

Utilitarianism, Reform, and Architecture
-- Edinburgh as Exemplar

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PhD Thesis
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December 2008

Declaration

In accordance with the University of Edinburgh Postgraduate (Research) Assessment Regulations 2.5, I hereby state that: This thesis has been composed by myself; the work is a result of individual research; and the work has not been submitted for any other degree or professional qualification.

Signed:

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Date: 16th December, 2008

Acknowledgements

I would like to express my deep appreciation to Professor Iain Boyd Whyte and Mr. John Lowrey for their enthusiastic and inspiring supervision in these years, it is impossible to overstate how much their intellectual illumination and warm-hearted encouragement mean to me.

I am also grateful to the staffs of Architecture Department Library, University Library and National Library of Scotland. Special thanks must go to the staffs of Edinburgh Council Archive Department, their professional expertise helped a lot with my archive work.

In addition, I want to thank the Universities of the United Kingdom and the University of Edinburgh for providing an ORS Scholarship and an ORS Linked Scholarship for me. Financially, they strongly supported my research.

Finally, I am forever indebted to my parents and my wife, their endless love makes everything possible.

Abstract

Although the utilitarian character of modern architecture has been widely recognized, the relationship between Utilitarianism and architectural practice has not been adequately discussed. This thesis intends to contribute to this area with a historical study of the interaction of Utilitarianism and architectural practice in the social reforms of 18th and 19th century Britain. Edinburgh is used as an example to illuminate this historical process in more detail.

From three angles: prison, poor relief and elementary education, this thesis discusses how Utilitarians influenced the reform process and how architecture was used as significant instruments to promote the reform schemes designed by Bentham and his followers.

In prison reform, Bentham created the architectural model of the Panopticon to build a new punishment system based on disciplined prisons which could harmoniously align individual interest and public interest. He later introduced the same ideology and the Panopticon model into poor relief reform. Through the works of his followers, especially Edwin Chadwick, these Utilitarian ideas largely shaped the new poor relief system in Britain. Similar steps were later followed in elementary education reform. Together with the establishment of the national systems of poor relief and elementary education, a large volume of institutional buildings such as workhouses and board schools came into being, and many of them are still affecting our modern life.

Based on these examples, this thesis ends with a theoretical discussion of the inadequacy of Utilitarianism as a complete ethical theory. Contrary to the optimism of Bentham and his 19th century followers, Utilitarianism is insufficient to be a practical guidance for everyday life. This inadequacy determines that Utilitarianism cannot provide a firm ethical foundation for architecture.

Table of Content

1	Introduction	1
1.1	Discourses and the Plurality of History.....	1
1.2	The German Tradition of Art History and Aesthetics.....	3
1.3	Pevsner’s History of Modern Architecture and his Critics.....	9
1.4	Ethics Discourse in Architecture	12
1.5	A Short Introduction to Utilitarianism.....	21
2	Utilitarianism and Prison Reform	31
2.1	Bentham’s Criminology	31
2.2	Early Prison Reform in Britain.....	36
2.3	Bentham’s Panopticon.....	39
2.3.1	The History of Bentham’s Efforts to Build Panopticon Prisons.....	39
2.3.2	Architecture and Management	42
2.3.3	Power and the Panopticon	52
3	The Panopticon and the Edinburgh Bridewell	60
3.1	Early Proposals for the Edinburgh Bridewell.....	60
3.1.1	Howard and the Proposal of the Edinburgh Bridewell.....	60
3.1.2	The 1780 and 1782 Proposals	63
3.1.3	The 1791 Act of Parliament.....	69
3.2	The Edinburgh Bridewell	72
3.2.1	The Competition.....	72
3.2.2	Wardrop and Baxtor’s Designs.....	73
3.2.3	Robert Adam’s Designs.....	76
3.2.4	A Comparison of the Edinburgh Bridewell and Bentham’s Panopticon	89
4	Utilitarianism and Poor Relief Reform	100
4.1	Background of Poor Relief Reform.....	102
4.1.1	Old Poor Law and Workhouses	102
4.1.2	Knatchbull Act and the Workhouse Test	106
4.1.3	Gillbert Act and the Speenhamland Scheme	109
4.2	Bentham’s Scheme of Poor Relief.....	110
4.2.1	Bentham’s Principles for Poor Relief.....	111
4.2.2	Bentham’s Practical Proposals	118
4.2.3	The New Idea of Disciplined Workhouse.....	124
4.3	New Poor Law and its Workhouses.....	131
4.3.1	1834 Report and the New Poor Law	132
4.3.2	Model Plans of the Poor Law Commission	137
4.3.3	New Workhouse Built Between 1835 and 1840.....	148
4.3.4	The Effects of the New Poor Law	161
5	Transformation of Poor Relief in Scotland and Edinburgh Workhouses	169
5.1	Old Poor Law in Scotland	169
5.2	Old Edinburgh Poor Houses.....	173
5.3	Reform of Scottish Poor Law.....	194
5.4	Model Designs and New Workhouses in Edinburgh.....	199

6	Utilitarianism and Education Reform.....	215
6.1	Education Theory in the Enlightenment, Rousseau and Helvetius.....	217
6.1.1	Rousseau’s Education Theory	217
6.1.2	Helvetius’s Education Theory and Its Difference from Rousseau’s View.....	220
6.2	Bentham and Mill on Education.....	224
6.2.1	Education in the <i>Panopticon Letters</i>	224
6.2.2	Education in the <i>Pauper Management</i>	227
6.2.3	Education in the <i>Chrestomathia</i>	232
6.2.4	James Mill and Education	247
6.3	Utilitarians and the Establishment of the National Education System.....	255
6.3.1	Progress Prior to the 1870 Education Act.....	256
6.3.2	The Influence of the 1870 Education Act.....	269
6.3.3	London Board schools.....	271
7	Education Reform in Scotland and Edinburgh Board Schools.....	283
7.1	Scottish Education before 19 th Century.....	283
7.2	Monitorial System in the High School of Edinburgh.....	288
7.3	Edinburgh Sessional School and the Teacher Training System.....	301
7.4	New Board Schools in Edinburgh	305
8	Conclusion.....	319
8.1	Two Kinds of Functionalism: General Functionalism and Essential Functionalism...	320
8.2	The Significance of the Theory of Pleasure in Utilitarianism	331
8.3	The Problem of Bentham’s and Mill’s Concepts of Pleasure.....	339
8.4	Architecture and Ideal Life	346
8.5	Concluding Remarks	350
	Bibliography	352

1 Introduction

1.1 Discourses and the Plurality of History

It is largely due to Michel Foucault's early works such as *Madness and Civilization* (1960), *Birth of the Clinic* (1963), *The Order of Things* (1964) and *The Archaeology of Knowledge* (1968) that "discourse" has become a key concept in contemporary historiography. In common use, discourse has various meanings such as a talk, a conversation, a narrative, an account, a spoken or written treatment of a subject, or the like.¹ Starting from the descriptive meaning of this word, Foucault expands the concept and places more attention on its practical content. In Foucault's interpretation, discourse is an intellectual constitution formed in a specific social condition, which constructs our understanding of the world and ourselves in that condition.² In other words, discourse frames our knowledge, it defines the subject to be discussed and determines the way we think and talk about it. These factors consequently sets limit of what we can know. Foucault argues that discourse works in four ways - the formation of objects, the formation of enunciative modalities (research methods), the formation of concepts and the formation of strategies (the theoretical choice of forming a specific theory out of multiple possibilities based on the same group of objects, enunciative modalities and concepts) – to construct a branch of knowledge such as medicine and psychology.³ As immanent rules and patterns, discourse shapes our interpretation of reality and even reality itself.

A major implication of Foucault's new illustration of the concept of discourse is that the validity of human knowledge is subject to discursive construction. Different discourses in different times create different knowledge of its specific validity. And the change of general discourse naturally brings the total transformation of human knowledge. The main content of Foucault's early works illustrate how new discursive formations brought the development of modern psychiatry, medicine and human science. In this way, Foucault rejects the traditional

¹ *The Oxford English Dictionary*. 2nd ed. 1989. *OED Online*. Oxford University Press. 4 Apr. 2000
<http://carlin.lib.ed.ac.uk:2122/cgi/entry/50065473?query_type=word&queryword=discourse&first=1&max_to_show=10&sort_type=alpha&search_id=jp4x-c7IUWj-1156&result_place=2>.

² Foucault did not give an accurate definition of this term, for his interpretation of this concept see Michel Foucault, *The Archaeology of Knowledge* (London: Routledge, 1989), part II.

³ See *Ibid.*, pp. 31-70.

belief in the gradual, progressive development of knowledge and replaces it with successive discontinuities brought by abrupt discursive changes.

While Foucault mainly implies discursive analysis in the human sciences, Kuhn proposes a similar concept of “paradigm” in natural science.⁴ A paradigm is a mature theoretical matrix comprised of key concept, goals, instruments and metaphysical assumptions that prefix the possible form of science in a specific area. While a paradigm in a specific time provides the basic structure of the science of that period, tremendous changes in science, or “scientific revolutions” in another word, is brought by sudden “paradigm shift.” Like Foucault’s concept of discourse, Kuhn’s “paradigm” discloses the generally implicit model or pattern that frames human knowledge; both of them embrace the idea of discontinuous development of human knowledge brought by epistemological breaks.

By disclosing the dependence of human knowledge on its basic structure, discourse or paradigm, both Foucault and Kuhn discard the Platonic view of knowledge as a direct representation of essential truth without the distortion of human opinion. We can only establish our knowledge on the basis of discourses, which are themselves conditioned by social reality, and embody the interest, concern, assumptions and perspectives of human beings. Hence the old concept of a unique knowledge as an account of universal truth must be replaced by the concept of various knowledges, each conditioned by its own discursive formations. This replacement not only indicates the plurality of human knowledge but also opens the possibility of different kind of understanding as long as new discourse can be accepted.

