused by
her tendency to clutter the space with excessive ornaments of her own prediction. In his words, the drawing room expressed

"lightness, mobility and elegance but usually combined with caprice and that love of frippery and knicknacks by the thousand that characterised the modern English Society woman" (96)

In the case of the drawing rooms at Hill of Tarvit and Brackenburgh the femininity of the room was expressed primarily through the white panelled walls and ceilings, this effect was enhanced by the perfection and delicacy of the carvings in both cases. At the Hill of Tarvit, the classical and fragile nature of the room was expressed through the elegant doric pilasters and the geometry created in the delicate carvings, the fireplace and the nature and layout of the furniture. In both rooms, the walls were decorated with works of art and mirrors built into the panelling; the wooden floors were made more comfortable with rugs placed in appropriate positions.

In Mackintosh's drawing room at Hill House, the femininity of the room came from walls again, which were painted white and stencilled with stylised pink roses amid a green checkerboard pattern. These features were given a place on the wall be a vertical silver framework; matching metal and glass lights were incorporated into this pattern. I saw these patterns as a reminder of the shapes created on a panelled wall whilst being representative of abstracted natural forms. The geometric punctuations of the window seat posts and the organic and geometric patterns on the fireplace carried a coherent decorative
theme throughout the room, making for a more unified space. In this case, I feel that Mackintosh has made an obscured historical reference by having distilled the decorative technique down to its most basic, ie paint and stencil, and elevated or modernised it the same time through his innovative use of geometrical ornament. The floor surface was wooden in the bay window but the rest of the room had a fitted carpet of complimentary design to the stencilling. Therefore, the emphasis in the room was far more on the living room side and a move away from the outdated gender dominated traditional aesthetic the drawing room had. To add to the cosy atmosphere of the room, the ceiling was originally plum; this large mass of strong colour also helped to unify the three spaces and was in contrast to the white decorated ceilings which Lorimer employed. However, another effect which Mackintosh's plum ceiling had was to bring your eye down to the level of the white wall and bay window, which gave the room the light airy femininity of the other drawing rooms of the time, but still gave the room a comfortable warm atmosphere.

The confusion and clutter associated with the traditional drawing room was normally caused mainly by the wide variety of furniture within the room; there was always a suite, which usually consisted of a sofa, two upholstered arm chairs, two low chairs and four chairs without arms. There was also a piano, a variety of small tables, a china cabinet, bookshelves and a mantle piece. It was fortunate then when chintz covers became popular and began to unify some of these pieces.
Lorimer used furniture which was very similar and indeed sometimes copied from antique forms, he also included nearly all the pieces traditionally expected in a 'Drawing Room', however through the complete control he had over the forms of furniture and fittings and the craftsmen he employed to create them, the rooms appeared elegant and unified as opposed to cluttered and fussy like many of the 19th century drawing rooms.

The furniture in Mackintosh's drawing room consisted of the fireplace and fitted couch along with a fitted window seat, a selection of upholstered chairs, two elegant wooden chairs and two small wooden tables, these were all to Mackintosh's design. This variety of furniture created a casual effect overall, but this was merely a reminder of the effect within a traditional drawing room. Mackintosh's room, however, was far more elegant and striking. The functional layout of this room along with his use of distended elegant forms and geometry within the furniture and his careful manipulation of small patches of bright unusual colours throughout created what Muthesius described as a

"New Vocabulary" (97)

The relation that these rooms had to the history of the country house drawing room was illustrated by the similarities within the positioning of the room on the overall plan, the layout of the room itself, the treatment of surface and also in the use of
traditional and antique furniture. However, the character of these rooms depended on the way in which history was considered, the scale and proportion of all events within the space and the flair in which these ingredients were handled.