This same principle also applies to historical research. As a kind of knowledge of the past, history is also framed by specific historiographic discourse which defines what aspect of the past should be surveyed and sets the limit of the ways in which that aspect can be analyzed systematically with specific concepts, categories and methodology. In this sense, history can not be regarded simply as a truthful mirror of the past; it is rather a discursive construction of our understanding of the past. Hence, no history can be claimed to be a complete “truth,” independent of the impact of changing discursive conditions. There is not only one history, but various histories based on different discursive foundations.

Recognizing this dimension of the plurality of history naturally opens the door of critical

⁴ See Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: London: University of Chicago Press, 1996).

analysis of historical writings. As Foucault's early works demonstrate, to understand a branch of knowledge, it is necessary to understand its basic discourse, the immanent rules and patterns that materialize the forming condition of that knowledge. This critical analysis is not only necessary for our understanding of knowledge, it is also necessary for our understanding of reality, because reality, in our mind, is also a construction based on various knowledges; the boundary between knowledge and reality is blurred. In this sense the clarification of the discursive foundation of knowledge is crucial for the reconstruction of reality, no matter it is a reality of past, present or future.

1.2 The German Tradition of Art History and Aesthetics

This theoretical background of discourse helps to explain the rise of historiographic research in the Modern Movement in recent years. Not all researchers adopt Foucault's concept of discourse, but they all hold that the elucidation of the epistemological background of historical writings is crucial in forming a complete understanding of modern architecture. Works such as Watkin's *The Rise of Architectural History* (1980), *Morality and Architecture Revisited* (2001) and Tournikiotis' *The Historiography of Modern Architecture* (1999) all contribute to the exposure of the ideological structure and immanent agenda of various historical writings. While the concept of discourse is not used by Watkin, it appears as a key concept in Tournikiotis' book, which addresses several classic narratives of the Modern Movement. Despite the different terminologies and different writing styles, both authors and many other researchers identify the German tradition of art historical research as one of the most important factors that affected the formation of modern architectural history in the early 20th century. Not only was modern architectural history directly derived from German art history research, but more importantly, the basic rule of traditional German art history was also transplanted into architectural history. It determines the structure of the historical researches of architecture and, by forming the historical knowledge, constructs our understanding of architecture in reality.

It is in Winckelmann's writings that the general character of style-centered discourse of art history emerged. Widely regarded as the founder of modern art history and archaeology, Winckelmann continued the tradition of historical narrative of art developed by Vasari. On the one hand he adopted some of Vasari's old ideas such as "the cyclical progress of art",

and on the other hand he introduced new discursive elements into the historical research of art. The key concept and category that Winckelmann used to define the object of his research was “style,” which means a distinctive, recognizable pattern of artistic form.⁵ In this respect Winckelmann differed significantly from Vasari. While Vasari concentrated more on individual artists, their great works, innovations, and achievements, Winckelmann’s real interest was not on the individual man or art work, but the general style, a collective social pattern of artistic form dominating in one age. There are two assumptions implicit in the utilization of the concept of style as the foundation of art history. First, it assumes the dominant role of formal analysis. This concentration on form does not directly lead to contradictions; nevertheless it does plant the root of tension between the formal aspect and other dimensions, such as the semantic or symbolic meaning of an art work, a tension exaggerated by later Kantian formalism, which reached its culmination in the abstract art of avant-garde. The other assumption is that there exists a general trend of pattern commanding the form of the art works produced in a specific age. Based on this premise, the creation of an individual artist is secondary to and subject to the control of this general pattern. It helps to render the impression that the pattern is a self-evolving entity out of the control of the individual artist, whose works only bring forth the realisation of the general pattern.

Compatible with the new conceptual scheme of style, Winckelmann’s “enunciation modality,” or analysis methodology in other words, placed emphasis on formal analysis; and more importantly, various styles were not treated as independent fragments, but as integrated segments of the general stylistic evolution. The styles are not separated, but correlated in a comprehensive scheme of formal transformation. Thus it is necessary to discuss the relationship between different styles. Comparative study becomes a central method in art history. It was this methodology, with its strong assumption of the stylistic evolution that promoted the dominant interpretation of art history as a sequence of various styles, each with its own time and was replaced by the next style. In this aspect the 20th century’s “formalist” histories of art are indebted to Winckelmann

With regard to the larger strategy of constructing the discipline as one part of the system of various knowledges, Winckelmann was also innovative. Different from earlier art historians who adhered to biography-centered narrative, Winckelmann’s discourse is more analytical by relating art to its social background of political conditions, customs, climate and religion. For example, in Winckelmann’s history, the high standard of Greek art is

⁵ See Jonathan Harris, *Art History: The Key Concepts* (London: Routledge, 2006), p. 305.

directly linked to the high moral standard of Greek society, whose distinct ethos was freedom. It is in this way that art becomes a mirror of the society, and art history, or stylistic transformation in Winckelmann's discourse, becomes a reflection in miniature of social evolution. This insight was later developed by Hegel's aesthetic theory of the *Zeitgeist*.

Finally, in choosing a research object, Winckelmann's discourse still focuses on the most important art works, judged on their formal excellence. But these works are regarded more as manifestations of the current style or the forerunner of new style rather than the separate creations of great artists. It is assumed that these works were commanded by the collective style evolution rather than the sporadic inspiration of individual genius. Under this logic, stylistic significance becomes the criterion of defining the importance of artworks and decides which artwork should be included in art history and which should be excluded; it is the formal quality that is decisive.

It is difficult to exaggerate Winckelmann's influence on the later development of art history and aesthetics. The discourse he established constructed the basis of art history as an autonomous academic discipline, and the philosophical premises immanent in his discourse were developed by later German philosophers and aestheticians. The two most significant are Kant and Hegel, each of whom emphasized one aspect of Winckelmann's discourse and brought two quite different aesthetic theories that contradicted each other in some important aspects. Considering the influence of their theory on modern art and architecture, it is necessary to discuss them respectively.

Although Baumgarten first coined the term "Aesthetics," it is Kant who is spoken of as the "father of modern aesthetics."⁶ His *Critique of Judgement*, more specifically the section entitled "Critique of Aesthetic Judgement," established a discourse that largely determined the direction of later development of aesthetics. Kant's aesthetic theory is very complicated especially in its place in the large theoretical structure of the human world he constructed in his three Critiques. He claims that there is a close relationship between the "Critique of Aesthetic Judgement" and the "Critique of Teleological Judgement"; the two parts, appearing as a whole in the *Critique of Judgement*, form a bridge to connect the other two Critiques: the *Critique of Pure Reason* and the *Critique of Practical Reason*, and then complete the Critical System as a unity.⁷

⁶ Paul Guyer, *The Cambridge Companion to Kant* (Cambridge: Cambridge University Press, 1992), p. 368.

⁷ Immanuel Kant and Werner S. Pluhar, *Critique of Judgement* (Indianapolis: Hackett, 1987), pp. Lxxxvi-cix.

Kant rejects Baumgarten's attempt to "bring the beautiful under rational principles" as if aesthetics can be analyzed scientifically. Aesthetic judgement, he argues, is a subjective judgment; its principal foundation is in the human faculty of imagination and understanding. The pleasure of aesthetic judgment arises when we discern a certain harmonious "free play" between our faculties of imagination and understanding. At that moment we feel as if the form of the object has been "designed for the cooperation of our cognitive powers," it represents to us the "form of finality, or the appearance of having been designed to suit our cognitive capacities."⁸ By "free play", Kant precludes any cognitive intention or attempt to categorize the object under a concept and then have an idea of what it is, or any interest or desire such as the benefit one can expect from the object. As Kant puts it: "a judgement of taste is an aesthetic judgment, i.e., a judgment that rests on subjective bases, and whose determining basis cannot be a concept and hence also cannot be the concept of a determinate purpose."⁹

Roughly speaking, the most influential part of Kant's aesthetics can be generalized as follows: First, aesthetic judgment is a subjective judgment; it has its most important foundation in human faculties. Second, aesthetic judgement is derived purely from the form of the object. Third, aesthetic judgement is disinterested, and does not involve the concept of what this object is or the purpose of the object. Fourth, aesthetic judgement is universal and necessary because it is a function of human faculty common to everyone. Of the four aspects, the most important are the second and the third. They provide the theoretical foundation of the idea that it is the formal features and nothing else of artworks that determine its quality as an object of aesthetic judgement. Other factors of the artwork such as its content, its meaning or its purpose do not have any relevance in pure aesthetic judgement. In this sense, art, with its creation and appreciation is a pure domain independent of other activities such as scientific cognition and practical utilization; it has its own rules of form, hence it is an autonomous discipline and is not informed by any goal outside itself. Art is only for art's sake. These ideas had a direct connection with the later development of abstract art in which the semantic contents of artwork are discarded and the autonomy of art asserted, separating art from other social spheres.

This separation of artistic form and society was completely rejected by Hegel, who held that there is an inherent relationship between art and society. Similar to Kant, Hegel's aesthetics is an integrated part of his whole philosophical construction. Central to Hegel's

⁸ Guyer, *The Cambridge Companion to Kant*, p. 377.