Throughout all of Lorimer's work his strengths were his manipulations of scale and proportion and the control of the craftsmanship that distinguished his work as a form of historical progression and not regressive historicism. Ian Gow in his book 'The Scottish Interior' described the craftsmanship and unity of the drawing room at Balmanno and said

"Although every item derives from the antique prototypes... superb craftsmanship and fastidious choice of timbers eclipsed the originals."

he also remarked that the furniture was

"eclectic, but mustered together. Supplied the effect of quite good taste but with sufficient variety to dispell any sense of a twenty guinea suite." (98)

Gow also explained in his description of the drawing room at Hyndford, how Lorimer was distinguished from his contemporaries and how he exercised control over the large china collectors which were so popular at the time.

"The screen just reveals a buffet niche for the display of china which was an alter to chinamania. The success of Lorimer's rooms was the result of skillful editing of many contemporary trends." (99)
These observations convey the extent of Lorimer's control over the design of the drawing room. Lorimer handled the drawing room which Muthesius said traditionally

"suffers in general from having too many odds and ends" (100)

by creating a harmonious relationship between the room and its contents.

Thereby, he created an elegant space from a potentially cluttered room.

Ian Gow also stated when referring to Lorimer's work that

"Mackintosh gave a very different expression of the white drawing room"

This was true in many ways but a large number of elements in Mackintosh's rooms were also inspired by his historical contemporaries.

Mackintosh's work was indeed initiated with a firm understanding of history but it was also inspired directly by nature, which led to his forms following function and the design process becoming more organic. Mackintosh saw true beauty within nature and felt that its forms could be abstracted to suit human needs. William Eadie described his new forms

"as providing access to knowledge which was of a scientific nature but which was yet capable of being experienced through emotionality" (101)
Eadie was saying that Mackintosh's creations were derived from a close study of natural forms so that effectively they were scientifically based, however, these pure forms went through a process of abstraction in order to become in Ruskinian terms, a representation of the

"infinite in finite form"

A good example of this process was in Hill House in the drawing room and bedroom, where the stenciling on the walls were of abstracted robes and trellises which relates to the real things in the garden and begin to break down the separation between inside and outside and natural and man made.

Mackintosh seemed to be inspired by nature and to use a selection of theories and forms from what was seen as 'standard house design', he also followed some of the dictums of the Arts and Crafts movement. His real strength, however, was his ability to use all this information and source material and to process it through his imagination. This allowed him to create works of great originality, yet works which managed to take their place in the context of their surroundings.

Muthesius claimed that traditionally the dining room was the second most important room in the house and this it was

"serious and dignified in character" (102)
This character was suggestive of masculinity, a character displayed in dark colours and exposed wood. The dining room was easily accessed from the food preparation quarters and was expected to have a processional approach which was normally involved entering it through the hall. The room was usually rectangular to accommodate the shape of a dining table, and near the entrance or servants' entrance, there would be a sideboard for the preparation and storage of plates and cutlery. The floor was normally carpeted so that serving could take place with as little distraction as possible.

Both Lorimer and Mackintosh tended to make the dining room the second largest room in their house, however, their ideas of a processional entrance differed. In Ardkinglas, Lorimer used a large well lit hall approached by a long internal corridor as the introduction to the dining room, whereas at Hill House, Mackintosh created a constricted small lobby space as a transition from hallway to dining room. Both architects normally created standard rectangular rooms, adequately lit and within close proximity of the drawing room and kitchens. The area in which Mackintosh and Lorimer differed most in the dining room was in the style of furniture and finishes that each used. This contrast is clearly illustrated by a comparison between Rowallan in Lorimer's case and at the House for an Art Lover (unexecuted) in the case of Mackintosh. Both rooms were rectangular, with dark wood paneled walls and furniture to the design of their respective architects. The decoration in each space was also quite rigid and geometrically inspired. Despite the similar formal and sombre
appearance of both room, however, each interior had a completely different character. In Lorimer's room the atmosphere was one of elegant historicism, engendered by the rectangular wood panelling, intricately moulded ceiling based on the 17th century designs, the gothic style furniture and patterned oriental rug. This room gave the impression of being an elegant assemblage of individually crafted pieces of work. Mackintosh's room on the other hand despite being similar to Lorimers in terms of colour and geometric nature, appeared to have a more progressive and challenging quality. I feel that this quality was derived from the contrast between old and new ideas. Mackintosh's large expanses of panelling, the typical Scottish vaulted ceiling and traditional layout contrasted with the sinuous plant and like forms and obsessive geometry of the furniture, light fittings and patterns on the rug and built in decorative panels.

The master bedroom was also an important room in the 19th century house. It was usually a large room with an easterly aspect, so as to capture the sun in the morning. The Victorians realised that most time was spent in this room. This realisation encouraged a greater attention on bedroom design. Muthesius described this as part of a

"movement towards more hygienic living ... wood panelled walls were nearly always painted white, the colour of immaculate cleanliness" (103)
this also brought about the use of built in cupboards to avoid
dust traps. However, as so much time was spent in the room

"the woman spent several hours in the morning writing
letters"

and apparently returned to the bedroom several times in the day

"to attend to her elaborate toilet"

This meant as Muthesius said, that the bedroom should aim to

"combine hygiene with comfort."

Therefore the furniture was to be comfortable and the atmosphere
friendly. (104)

I would suggest that Lorimer addressed the aspect of hygiene in
relation to comfort taking care to restrict most elaborate
decoration to the ceiling. This meant that any dirt traps were
upside down and that the ceilings' softer more decorative forms
appeared to embrace the plain wall surfaces. This is certainly
the effect implied by the large curved expanses of the ceilings at
Balmanno castle and Rowallan. From the pictures of these
bedrooms, I could see no evidence of free standing wardrobes, but
there is a built-in sink which makes it likely that Lorimer
created built-in wardrobes as well, as a way of controlling dust
and dirt. The furniture within these rooms was obviously inspired by traditional and antique pieces. The ceiling carvings at Rowallan and Ardkinglas were copied from the 17th Century work at Kellie castle.

So, once again we see that Lorimer employed technique and forms from history and used them in contemporary houses. Lorimer's strengths were demonstrated through careful attention to the proportion of the spaces, and in the unifying effect of the craftsmanship, which enhanced the historical ingredients used and created uncluttered hygienic bedrooms in a appropriate manner.

Much has been written about the master bedroom at Hill House and it was one of Mackintosh's best known interiors. It was one of the most modern looking rooms that he did, however, it seemed to adhere to many of the requirements of a 19th century bedroom. The Hill House bedroom was an L-shaped space with the first section being the dressing area and the second part the place for the bed. The dressing space was lit by two sash windows and the sleeping space by a small window with white wooden shutters. Next to the sleeping space was a separate dressing room for the man. All the wall and the ceiling were white and there was a light grey fitted carpet on the floor. The dressing space had a recess which was the same height as the window heads, in this recess were two wardrobes, a couch and a ladderback chair. Also in this part of the room was a fireplace, wash hand basin and a tall free standing
mirror. The bed space had a vaulted ceiling which was echoed in the shape of the window bay. The bed had a fixed headboard with storage next to it and on the line of division between the two spaces, against the wall was another ladderback chair.

The overall character of this room expressed in the clean white surfaces and bright spacious nature, gave the impression of "hygienic design" which was so fashionable in the 19th century. The fitted wardrobes also followed the dictums of Mackintosh's historical contemporaries. The dressing room for the man was also standard practice and the vaulted ceiling, a traditional Scottish feature in many 16th century Laird's houses. Once again, these traditional aspects of the room were recovered from history and projected into the future. The healthy white space became almost a spiritual one through a mixture of stylised plant forms and geometry used to decorate the furniture, also the almost alien presence of the distended ladderback chairs and cheval mirror. The flashes of colour within this room came from small enamelled panels on the bed head, the wash hand basin, the light fittings and in the fireplace. Muthesius described these as "precious stones" (105) amid the expansive subservient white background. These colours draw the eye around the room emphasising areas of importance making simple surfaces kinetic. These punctuations along with an implied cornice-line, made up of window head, tops of wardrobes, etc, complimented by the fragile vertical forms of the ladderback chairs turn the room into an abstract composition of form, colour, textile, light and imagery.
The abstract vision that Mackintosh possessed set him apart from others in his field, making him one of the most original designers of his time. As regards Robert Lorimer, I feel that the common ground between him and Mackintosh lay in their common respect for history. However, despite this interest, Mackintosh and Lorimer had very different attitudes to its use. Lorimer felt quite comfortable to borrow directly from a historical style and integrate whatever he found into a modern work, for example, the carved wooden screen in the hall at Earshall, which was a replica of one at Falkland Palace. (106) Also when Lorimer was speaking about his prospective job at Formakin he said he wanted to