⁹ Kant and Pluhar, *Critique of Judgment*, p. 74.

philosophical system is the concept of Spirit. For Hegel, Spirit is the ultimate reality which underlines everything we experience; only when self-conscious being reaches full comprehension of Spirit can it achieve Absolute Knowledge rather than illusions. The Spirit is not a static object, but a dynamic, self-active entity which evolves dialectically and reaches its own final self-understanding and self-realisation. And it is through this process that we humans, the “vehicles” of Spirit, eventually reach the ideal state as conscious beings – the “self-conscious freedom at peace with itself.”¹⁰

This evolving process of Spirit provides the foundation of art. Art represents the Spirit; it is a specific means of the self-expression of the Spirit. In the process of the self-realisation of Spirit it belongs to a specific stage together with religion and philosophy. For Hegel, Spirit acquires its self-understanding through the process of “externalization.” In its interaction with external things, it gradually recognizes its ability and potentials. Art is just one of the different ways of interaction. In art Spirit expresses itself in sensuous form through the free artistic activity of human consciousness. In the idealized artistic form, human consciousness recognizes its own freedom – “a freedom in which oppositions are overcome and reconciled and in which humanity finds itself at home.”¹¹ Thus art for Hegel is not a domain of pure form as Kant suggests but a combination of form and content - the Spirit or Idea represented in art work. It is a result of the purposive activity of human consciousness; hence artistic beauty stands higher than natural beauty because the latter lacks such expressive content. In this aspect Hegel also contradicts Kant who puts natural beauty higher than artistic beauty just because of its complete purposelessness.

In Hegel’s view art also has its own evolution in which the relationship between art form and the content or idea it represents changes from lower to higher stages. He identifies three stages: *Symbolic*, *Classical*, and *Romantic*. For Hegel, Egyptian architecture is typical of *Symbolic* art. At this stage, the divine, the idea or the ultimate truth is represented as something abstract and mysterious beyond the world of experience as if it cannot be fathomed by humanity. This stage is less perfect because human consciousness is still far away from the Spirit and mistakes it as something obscure and mysterious. The second state, *Classical* stage is referring to Greek art. At this stage, the divine is conceived in terms of individuality. The inner life of Spirit is expressed in the form of human body. For Hegel,

¹⁰ Georg Wilhelm Friedrich Hegel, J. N. Findlay, and A. V. Miller, *Phenomenology of Spirit* (Oxford: Clarendon Press: Oxford University Press, 1977), §12

¹¹ William Ralph Schroeder, *Continental Philosophy: A Critical Approach* (Malden, Mass.; Oxford: Blackwell, 2005), p. 48.

Classical art represents a short-lived unity of form and content. But this is not the end of art, because the general process is for the complete self-realisation of Spirit. In this sense, *Romantic* art is the most superior because it expresses the inwardness of self-consciousness. Such inwardness evokes the conflict between subjectivity and object whose unity can be achieved only in thought rather than the sensible shape of art. Although Romantic art fails to bring such unity, it does express the self-dividing features of modern consciousness. In such bitter consciousness Spirit becomes concrete; the other-worldliness of Symbolic and Classical art is overcome.¹² For Hegel, Romantic art also symbolizes the end of art, it has finished its own mission, the task of achieving the final unity, the complete self-understanding of Spirit must be accomplished by religion and philosophy, compared to which art is only an inferior way due to its dependence on sensuous form.

By placing art in the general evolution of the Spirit's self-understanding, Hegel also connects art closely with society and history. Art is not the only domain in which Spirit expresses itself; in other areas such as logic, nature, mind and politics Spirit has different forms of realisation. Generally Spirit is moving in a temporal development towards complete freedom. It appears as a historical process leading to full human freedom when human consciousness achieves full comprehension of Spirit. In this process art appears as a manifestation of this evolution. Different art forms represent different stages of the Spirit's self-realisation in a historical process. A special term — "Zeitgeist" — is given to the specific temporal and partial realisation of Spirit. As a kind of materialization of Spirit, *Zeitgeist* explains the fundamental motivation of historical transformations and decides the characters of the society in which a specific *Zeitgeist* is dominant. While art embodies one part of the evolution of Spirit, it also represents the *Zeitgeist* which changes from time to time towards the full realisation of Spirit.

It is this connection between art and *Zeitgeist* that is of great importance for later art historians. Contrary to Kant's isolation of art in an autonomous, formalist sphere, Hegel identifies a broad consonance between the transformation of artistic form and society in general, both of which are generated by the evolution of *Zeitgeist*. By representing *Zeitgeist*, art also represents the most essential characters of the society; conversely a specific *Zeitgeist* embodied in a specific society also requires an appropriate art as the representation of its unique character. This rationale provides the philosophical foundation for the call for a new art in a new age. But the breakdown of the autonomy of art also brings dangers. As Hegel's

¹² Paul Smith and Carolyn Wilde, *A Companion to Art Theory, Blackwell Companions to Literature and Culture*; 5 (Oxford: Blackwell, 2002), p. 135.

view of the “end of art” shows, by identifying art as one of many ways in which Spirit expresses itself, the uniqueness of art is reduced. It is no longer completely different from other spheres; it can be or should be replaced by religion and philosophy. While Kant gives art its autonomy and independent value, Hegel destroys such independence and casts a shadow on the legitimacy of art’s existence. It is not surprising that while many artists embrace Hegel’s Zeitgeist theory to call for a new art, many others reject his view and adhere to Kant’s formalism which guarantees the irreplaceable status of art.

Both Kant and Hegel’s views produced deep influences on later development of art theory and historical research. Winckelmann’s discourse was transformed by their philosophical systems into aesthetic theories, which consequently set the foundation of later discourses. Despite the contradictions in many aspects between the two theories it does not mean that one has to choose either one or other. In many cases, some aspects of the two theories are interestingly put together. This is possible under the condition that only some parts of the philosophical system rather than the whole of the two theories are accepted. On the one hand it produces a compromised compound that avoids some radical arguments of the two theories, but also it incorporates the theoretical difficulties inherent in them. A typical example of such double effects is Pevsner’s history of Modern architecture.

1.3 Pevsner’s History of Modern Architecture and his Critics

Pevsner’s work clearly represents the influence of the discourse of German tradition of art history and aesthetics on the historical research of architecture. Generally speaking, he takes from Kant the form-centered view of art and regards architecture as a formal problem; from Hegel he takes the view of the deep connection between architectural style and Zeitgeist.

Pevsner holds that aesthetic quality is one of the defining characters of architecture, he argues: “A bicycle shed is a building; Lincoln Cathedral is a piece of architecture. Nearly everything that encloses space on a scale sufficient for a human being to move in is a building; the term architecture applies only to buildings designed with a view to aesthetic

appeal.”¹³ Compatible with the aesthetic definition of architecture, his historical discourse focuses on the formal aspect of architecture. Continuing the tradition of Winckelmann, he sees architectural styles as the central problem of modern architecture. In his interpretation, the modern movement is the process through which the modern style originates and evolves into its maturation, with the Fagus work and the Cologne Model Factory as the best examples. It is this formal criterion that led him to call Wright, Garnier, Loos, Behrens, Gropius modern pioneers and Gaudi, Sant’ Elia and even late Corbusier “freaks and their inventions fantastical rantings.”¹⁴ In *Pioneers of Modern Design*, first published in 1936, Pevsner constructs the genealogy of the modern movement as follows: “Morris laid the foundation of the modern style; with Gropius its character was ultimately determined.”¹⁵ Before Morris, Pevsner argues, 19th century architectures were dominated by eclectic historicism borrowing styles arbitrarily from the past. These architectures had the serious defect of the “complete lack of feeling for the essential unity of architecture” caused by the disconnection of art and its social reality.¹⁶ Morris is extolled as the initiator of modern architecture on the basis of his lifetime campaign against that fatal error. The final result of this campaign, continued by a group of pioneers is a completely new style consisting of horizontal lines, pure geometrical shapes, plain surfaces, transparent glass and visible structures. Pevsner believes this is the only right style to be adopted because it glorifies the modern world, a world of “scientific and technology, of speed and danger, of hard struggles and no personal security,” in short the modern style embodies the *Zeitgeist* of modern age.¹⁷ In this way he combines the formal emphasis of Kantian aesthetics and the Hegel’s *Zeitgeist* theory to justify the modern style that he supports.

Although Pevsner’s story of modern architecture is influential and sets a paradigm for the history of modern architecture, its coherence has been questioned by Watkin. Watkin argues that the alleged unity of modern style and modern society presupposed by Hegelian *Zeitgeist* theory cannot be verified empirically. The formal character of modern style is not a necessary result of the age, but only of “aesthetic demands made by people who have already decided what they want building to look like, and who then persuade the public to accept them as though they were the inevitable consequence of the facts of modern life and

¹³ Nikolaus Pevsner, *An Outline of European Architecture*, 7th ed. (Harmondsworth: Penguin, 1972), p. 15.

¹⁴ Nikolaus Pevsner, *Pioneers of Modern Design: From William Morris to Walter Gropius*, Reprint with revisions. ed. (Harmondsworth: Penguin, 1970), p. 17.

¹⁵ *Ibid.*, p. 39.

¹⁶ *Ibid.*, p. 20.

¹⁷ *Ibid.*, p. 217.

society.”¹⁸ In this sense the genealogy of modern architecture constructed by Pevsner is based on rather arbitrary choices of one style rather than others. Inevitably, this kind of history of modern architecture is heavily confined and limited while many other architectures with different formal qualities are excluded.

Moreover, to treat architecture as an aesthetic problem and concentrate on formal analysis brings the tension between form and other aspects, a difficulty inherent in Kantian aesthetics. Due to the overemphasis on stylistic form, many other aspects of architecture are overlooked or treated not for its own sake but only as instrumental factors leading to the formal effect. This causes the contradictory result that, while early 20th century historians such as Pevsner and Giedion stress the significance of the factors such as structure and function in modern architecture, their works do not really discuss these factors as of independent architectural value but only mention them for their stylistic implications. Their works concentrate on morphological analysis and are always ambiguous and obscure on how this style, alleged to be the moral style of the age, can help to bring an ideal society. There is a gap between the formal discourse and the real effect of architecture in society, as people do not just encounter architecture as a pure aesthetical object.