"make it the purest Scotch I've ever done" (107)

Mackintosh, however saw

"the slavish imitation of old work (as) the props of art"

and stated that we should

"shake of all props."

Mackintosh felt, instead of relying entirely on history, we should create with more individual input. I feel he summed up this philosophy when said (I should)

"take my stand on what I myself consider my personal idea." (108)
House for an Art Lover - Dining Room.

73 Derngate - Dining Room.

78 Derngate - Dining Room.
64 Carvings at thistle chapel.

65 Screen at Earshall.
We have seen how Mackintosh and Lorimer were connected with the international Arts and Crafts movement and how they translated a sense of nationalism through their designs. In all aspects of their work we have also seen similarities in their attention to detail, appropriate use of materials and manipulation of scale and proportion, however, the most obvious difference between the architects was their use of history.

Both Lorimer and Mackintosh used historical sources within every detail of their work. I feel that the difference lay in the way in which their respective works fitted into society. I feel that Lorimer had a great desire to see his designs (which were based on appropriate historical styles) completed faithfully and to take their places in a modern society as an example of successful contemporary architecture. This contrasted with Mackintosh, who preferred to translate history into a form which was completely modern and appropriate to contemporary society, in other words progressive architecture with the emphasis on progression.
Bibliography

BILLCLIFFE, Roger
Charles Rennie Mackintosh, The Complete Furniture and Interior Designs
Lutterworth Press, London 1979

BRETT, David
Poetics of Workmanship Reaktion Books.
London, 1992

CARTER, Jenny
Traditional Crafts of Scotland Chambers.
Edinburgh, 1988

COOPER, Nicholas
The Opulent Eye Architectural Press Ltd., London

CUMMING, Elizabeth
'Architecture in Britain'
'Regionalism in American Architecture'
'The Arts and Craft Movement on the Continent'
in The Arts and Craft Movement on the Continent Thames and Hudson 1992

KAPLAN, Wendy

DAVEY, Peter

DUNBAR, John G
The Architecture of Scotland Bt.
Batsford Ltd., London, 1966

EADIE, William

GIFFORD, John
Scottish Edwardian Interiors

GOW, Ian
The Scottish Interior Edinburgh University Press, 1992

GREENHALGH
'The Struggles within French Furniture'
in Modernism in Design Reaktion Books 1990

HAY, George
Architecture in Scotland Oriel Press, 1957

HOWARTH, Thomas

HUSSEY, Christopher

JONES, Anthony
Charles Rennie Mackintosh Studio, London, 1990
JONES, David

'George Walton's Revival of Scottish Furniture Types' in St Andrews Studies in Architecture and Design 1991

KINCHIN, Juliet

Glasgow Exhibitions

MACAULAY, James


MACBETH, Lindsay


MACLEOD, Robert

Charles Rennie Mackintosh Hamlyn Publishing group, Suffolk, 1968

MACLEOD, Robert INTRO


MCKEAN

Scottishness of Scottish Architecture - LECTURE

MIT PRESS


MUTHESIUS, Herman

The English House Crosby Lockwood Staples, London

SAVAGE, Peter

Lorimer and the Edinburgh Craft Designers Paul Harris Publishing 1980

SWENARTON, Mark

'Ruskin and 'the Nature of Gothic' Artisans and Architects Macmillan Press Ltd., 1989

WALKER, Frank

'National Romanticism and the Architecture of the City' in Perspective of... the Scottish City Ed. GORDON, G. Aberdeen University Press, 1985

WALKER, Frank A INTRO


WALKER, John A

SOURCES

National Monuments Record - Edinburgh

Huntarian Art Gallery - Glasgow
NOTES

CHAPTER 1

1. Mark Swenarton
   Artisans and Architects, the Ruskinian tradition in Architectural Thought
   Macmillan Press London (P10)

2. Ibid (P3/4)

3. Peter Davey
   Arts and Crafts Architecture
   The Architectural Press London (P8)

4. Mark Swenarton
   Artisans and Architects (P17)

5. Ibid (P24)

6. Ibid (P26)

7. Ibid (P27)

8. Peter Davey
   Arts and Crafts Architecture (P8/9)

9. Ibid (P8)

10. Mark Swenarton
    Artisans and Architects (P3)

11. Elizabeth Cumming
    The Arts and Crafts Movement Thanes and Hudson 1992 (P31)

12. Ibid (P35)

13. Ibid (P42)

14. Ibid (P58)

15. Peter Davey
    Arts and Crafts Architecture (P104)

16. Elizabeth Cumming
    The Arts and Crafts Movement (P51)

17. Peter Davey
    The Arts and Crafts Architecture (P177/178)

18. Peter Savage
    Lorimer and the Edinburgh Craft Designers Paul Harris Publishing (P38)

19. Elizabeth Cumming
    The Arts and Crafts Movement (P51)

20. Roger Billcliffe
    Mackintosh, the Complete Furniture Drawings and Interior Designs
    Lutterworth Press, London (P9)
22. Peter Davey: Arts and Crafts Architecture (P183)
23. Ibid
24. Wendy Kaplan: The Arts and Crafts Movement (P179)
25. Peter Davey: Arts and Crafts Architecture (P195)
26. Wendy Kaplan: The Arts and Crafts Movement (P179)
27. Peter Davey: Arts and Crafts Architecture (P195)
28. Wendy Kaplan: The Arts and Crafts Movement (P179)
29. Ibid
30. Ibid (P180)
31. Ibid (P181)
32. Ibid (P181)
33. Ibid (P132)
35. Wendy Kaplan: The Arts and Crafts Movement (P184)
36. Ibid (P108)
37. Ibid (P122)
38. Peter Davey: Arts and Crafts Architecture (P184)
39. Ibid (P188)
40. Ibid (P190)
41. Roger Billcliffe: Mackintosh, Furniture and Interior Designs (P9)
42. Wendy Kaplan: The Arts and Crafts Movement (P191)
43. Ibid (P127)
44. Ibid
CHAPTER 2

47. Ibid (P124)
48. Ibid (P135)
49. Pamela Robertson ed Charles Rennie Mackintosh, The Architectural Papers Glasgow (P45/50)
50. Peter Savage Lorimer and the Edinburgh Craft Designers (P1)
52. Frank A Walker St Andrews Studies in Architecture and Design (P54)
53. Ibid
54. Ibid (P53)
55. Ibid (P54)
56. Ibid (P56)
57. Frank A Walker National Romanticism and the Architecture of the City' in Perspectives of the Scottish City (Ed G Gordon) (P126)
58. Ibid (P136)
59. Ibid
60. Ibid (P138)
61. James Macaulay 'Rejecting Over Historicism' in Mackintosh's Masterwork - The Glasgow School of Art Glasgow (P145)
62. Frank A Walker 'National Romanticism and the Architecture of the City' (P133)
63. Ibid (P141)
64. James Macaulay 'Rejecting Overt Historicism' in Mackintosh's Masterwork - The Glasgow School of Art Glasgow (P146)
CHAPTER 3