The way of seeing architecture as an aesthetic object is called the “aesthetic approach” by Karsten Harries. He points out that this approach does not suit architecture because “the extreme formalism of such an approach follows from its commitment to aesthetic perfection, which renders talk of the requirement of dwelling or function simply irrelevant.”¹⁹ In fact these words are not far away from Pevsner’s critique of 19th century architecture which only cared about style and ignored public and utility. Unfortunately his favoured style faces the same critique. As we have seen the real problem is not of any specific style but of the “aesthetic approach” of style-centered discourse; as long as architecture is regarded as an aesthetic object the tension between formal and non-formal factors in architecture can hardly be reconciled. Harries believes this tension had produced great harm to architecture: “it is thus hardly surprising that with the rise of the aesthetic approach in the 18th century, architecture should have entered a period of uncertainty and crisis from which it has still not emerged.”²⁰

¹⁸ David Watkin, *Morality and Architecture Revisited*, [Rev. ed. (Chicago: University of Chicago Press, 2001)], p. 94.

¹⁹ Karsten Harries, *The Ethical Function of Architecture* (Cambridge, Mass.; London: MIT Press, 1997), p. 24.

²⁰ *Ibid.*, p. 26.

If the aesthetic approach or aesthetic discourse does not really fit architecture, or incomplete at least, what other approach or discourse can be considered? The title of Harries's book *-The Ethical Function of Architecture* – has already indicated an alternative choice. But is it really possible to include ethics in architectural discourse, and how to do so? This is the question that will be discussed in the next section.

1.4 Ethics Discourse in Architecture

No simple answer can be given to the question about the possibility of including ethical discourse in architecture because there are different ethical discourses and they determine quite different answers. To put it simply, such incorporation is highly possible in teleological ethics but very hard in deontological ethics.

Let us first consider teleological ethics. What are teleological ethics? In his *A Theory of Justice* Rawls argues there are two main concepts in ethics: right and good. “The structure of an ethical theory is, then, largely determined by how it defines and connects these two basic notions.” From this he defines teleological theories with this character: “the good is defined independently from the right, and then the right is defined as that which maximizes the good.”²¹ To put it simply, the right action is the one that can maximize the goodness the action is able to produce. But in *Weighing Goods*, Broome points out that Rawls's definition is too narrow and too specific to include all teleological theories. Instead he proposes a wider definition of teleological theories: “teleological ethics, then, says there is an ordering of acts that determines the acts' rightness.”²² According to him, there is no need for a prior notion of good, because the notion of good is just defined by this ordering. Hence, “any ethical theory with a maximizing structure is teleological, and what it aims to maximize is what it takes to be good.”²³ From this point of view, the difference between Rawls's and Broome's definition of teleological theories is not that great, except for the different importance they give to the notion of good.

Teleological theory is probably the oldest type of ethical theory. Its most important representative in the pre-modern age is Aristotle's ethical theory, which is also the earliest systematic ethical theory in Western thought. The concept of *telos* is central to Aristotle's

²¹ John Rawls, *A Theory of Justice*, Rev. ed. ed. (Oxford: Oxford University Press, 1999), pp. 19-24.

²² John Broome, *Weighing Goods: Equality, Uncertainty and Time, Economics and Philosophy* (Oxford: Blackwell, 1991), p. 13.

²³ *Ibid.*

ethics. He starts his *Nicomachean Ethics* with the words: “Every art and every inquiry, and similarly every action and choice, is thought to aim at some good; and for this reason the good has rightly been declared to be at which all things aim.”²⁴ This teleological definition of good as something all things aim at is quite different from Plato’s concept of good as an absolute, eternal and unitary Idea which is the cause of all particular good in worldly things and affairs.²⁵ Aristotle clearly rejects such a Platonic view because saying “good can be explained by the Idea of Good Itself” tells nothing about the particular good we encounter in practical life and try to obtain.²⁶ Then what is Aristotle’s good in different actions? He writes: It is “that for whose sake everything else is done. In medicine this is health, in strategy victory, in architecture a house, in any other sphere something else, and in every action and choice the end; for it is for the sake of this that all men do whatever else they do.”²⁷ Here Aristotle has already provided an example of combining ethical discourse, i.e. the concept of good, and architecture. In short, as long as architecture serves some purpose, it is an ethical construct.

If there are as many goods as different actions, what is the criterion deciding which action to take? In Broome’s terms, Aristotle needs an “ordering” of goods to determine which action is the right one to take. To this question, Aristotle does provide an answer. He argues “not all ends are complete ends;” some ends are chosen for the sake of something more complete. “If, then, there is some end of the things we do, which we desire for its own sake (everything else being desired for the sake of this), and if we do not choose everything for the sake of something else (for at that rate the process would go on to infinity, so that our desire would be empty and vain), clearly this must be the good and the chief good.”²⁸ The chief good is the most complete good, therefore an ordering is established by the degree of completeness: “if there is only one complete end, this will be what we are seeking, and if there are more than one, the most complete of these will be what we are seeking.”²⁹

For human beings, the chief good, the most complete and self-sufficient good, is identified by Aristotle as *eudaemonia*, which is normally translated as happiness. It is the highest good for human beings because only in the case of happiness do we “choose always for itself and never for the sake of something else while for other goods such as honour,

²⁴ Aristotle, *Nicomachean Ethics*, Book I, 1094a. The translation of Aristotle’s work is taken from Aristotle and Jonathan Barnes, *The Complete Works of Aristotle*, Rev. Oxford translation / ed., vol. 2 (Princeton; Guildford: Princeton University Press, 1984), p. 1729.

²⁵ Plato’s concept of good is very complicate and he acknowledges that it is impossible to give an accurate definition of it, see *Republic*, 506-509.

²⁶ Aristotle, *Nicomachean Ethics*, Book I, 1096a-1097a.

²⁷ Aristotle, *Nicomachean Ethics*, Book I, 1097a.

²⁸ Aristotle, *Nicomachean Ethics*, Book I, 1094a.

²⁹ Aristotle, *Nicomachean Ethics*, Book I, 1097a.

pleasure and reason we choose them for themselves but also for the sake of happiness, judging that through them we shall be happy.”³⁰ Only happiness stands in the end of the chain of various goods, it is the final end human action aims at; all other good things, including those of architecture, are segments of this great chain; as constituents they are included in the human pursuit of happiness.

Up to now, Aristotle’s teleological theory is not complete because he only gives a formal description of good and the chief good: they are some ends our actions aim at. There still remains a question of the substantial content of the ends, i.e. what exactly it is. At this point Aristotle’s concept of *telos*, which is central to his metaphysical biology, enters.

Telos is one of the Four Causes – material, formal, efficient, and final causes (*telos*) – that Aristotle introduces in *Physics*.³¹ He argues that we cannot fully understand natural process without knowing its *telos*. Architecture is used as an example to illustrate this point again, he points out that it is inadequate to explain how the wall comes to be only by referring to its material property as “stones and foundations take the lowest place, with earth above because it is lighter, and wood at the top of all as being the lightest. Whereas, though the wall does not come to be without these it is not due to these, except as its material cause: it comes to be for the sake of sheltering and guarding certain things.”³² The metaphysical aspect of Aristotle’s theory is that he expands the example of building to the whole of nature. Just as only referring to the material of stone, brick and wood does not fully explain a wall, description of the material constituent of nature, such as the atomist theory did, does not fully explain nature as well. It is crucial to understand the teleological dimension of nature as his famous phrase says: nature does nothing in vain.

Hence, every being in nature, including plants, animals and human beings, has its own *telos*. Moreover, Aristotle holds that there is a metaphysical hierarchy of these different *telos*. This view is best illustrated by his biology theory. In *On The Soul*, he argues that all organisms can be graded based on the “power of soul” possessed by them, from the plants at the bottom, which only have the nutritive dimension, to the human beings capable of rational thinking. Each higher grade of being in the hierarchy owns all the powers of those below it and additional powers that make it higher in the scale. These powers equip each organism with a certain potentiality, and the end, or *telos*, of that species is to realise all its potential.

³⁰ Aristotle, *Nicomachean Ethics*, Book I, 1097b.

³¹ Aristotle, *Physics*, Book II, 194b23-35.

³² Aristotle, *Physics*, Book II, 200a1-10.

So the specific *telos* of that species is defined in terms of its specific character of “power of soul.” This principle indicates the *telos* of the human being, the highest species in the hierarchy of organisms. The specific character of the human being is his capability of rationality, so “the function of man is an activity of soul in accordance with, or not without, rational principle,” and “human good turns out to be activity of soul in conformity with excellence, and if there is more than one excellence, in conformity with the best and most complete,” which is, in the case of the human being, excellence of rational thinking. This is the best and most complete excellence because it is the closest above all things in the world to the top of the “Great Chain of Being,” the Unmoved Mover, the thought only thinking of itself and also the ultimate end of the universe, to which all things are moved. Or to put it in Aristotle’s term, it is the Final Cause of the Universe.³³

With this metaphysical hierarchy of *telos*, Aristotle successfully gives more substantial content to various goods. They are not just something different actions aim at, put together they form a continuity with the Unmoved Mover at its final end. All actions, including those of human beings must be regulated according to this structure of ends. As MacIntyre points out, metaphysical biology is fundamental in Aristotle’s ethics, it completes the teleological structure of Aristotle’s ethics. “Within that teleological scheme there is a fundamental contrast between man-as-he-happens-to-be and man-as-he-could-be-if-he-realized-his-essential-nature. Ethics is the science which is to enable men to understand how they make the transition from the former state to the latter. Ethics therefore in this view presupposes some account of potentiality and act, some account of the essence of man as a rational animal and above all some account of the human *telos*.”³⁴ Hence “any adequate teleological account must provide us with some clear and defensible account of the *telos*; and any adequate generally Aristotelian account must supply a teleological account which can replace Aristotle’s metaphysical biology.”³⁵

As shown before, this teleological structure also serves as the universal basis of the compatibility of architecture and human ethics. They are compatible because they are both in the teleological structure; their *telos* belong to the same hierarchical chain. While a building’s *telos* in serving its function is to shelter human beings, this function helps human

³³ For the concept of the “Great Chain of Being” see Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea: The William James Lectures Delivered at Harvard University, 1933* (Cambridge, Mass: Harvard University Press, 1936), p. 59. For an example of Aristotle’s view of unmoved mover as the Final Cause of universe see *Metaphysics*, Book XII, Section 7, and *Physics*, Book VIII, Section 5-6.

³⁴ Alasdair MacIntyre, *After Virtue: A Study in Moral Theory*, 2nd (corr.) ed. (London: Duckworth, 1985), p. 52.

³⁵ *Ibid.*, p. 163.

beings to realise their own *telos* in achieving excellence as rational being imitating the Unmoved Mover. Not only is architecture one part of the ethical project of human beings, everything else in the universe, including the Aristotelian God, is one part of it as well.

This teleological account of nature illustrates the metaphysical dimension of Aristotle's functionalism. It also has deep influence on architectural theory. The idea that every being, organisms or materials, has an innate *telos* or *function* decided by its own nature was long lasting and flourished again in the 19th century and early 20th century. As De Zurko and Forty point out, it is central to the German Romantic idea of the "organic" theory of form and stays central in the theoretical background of Sullivan's famous phrase – "Form Follows Function."³⁶ It is worth noting that Sullivan's "functionalism" is not a complete teleological account. Just as a teleological theory without a clear account of *telos* is incomplete, a functionalism without a clear account of the *function* is also incomplete. Sullivan only emphasized the commanding influence of innate function, but did not pay attention to the function itself and the "ethical problem" of how to achieve it. He did not put *telos* or *function* at the central position as Aristotelian ethics requires: it only serves as a metaphysical condition of the aesthetical consideration of form. Herein is the difference between a "formal functionalism" represented by Sullivan and a "teleological functionalism" represented by Utilitarian social reformers whom this thesis will discuss later.

From the above discussion it can be seen that in Aristotle's teleological ethics architecture can be a part of the ethical project of human beings. Moreover, it is necessarily an ethical problem because all the *telos* in the universe are connected in a chain. In such a theory there is no boundary preventing the application of ethical discourse in architecture. It is quite natural to discuss the *telos* of architecture, its function of helping human beings fulfill their own *telos*. Aristotle's theory provides a good example showing how ethical discourse frames our understanding of architecture on the basis of teleological theory.

Aristotle's teleology is a typical example of the ancient world view which sees the world as a whole governed by a predetermined rational and divine order. It is inevitable that once such a world view is disbelieved the ethical theories based on it will be questioned and a new foundation must be sought. This is what happened when Kantian deontological ethics stepped onto the stage. While a new type of moral philosophy came into being, the

³⁶ Edward Robert De Zurko, *Origins of Functionalist Theory* (Columbia University Press: New York, 1957), pp. 20, Note 18. Also, Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (New York, N.Y.: Thames & Hudson, 2000), pp. 177-79.

relationship between ethics and architecture inevitably changed.

In his *Science as a Vocation*, Max Weber used the concept of “disenchantment” to describe the process of rationalization developed in European society after the Reformation and the scientific revolution.³⁷ He argues that after the eclipse of the old world view based on the religious and metaphysical order, a new space is opened for reorganization under the guidance of rationalization. This transformation of modernization brought the result that the previously unified system of human understanding backed up by the metaphysical chain was separated into three autonomous spheres: science, morality and art. As Habermas puts it: “since the 18th century, the problems inherited from these older world-views could be arranged so as to fall under specific aspects of validity: truth, normative rightness, authenticity and beauty. They could then be handled as questions of knowledge, or of justice and morality, or of taste.”³⁸

No one else represents this separation better than Kant. His three *Critiques* are aimed exactly at establishing the rational basis of cognitive knowledge, morality and aesthetics. By elucidating the different foundations of the three spheres Kant helped to build the autonomy of the three disciplines and also the growing division and distance among them. As we have seen, it was in the time of Baumgarten and Kant that aesthetics originated as an autonomous discipline. It was also one of the great dividing points in the history of ethics. The significance of Kant’s work can be seen from MacIntyre’s assertion that “for perhaps the majority of later philosophical writers, including many who are self-consciously anti-Kantian, ethics is defined as a subject in Kantian terms. For many who have never heard of philosophy, let alone of Kant, morality is roughly what Kant said it was.”³⁹ In short, Kant deeply influenced the modern discourse of ethics. When discussing the possibility of including an ethical discourse in architecture, Kant clearly cannot be omitted.

To put it simply, it is very hard, if not completely impossible, to combine Kantian ethics and architecture. This is because Kantian ethics is only possible for rational beings with free will. As architecture is not such a being, it makes no sense, strictly speaking, to talk about ethics in architecture.

³⁷ Max Weber, “Science as a Vocation” in Max Weber, Hans Heinrich Gerth, and C. Wright Mills, *From Max Weber: Essays in Sociology, International Library of Sociology and Social Reconstruction* (London: Routledge & Kegan Paul, 1948), p. 155.

³⁸ Habermas, “Modernity – An Incomplete Project” in Jürgen Habermas, *The Philosophical Discourse of Modernity: Twelve Lectures* (Cambridge, UK: Polity in association with Basil Blackwell, 1987), p. 9.

³⁹ Alasdair MacIntyre, *A Short History of Ethics: A History of Moral Philosophy from the Homeric Age to the Twentieth Century*, 2nd ed. (London: Routledge, 1998), p. 190.

From Rousseau, Kant accepted the view that human beings are autonomous agents capable of self-government. On the other hand, human being must be self-governed because only in this way are they really free, which means not to be controlled by any other factor other than their own will. The existence of rational free will was not proved by Kant, but taken as an *a priori* condition of human existence. The striking point developed by Rousseau and Kant from this *a priori* condition is the tenet that, as free agents, human beings ought only follow the command of their own will. No external authority, including the God, can be allowed to influence their choice of any behaviour. They are their own legislator.

But there is another level of freedom: freedom from our own desire and interest. Like many other philosophers before him, Kant distinguishes two parts in human nature. One part is the animal part, of sense, desire and passion, which are always chaotic, illusionary and contradictory; the other part is the rational part, which is ordered, consistent and universally valid. Since the animal part is deceptive and full of error it cannot be a valid basis for morality. Meanwhile, to be subject to the command of our animal nature is to decline from human being into animals. The most dignified element of a human being – the rational part – is thus humiliated and destroyed. Plato puts it in these words: soul is imprisoned by body and “the worst feature of this imprisonment is that it is due to desires, so that the prisoner himself is contributing to his own incarnation most of all.”⁴⁰ Hence, for the most essential part of human nature to be free, it is necessary to be freed from this incarnation of desire. To act as a free being, our action must not be affected by any consideration of desire, interest or the utility of the action, because once these factors take control in any form, the action is no longer really free. Only the pure free will itself is the sole motivation of moral action. We ought to do whatever “a holy will” or “perfectly rational will” dictates us to do regardless of its consequence for us. There is an unconditional obligation for us to do things only for the sake of doing it. This unconditional obligation constitutes what Kant calls “categorical imperative.”

But this does not mean human beings can do anything they will. As the rational part of human nature the will must follow certain laws, but the laws are not imposed from outside, but are given by human beings to themselves “a priori through their own reason – a reason that is entirely self-directing, free of any guidance by natural impulse, social tradition, religious revelation, or poetic inspiration.” And “it is this capacity to be unconditionally

⁴⁰ Plato, *Phaedo* 82e, The translation of Plato is taken from Plato, John M. Cooper, and D. S. Hutchinson, *Complete Works* (Indianapolis; Cambridge: Hackett, 1997).

legislative that constitutes the dignity (absolute and incomparable worth) of humanity.”⁴¹ Hence following the moral laws is not a confinement of human freedom; on the contrary it is just the representation of the freedom of a dignified being of reason. This justifies our unconditional obedience to nothing else but moral laws as the guidance of human behavior. It is not a contingent requirement but the result of a priori deduction from our nature.

It is in this way that Kant gave moral law a metaphysical foundation, and helped to establish a new discourse of ethics in which will, moral laws and obligation are the most important concepts, and right or wrong is prior to good or bad. Similar to Kant’s aesthetics moral judgement is also disinterested. It is not based on any concept of external object but governed by moral laws derived from our pure will only. Thus it is completely independent of external restrictions such as human desire or material condition, ethics becomes an autonomous realm constructed on a priori “categorical imperatives.”

Such an ethical theory, based on the notion of obligation or duty is called “deontological” ethics, of which Kantian ethics is its most important example. In fact it is this discourse of deontological ethics that is most familiar for modern man. Under its influence, moral problems “have tended to focus on what is right to do rather than what it is good to be, on defining the content of obligation rather than the nature of the good life,” as Taylor points out.⁴²

It is quite natural that this kind of ethical discourse can hardly be transplanted into architecture. As Kant argues, ethics, embodied in universal and unconditional moral laws, is only possible for rational beings of free will. For them moral laws are necessary obligations originated in the most dignified part of human nature. But for architecture, these moral laws completely lack any philosophical foundations. Architecture is not rational being capable of free choice, it does not have autonomous self-government, thus it is completely wrong to talk of an architecture being honest or sincere in a Kantian sense. It is, of course, possible to have a romantic view regarding architecture as a living being, or at least a mirror of human character, and apply moral rules imaginatively in architecture. But such imaginative transplantation does not have the moral necessity that Kantian ethics requires of human beings. There always exists a question why a moral rule of human existence can or should be

⁴¹ Immanuel Kant, Mary J. Gregor, and Allen W. Wood, *Practical Philosophy, The Cambridge Edition of the Works of Immanuel Kant* (Cambridge: Cambridge University Press, 1996), p. xxii.