65. Thomas Howarth
   Charles Rennie Mackintosh and the Modern Movement Routledge and Keagan Paul (P96)

66. Ibid (P95)
67. Ibid (P97)

68. Peter Savage
   Lorimer and Edinburgh Craft Designers Cameron Gorbettt (P94)

69. Ibid (P109)
70. Ibid (P94)

71. Thomas Howarth
   Mackintosh and the Modern Movement (P102)

72. Ibid

73. Peter Savage
   Lorimer and Edinburgh Craft Designers (P30)

74. Robert Macleod
   Charles Rennie Mackintosh Suffolk (P73)

75. Thomas Howarth
   Mackintosh and Modern Movement (P104)

76. Robert Macleod
   Charles Rennie Mackintosh (P88)

77. John G Dunbar
   The Architecture of Scotland

78. Robert Macleod
   Charles Rennie Mackintosh (P88)

79. Christopher Hussey
   The Work of Sir Robert Lorimer (P67)

80. John G Dunbar
   The Architecture of Scotland

81. Robert Macleod
   Charles Rennie Mackintosh (P74)

82. Ibid (P77)

83. Thomas Howarth
   Mackintosh and The Modern Movement (P103)

84. Peter Savage
   Lorimer and the Edinburgh Craft Designers (P95)

85. Ibid (P33)

86. Christopher Hussey
   The Work of Sir Robert Lorimer (P69)

87. Peter Savage
   Lorimer and the Edinburgh Craft Designers (P95)

88.
89. Paul Greenhalgh  'Struggles within French Furniture' in Modernism in Design Reaktion (P58)

INTERIOR

90. Herman Muthesius  'The Layout of the English House' in The English House London

91. Ibid

92. Herman Muthesius  'The Interior of the 19th Century' in The English House

93. Ibid (P84)

94. Herman Muthesius  'The Layout of the English House'

95. Ibid (P211)

96. Ibid (P221)

97. Ibid (P54)

98. Ian Gow  The Scottish Interior University Press 1992 (P159)

99. Ibid (P159)

100. Herman Muthesius  'The Layout of the English House'

101. William Eadie  Movements of the Modernity - The cae of the Glasgow Art Noveau

102. Herman Muthesius  'The Interior of the 19th Century' (P206)

103. Ibid (P1211)

104. Ibid

105. Ibid (P89)

106. Peter Savage  Lorimer and the Edinburgh Craft Designers (P10, pl 19)

107. Ibid (P115)

108. Frank A Walker  Charles Rennie Mackintosh, The Architectural Papers (P223)
ILLUSTRATION SOURCES

1. BILLCLIFFE, Roger
   Charles Rennie Mackintosh, The Complete Furniture, Drawings and Interior Designs
   Lutterworth Press, London 1979
   Illus. 19, 41, 43, 48, 49, 50, 56, 59, 60, 61

2. BRETT, David
   Poetics of Workmanship
   Reaktion Books, London 1992
   Illus. 13

3. BUCHANAN, David
   Mackintosh's Masterwork, The Glasgow School of Art
   Glasgow 1989
   Illus. 14, 67

4. DAVEY, Peter
   Arts and Crafts Architecture
   Illus. 31, 40, 46

5. HOWARTH, Thomas
   Charles Rennie Mackintosh and the Modern Movement
   Routledge and Keagan Paul, 1952
   Illus. 17, 28, 42, 55

6. HUSSEY, Christopher
   The Work of Sir Robert Lorimer
   Country Life, London 1931
   Illus. 32, 33, 34, 35, 46, 47, 52, 53, 64

7. JONES, Anthony
   Charles Rennie Mackintosh
   Studios, London 1990
   Illus. 6, 7, 8, 9, 10

8. KAPLAN and CUMMING
   The Arts and Crafts Movement
   Thames and Hudson 1992
   Illus. 6, 7, 8, 9, 10
Illustration Sources Cont..

9. MACLEOD, Robert
   Charles Rennie Mackintosh Hamlyn
   Publishing group, Suffolk 1968
   Illus. 15, 16, 18, 20, 27, 29, 30, 57

    Illus. 51, 63, 66

11. SAVAGE, Peter
    Lorimer and the Edinburgh Crafts
    Designers Paul Harris publishing
    1980
    Illus. 21, 22, 23, 24, 25, 26, 38, 39,
    45, 54, 62, 65

12. WALKER, Frank
    Perspectives of the Scottish City
    Illus. 11, 12