⁴² Charles Taylor, *Sources of the Self: The Making of the Modern Identity* (Cambridge: Cambridge University Press, 1989), p. 3.

applied to architecture.

On another level, the gap between Kantian ethics and architecture is driven even wider by the “aesthetic approach” of architecture. As mentioned before, both aesthetics and ethics are autonomous areas in Kant’s *Critique* system, and are both governed by their own principles. Thus it is extremely hard to intermingle the two aspects together. Once an “aesthetic approach” takes control of architecture, it becomes even harder to consider architecture in ethical discourse. This difficulty is clearly represented in Geoffrey Scott’s critique of “The Ethical Fallacy” of architecture. Scott maintained a typical Kantian aesthetical approach to architecture. In architecture there exists the “disinterested desire for beauty,” he argues. “This desire does not, it is true, culminate here in a purely aesthetic results, for it has to deal with a concrete basis which is utilitarian. It is, none the less, a purely aesthetic impulse, an impulse distinct from all the others which architecture may simultaneously satisfy, an impulse by virtue of which architecture becomes art.”⁴³ Hence “we cannot look to the morality of the artist in his work as a criterion of the aesthetic value of the style,”⁴⁴ because the aesthetic quality of architecture is only based on form “whose language is Mass, Space, Line, and Coherence.”⁴⁵ Scott’s work clearly represents the influence of “disenchantment” that separates science, morality, and art into three autonomous realms and the difficulty it produces for the incorporation of ethical discourse in architecture, especially in an age in which Kantian ethics still takes a central place in common use. As long as we talk about ethics in Kantian discourse, the oddness of using ethical terms in architecture cannot be easily eliminated.

To generalize, in teleological ethics architecture can be discussed in ethical discourse because the function of architecture can be integrated into the overall teleological structure; in deontological ethics this incorporation is hardly legitimate because there is no justifiable reason to transplant the moral rules of rational being onto architecture. As Kantian discourse largely influenced modern understanding of ethics and aesthetics, the tension between the two areas and the uneasy position of architecture related to them engendered many problems for modern architecture. One way of avoiding part of the difficulty is to return to teleological ethics. This is possible because the eclipse of Aristotelian ethics does not mean the death of teleology. His theory is only rejected because of the metaphysical structure of *telos*. If such metaphysical *telos* is replaced by some other end acceptable to the modern world view, it is

⁴³ Geoffrey Scott, *The Architecture of Humanism* (Doubleday Anchor Books, 1956), p. 17.

⁴⁴ *Ibid.*, p. 122.

⁴⁵ *Ibid.*, p. 125.

quite natural that a modern teleology can be built up. The most important representative of this kind of new teleological theory is Utilitarianism, an ethical theory developed at the end of the 18th century.

1.5 A Short Introduction to Utilitarianism

According to John Stuart Mill, he created the term “Utilitarianism” as the name for a specific ethical theory.⁴⁶ His essay “Utilitarianism” is probably the first systematic philosophical expatiation of the theory, and specifically locates the theory in the realm of moral philosophy. Nevertheless, it is not Stuart Mill, but Jeremy Bentham, a good friend and the intellectual master of Mill’s father, who is normally recognized as the founder of Utilitarianism. It was due to his influential works that a school of Utilitarianism was formed in the early 19th century and finally led to the crystallization of his thought by Mill into a special moral theory.

In its simplest form, Utilitarianism is known for the “Greatest Happiness Principle.” In his earliest book, *A Fragment On Government* Bentham declares the “fundamental axiom” in the moral world to be “the greatest happiness of the greatest number that is the measure of right and wrong.”⁴⁷ Later, in *An Introduction of the Principles of Morals and Legislation* Bentham gives a fuller interpretation in the *Principle of Utility*. “Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure*. It is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne. They govern us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection, will serve but to demonstrate and confirm it.” “The Principle of Utility recognizes this subjection” to pain and pleasure, “and assumes it the foundation of that system, the object of which is to rear the fabric of felicity by the hands of reason and law.” He continues: “By the principle of utility is meant that principle which approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question; or, what is

⁴⁶ “Utilitarianism” in John Stuart Mill and John Gray, *On Liberty and Other Essays* (Oxford UP, 1991), pp. 137, note 1.

⁴⁷ Jeremy Bentham, *A Fragment on Government* (London: 1776), p. ii.

the same thing in other words, to promote or to oppose that happiness.”⁴⁸ Although it was Bentham’s work that made this principle widely noticed, he was not the first person to propose it. It had appeared in Francis Hutcheson’s *Inquiry into the Origins of our Ideas of Beauty and Virtue, in Two Treatises*, in which he wrote: “Action is best, which procures the greatest Happiness for the greatest numbers; and that, worst, which, in like manner, occasions Misery.”⁴⁹ Moreover, the origin of Utilitarianism can be traced back to the theories of Hume, Hobbes, and even Aristotle.

Aristotle denies that happiness, the highest good of human being, equals pleasure. He agrees with Plato that at least some pleasure is bound up with the irrational or bodily part of human being which is “human, mortal, multiform, unintelligible, soluble and never consistently the same.”⁵⁰ Bodily pleasures are always transient, contradictory to each other, and even lead to their opposites in the cases of self-indulgence. They cannot be equated with good, and may be bad without qualification in some cases. But for Aristotle, it does not follow from this fact that the chief good would not be pleasant, because not all pleasures are naturally bad. For Aristotle, pleasure is a state of the soul, it arises in any unfrustrated activity of our natural capacities such as our “discriminating or contemplative faculty,” hence happiness, the chief good, must be some pleasure because it is the excellent activity of the most essential nature of the human being, i.e. his function or *telos* that, according to Aristotle, defines the specie. When pleasure is involved, it completes the action “as an end which supervenes as the bloom of youth does on those in the flower of their age,”⁵¹ which means an additional good but not the essential one. This is an inevitable result of Aristotle’s teleology because happiness is defined not as a state but by actions. Hence pleasure as a “state of soul” can only be secondary to the chief good although it naturally accompanies it. But there is much obscurity in Aristotle’s account of pleasure. He agrees that we pursue pleasure only for its own sake, so that it can be a candidate of the chief good. Meanwhile, he maintains, the question “whether we choose life for the sake of pleasure or pleasure for the sake of life cannot be answered because they seem to be bound up together...since without activity pleasure does not arise, and every activity is completed by pleasure.”⁵² In this sense pleasure and happiness cannot be separated, their relationship and identity remains unclear. This obscurity arises in the incomplete coherence of two facts: that we desire something that

⁴⁸ Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation, Etc. Ms. Notes [by the Author]* (London: T. Payne & Son, 1780), pp. i,ii.

⁴⁹ Francis Hutcheson, *An Inquiry into the Original of Our Ideas of Beauty and Virtue* (1725), treatise 2, section 3, § 8.

⁵⁰ Plato, *Phaedo*, 80b.

⁵¹ Aristotle, *Nicomachean Ethics*, Book X, 1174b.

⁵² Aristotle, *Nicomachean Ethics*, Book X, 1175a.

is pleasant to us derived from common sense on the one hand, and our happiness is determined by our *telos* derived from Aristotle's metaphysical teleology on the other hand.

This problem was successfully avoided by Epicurus by denying the teleological structure of the universe. In Epicurus's atomism inherited from Democritus, the universe consists of infinite atoms of different kinds which move in the empty void. These atoms are physically indivisible, imperishable and internally changeless. All phenomena in the world are formed by movement, and the current formation of the world only derives from the uncaused divergence of atom from their parallel straight-line paths in infinite space. Hence the world is by nature accidental and devoid of any specific design of teleological order because the origin of everything is only the contingent swirl of atoms.⁵³ This materialistic atomism theory repudiates the theory of divine intervention and the teleological structure Aristotle envisages. Like anything else in the universe, human beings are not subject to the a priori *telos*, what they aim at is only their pleasure.

Epicurus's physics and ethics are systematically homogeneous in their shared tenet of eliminating fear and pain. This is represented in his famous four doctrines, of which the first two tell that there is no need to fear God and death, and the other two tell about the limit of pleasure and pain. Of special importance is the third doctrine: "The removal of all pain is the limit of the magnitude of pleasures. Whereas pleasure is present, as long as it is there, pain or distress or their combination is absent."⁵⁴ As pleasure is not defined as a positive quality but as the absence of pain, the best life with the maximum pleasure is the life free of any pain. Hence Epicurus's ethics proposes a life of tranquility free of any disturbance. To achieve this goal such life must abstain from anything beyond the minimum involvement of social affairs and concentrate on contemplation. At this point Epicurus concurs with Aristotle, since contemplation is the most self-sufficient activity, which guarantees human being free from outside intervention. In a large aspect it is this concept of "static pleasure" that distinguishes Epicurean ethics from later Utilitarianism, which holds a positive understanding of pleasure as something worth pursuing for itself.

Epicureanism anticipated British Empiricism in many aspects such as the materialism, the emphasis on sense, and in rejecting the teleological explanation of universe. With the phrase "All sensations are true," Epicureanism stands in opposition to the Parmenides-Plato

⁵³ See Hans Blumenberg, *The Legitimacy of the Modern Age* (Cambridge, Mass London: MIT, 1983), p. 151.

⁵⁴ D. N. Sedley, *The Cambridge Companion to Greek and Roman Philosophy*, Repr. with corrections. ed., *Cambridge Companions to Philosophy* (Cambridge: Cambridge University Press, 2006), p. 156.

tradition, which holds that sensation is deceitful. In fact the Epicurian trust of sensation is closely connected to Empiricism. Having dismissed the view that the world is constructed within a rational structure, Epicureans “denied man any insight into the rationality of the Creation...The universe as interpreted by atomism is ruled by the principle of the identity of indiscernible since the atoms and empty space are defined by the fact that they allow no rational action whatsoever but place reason in a position where all possibilities are indifferent, so that chance becomes the sole principle of reality.”⁵⁵ While reason can no longer guarantee our understanding the world, or a direct access to the truth, we have to regard the world as a disinterested fact and reconstruct it in the intellect with our own data. It was under this background that sense rather than reason became the basis of human understanding of the world. Parallel with this epistemological change was the new construction of human *telos*. No longer determined by a prefixed goal and a metaphysical order, human being is free to choose his own goal. As the external environment is an indifferent fact, a human being can only construct his goal from internal experience. Pleasure becomes one of the best alternatives because it is most widely accepted that man desires pleasure. Meanwhile the status of pleasure, an element closely connected with body, has been raised when reason is deprived the privilege to truth and sense is acknowledged as the basis of human knowledge. It is this internal coherence that explains the similarity between Epicureanism and Empiricism.

But there is also a huge difference. As mentioned before, the central motive of Epicureanism is to erect “static pleasure” as the sole goal of human life. Epicurian materialism aims principally at the avoidance of unnecessary fear and does not aim at producing positive pleasure. But for the Empiricist, pleasure has its own positive quality that does not equal the avoidance of pain. Hence there remains a problem not only of how to avoid pain but also how to increase pleasure. These differing attitudes towards pleasure led to Epicureanism’s abstinence on the one hand and the Utilitarian reformers’ enthusiasm for creating a world of maximum pleasure on the other.

The influence of Empiricism on human understanding of the world is enormous. A typical example is Claude Perrault’s questioning of traditional theories of proportion. He put the theory of a harmonious proportion existing everywhere in the world under empirical examination within the sphere of architectural order. Noticing that the various orders in earlier works and in ancient monuments do not follow the alleged universal proportions,

⁵⁵ Blumenberg, *The Legitimacy of the Modern Age*, pp. 149,50.

Perrault concludes: “Now all this proves that you cannot hold proportions in architecture to please the sight for reasons unknown (to the observer), or that they exercise their effect of themselves as musical harmonies affect the ear, notwithstanding the ignorance in which the listener may be of the reason for their accord.”⁵⁶ Hence he rejected the assumed “unity of spiritual senses” derived from the metaphysical unity of the old world view. Although Perrault’s challenge is not complete as he still acknowledged some geometrical principles of universal positive beauty in architecture, his rejection of a metaphysical harmony in architectural proportion and his argument that the architect’s training and mode of operation should operate principally in the sphere of taste, i.e. the arbitrary beauty, nevertheless removed the profession of architecture a further step from the operation of reason. As Joseph Rykwert points out, this demotion of reason and promotion of the status of sensual taste gave a freedom to 18th century architects and was partly responsible for a flourishing of ornament in Rococo architecture.⁵⁷

In other spheres such as political science the impact of Empiricism was even stronger. In *Leviathan*, Hobbes holds that the basis of ethics is not external rule or target but internal human emotion. A thing or an affair is good when it is the object of a man’s desire or appetite, and is bad when it is the object of aversion or hatred. Hence moral concepts are relative to human emotion and are completely subjectively based. Pleasure and displeasure accompany ethics because all appetite is accompanied by some pleasure and all aversion by some displeasure. The appearance of pleasure and displeasure indicates the guide line of moral decision.

Political theory is Hobbes’s most influential legacy. He argues that man in a natural state is self-interested. He has an unlimited right to acquire what he wants as long as his strength enables him to do so. As good and evil are only concepts relative to his own appetite and aversion, these ethical concepts can never be an obstacle for him. In such conditions, it is inevitable that the interests of different human beings may conflict, leading, potentially, to war and chaos in which no one’s security can be guaranteed. To avoid this, natural persons arrive at a mutual agreement to relinquish part of their unlimited rights as self-governed individuals and consent to be governed by a government, the Leviathan. However, a contract is established between Leviathan and its citizens, stating that the government must guarantee

⁵⁶ Claude Perrault, "Ordonnance Des Cinq Espèces De Colones, Selon La Méthode Des Anciens," (1683): p. iv. Cited from Joseph Rykwert, *The First Moderns: The Architects of the Eighteenth Century* (Cambridge, Mass.: MIT Press, 1980), p. 23.

⁵⁷ See Rykwert, *The First Moderns: The Architects of the Eighteenth Century*, ch. 5.

their security while citizens obey its rule. The state, according to Hobbes, exists only as a conciliator of conflicting interests. At the price of some part of the interest of natural man, it assures the main interest of humanity, namely security. It is a device to protect human interest by regulating that interest itself. We will see this is also Bentham's understanding of government, its purpose is to promote public happiness by leading individual interest to this goal.

In one aspect Hobbes differed from later Utilitarians. He holds that once the contract between Leviathan and natural men is established, the citizens have no right to rebel against the government except in the condition that the government fails to guarantee their security. Due to his fear of anarchy, Hobbes exaggerated the sovereignty of the government. Like Epicureanism, absence of displeasure is more important for Hobbes than gaining pleasure. He left little scope, therefore, for any positive effort to change government in order to obtain greater public happiness. For Utilitarians, by contrast, government reform is an extremely necessary and efficient means of achieving maximum pleasure because it has the power to guide individual interest. Contrary to Hobbes's conservatism, the Utilitarians became among the most enthusiastic supporters of government reform and obtained the name "philosophical radicals."

Locke had a similar view on ethics to Hobbes, holding that no validity can be given to moral laws without considering their consequence, and "what has an aptness to produce pleasure in us is what we call good, and what is apt to produce pain in us we call evil."⁵⁸ Although this is still different from the Utilitarian principle that recognizes public happiness as the measure of good and evil, Locke was innovative in asserting that "God, having, by an inseparable connexion, joined virtue and public happiness together, and made the practice thereof necessary to the preservation of society, and visibly beneficial to all with whom the virtuous man has to do; it is no wonder that every one should not only allow but recommend and magnify these rules to others, from whose observance of them he is sure to reap advantage to himself."⁵⁹ It means God has made the behavior that promotes public happiness worthwhile as a virtue. This argument, which invokes God to bridge the gap between the self-interested individual and public happiness, was continued by religious Utilitarians. But for atheist Utilitarians such as Bentham, it is unnecessary to seek the help of God: public happiness is a goal we aim at intentionally, it is not imposed from outside.

⁵⁸ John Locke and Pauline Phemister, *An Essay Concerning Human Understanding* (Oxford: Oxford University Press, 2008), Book II, ch. 21.

⁵⁹ *Ibid.*, Book 1, ch. 3,9.

Hume's ethics also has a strong Utilitarian character. He notably maintains that there is a gap between "is" and "ought," meaning that the ethical decision that tells us what we ought to do cannot be deduced from pure factual premises. In other words, reason is not enough to establish morality; passion is needed to determine our preference, hence his famous phrase: "reason is, and ought only to be the slave of passions, and can never pretend to any other office than to serve and obey them."⁶⁰ If the basis of morality is human feeling, what defines good and evil? In this aspect Hume is Utilitarian because he maintains that pleasure and displeasure constitute the main difference between good and evil. "An action, or sentiment, or character is virtuous or vicious: Why? Because its view causes a pleasure or uneasiness of a certain kind."⁶¹ In another place he writes: "In giving a reason, therefore, for the pleasure or uneasiness, we sufficiently explain the vice or virtue."⁶² Nevertheless, Hume is different from later Utilitarians in his recognition of sympathy as a cornerstone of morality. He defines sympathy as the pleasure or pain we feel when we think about other people's pleasure or pain. The moral result of sympathy is benevolence, which then leads to behavior for the good of others. For Bentham, such a concept of sympathy is redundant because the promotion of public happiness already includes the promotion of other people's happiness. There is thus no need of a special sentiment to achieve this goal. This aspect of Hume's view is inherited by Adam Smith in his *The Theory of Moral Sentiments*, although it does not seem entirely compatible with his argument in *An Inquiry into the Nature and Causes of the Wealth of Nations*, in which all men are declared to be self-interested.

Bentham acknowledged great benefit from Hume's work, but he also held that Hume's theory is not perfect. In one comment on the third volume of Hume's *Treatise of Human Nature* he wrote: "that the foundation of all virtue are laid in utility, is there demonstrated, after a few exceptions made, with the strongest force of evidence: but I see not, any more than Helvetius saw, what need there was for the exceptions."⁶³ What Bentham envisaged was a simpler and more unified theory based on the single principle of greatest happiness that explains everything without exceptions. But he achieves this goal not at the level of pure theoretical discussion, but rather by omitting theoretical discussion to a large extent. He simply takes the Utilitarianism principle as a self-evident maxim and spares himself the difficult task of qualifying it as Hume had done. As Plamenatz points out, Bentham ignored

⁶⁰ David Hume, *A Treatise of Human Nature*, ed. John Cottingham, *Oxford Philosophical Texts* (New York: Oxford University Press, 2005), II, 3,3.

⁶¹ *Ibid.*, III, 1,1.

⁶² *Ibid.*, III, 1,2.

⁶³ Bentham, *A Fragment on Government*, p. 46.

all the philosophical problems around the greatest happiness principle that haunted later Utilitarian philosophers; “he was anxious to have done with first principle as quickly as possible and to settle down to more congenial tasks.”⁶⁴ This careless omission does give Bentham’s theory a kind of simplicity that other moral theories lack. Simplicity and clarity are important for Bentham because they can help to erase the metaphysical obscurities that suffocated contemporary legal and political theories. Such obscurities were represented by the old concepts such as original contract and natural law. Bentham’s project was to get rid of them altogether and to build a rational and coherent system only from the basis of the simple principle of greatest happiness. In this aspect he was a typical Enlightenment intellectual who wished to replace traditional obscurantism with rational principles and systematic theories.

Although Bentham did not give a full theoretical explanation of his Utilitarianism, a few characteristics can be generalized from his discussions:

1. It is a teleological theory. It holds that an action is good or evil only relative to its ability to promote happiness or the opposite;

2. Happiness is defined in terms of pleasure and pain. Unlike Aristotle’s definition of happiness according to the predetermined *telos*, Bentham’s Utilitarianism adheres strongly to Empiricism by putting the subjective perception of pleasure and pain in the central position;

3. The greatest happiness principle has a strong mathematical character. Implicit in this character is the expectation that rational calculation will be used in social affairs. In some aspects it represented the Enlightenment ideal of employing the Newtonian system in social science;

4. It is believed that individual interest and public happiness can be reconciled. While recognizing both to be justified goals, Bentham’s Utilitarianism believes it is possible to find a way to harmonize them. Much of his intellectual work concentrates on how to promote public happiness in guiding individuals to pursue their own interest.

These features are not only represented in Bentham’s Utilitarianism theory but also in his various social reform schemes. Although not a great philosopher, Bentham was definitely

⁶⁴ John Plamenatz, *The English Utilitarians*, 2nd rev. ed. (Oxford: 1966), p. 71.

a great reformer. His greatest achievement lies in the utilization of the greatest happiness principle in solving technical problems. He was himself the best illustration of a Utilitarian whose concern is the action and its consequence rather than philosophical theory. He firmly believed that great progress can be achieved once the Utilitarianism principle is adopted to reconstruct various social systems such as legislation, poor relief and education. Late Enlightenment optimism is fully manifest in Bentham, who grasped in his hand the key to the door of a perfect society.

As happiness is measured in terms of pleasure and pain, anything related to pleasure and pain can be used in the great project of public happiness. Bentham would not hesitate to use the most efficient instrument to get the result he wants. From national policy to the length of sleeves, everything can be incorporated in the Utilitarian reform scheme as long as it can produce a good effect. It was in this sense that architecture was used as a crucial instrument because of its significant function in shaping the spatial environment of human actions. It provides the possibility to guide human behaviour driven by self-interest to the final goal of public happiness. Since public happiness is what ethics aims at, architecture becomes one part of the general ethical project leading to the ideal goal.

In Bentham's scheme, architecture is not regarded as an autonomous or style-centered discourse. It is rather an instrument whose value lies exclusively in the pragmatic realms of human pleasure and pain. It is not surprising that in such a scheme the independence of architecture is less significant than the broader social project to create maximum public happiness. As in Aristotle's ethics, there is a unity in the Utilitarian teleology. While Aristotle's unity comes from the metaphysical hierarchy of *telos*, Bentham's unity comes from the only value basis of pleasure and pain behind all good and evil. As Bentham did not see any difficulty in calculating pleasures and pains mathematically together, it is quite natural for him to incorporate all related elements into a larger construction aiming at the largest outcome of pleasure. It was into these big constructions that Bentham placed his most energy, and he saw architecture from this viewpoint. The essential value of architecture is its social purpose, its function as a part of the larger project. It is better to see it as an institution rather than as a building, considering its integrated status in the whole scheme of promoting public happiness. Institutions rather than individual buildings became the main concern of Utilitarian reformers. Inspired by Bentham they enthusiastically incorporated architectural means as a powerful constituent in their reform projects. Their efforts exercised a strong influence on 19th century British society and its architectural scenery; its effects can be felt

even to this day.

In the next part, this thesis will discuss the three areas of social debate and three kinds of institutions in which the Utilitarian reformers played significant roles: prisons, workhouses and primary schools. As mentioned before, to write a history of these institutions indicates a teleological discourse that differs significantly from the traditional aesthetic discourse of architecture. While this difference is too manifest to emphasize again, several points should be noted. In aesthetic discourse, architecture is seen as an autonomous art, and its relation with external conditions and factors is problematic because any influence from outside may represent an infringement of the autonomy of form. In such discourse, architecture remains a work or art; it remains the work of artists. In a history such as Pevsner's, significant architectural production is the work of significant artists who create buildings of formal significance. Contrary to this closed circle defined by the aesthetic discourse, teleological discourse welcomes an open horizon of architecture. It can never be locked into an autonomous area because its *telos* is determined to be one part of the general teleological structure. It is based on the *telos* of various construction materials, which enables the building to be built, and functioning towards the final end – the greatest happiness of greatest number of people. In this way teleological discourse broadens the scope of architecture, and relates it to the larger social sphere. What is most important is no longer form, style, or spirit of the age, but function, social purpose and public happiness; buildings worthy of discussion are not those with the most formal distinction, but those with special institutional characters, such as specially-designed prison and schools. The main figures in this history are not simply the great artist/architects, but other people who contribute to the conception of the built world, such as philosophers, social reformers, government officials, and institutional architects. Finally the purpose of this history is not to predict or generate a new style but to understand how these Utilitarians wanted to change their society and what we can learn from this.

2 Utilitarianism and Prison Reform

Throughout his intellectual life, legislation remained as the core of Jeremy Bentham's interest in social reform. For him legislation is not a separated or autonomous area; it shares with ethics the same foundation of the principle of utility. Moreover, legislation plays a central role in his image of a rational society, which runs efficiently towards the final end of greatest happiness of greatest number of people. This interest in jurisprudence was strongly manifest in his very first book *Fragment on Government*. It finally culminated in his *Constitutional Code*, the final and largest project of his life, which aimed to establish the overall legal and executive system of a modern state.

The broad sweep of Bentham's project forms an extraordinary contrast to his narrow focus on all aspects of the legal system. The most influential outcome of this process is Bentham's proposal for a new kind of prison – the Panopticon. In this project, Bentham's discussion covers nearly all aspects of the prison system, from governmental rule to the diet of prisoners. Architecture is also a central concern of Bentham, and architectural innovation provides the broader context for a whole scheme of prison reform. This is the subject of this section.

Prison reform was the first reform scheme that Bentham initiated. It is also one of the most important, because the thought and rationale it embodies was later extended by Bentham into other areas. This is clearly illustrated by his involvement in poor relief and education reform, areas that will be discussed later in the text.

2.1 Bentham's Criminology

Although generally regarded as the founder of the ethical theory of Utilitarianism, Bentham is much more a practical reformer rather than a moral philosopher. His real influence lay not in the expatiation of the greatest happiness principle, but in its application in practical areas such as jurisprudence. In fact not many new ideas were directly deduced by him from the principles of Utilitarianism. Rather, he borrowed ideas from other people and

provided Utilitarian justification of these ideas. Through this process, which might be called utilitarianization, Bentham was able to weave these ideas into his general reform schemes and his criminology.

Bentham's interest in this area was related to his father, a rich attorney. Having decided that Jeremy would follow him into the law, he sent Bentham to Queen's College Oxford at the age of twelve. The academic life in Oxford, however, did not leave a positive impression on Bentham. When he talked about that period in old age, Bentham's words are full of acrimony and criticism: "Mendacity and insincerity — in these I found the effects — the sure and only sure effects of an English university education."¹ This remark partly explains his later interest in education reform and his contribution to the formation of the University of London.

Bentham got the degree of B.A. in 1763 at the age of sixteen and took his master's degree in 1766. But he did not become a successful lawyer as his father had expected. Indeed, he never wanted to. Bentham found the foundations of the British legal system questionable, and could not persuade himself to work as a lawyer within such a corrupt and disordered system. He began to rethink the rationale of legislation, and turned his talents to constructing a reasonable system of law. In the year 1776, Bentham published his first book *Fragment on Government, or a Comment on the Commentaries; being an Examination of what is delivered on the subject of Government in general in the Introduction to Sir William Blackstone's Commentaries; with a Preface, in which is given a critique on the work at large*. This book attacked the trammels of authority and ancestor wisdom in contemporary jurisprudence. Merely attacking the existing system was not enough, however, and in his later work, *An Introduction to the Principles of Morals and Legislation*, he established a systematic basis for legal theory which earned him an international reputation. Today, Bentham is regarded as one of the most important forerunners of modern jurisprudence.

Bentham's legal theory is strongly influenced by the Italian jurist Beccaria. This point Bentham clearly acknowledged. In one passage he wrote about Beccaria: "Oh, my master, first evangelist of Reason, you who have raised your Italy so far above England, and I would add above France, were it not that Helvetius, without writing on the subject of laws, had already assisted you and had provided you with your fundamental ideas; you who speak reason about laws, when in France there was spoken only jargon: a jargon, however, which

¹ Jeremy Bentham, *Church of Englandism*, xxi

was reason itself as compared with the English jargon; you who have made so many useful excursions into the path of utility, what is there left for us to do? – Never to turn aside from that path.”² Echoing these words of praise is the fact that many of Beccaria’s views were directly adopted by Bentham. These views include: the scale of punishment should be corresponded to the scale of crime; the purpose of punishment is to prevent crime rather than revenge; punishment should be certain and immediate; judges should not interpret law but should confine themselves to applying law; and the death penalty should be abolished. As with Bentham, Beccaria’s claim to these rules was not original, as many of them had been proposed by others. But the essence of Beccaria’s work is that “it constituted the first successful attempt to present a consistent and logically constructed penological system” against the confusing and abusive penal system of 18th century continental Europe.³ This project was continued by Bentham.

Although Beccaria was not seen as a Utilitarian, his classic work *On Crimes and Punishment* does incorporate the Utilitarian principle of greatest happiness. In the introduction to this book, we can see this principle in its Italian version: “la massima felicità divisa nel maggior numero.”⁴ He argues: “if we look into history, we shall find that laws, which are or ought to be conventions between men in state of freedom, have been for the most part the work of the passions of the few or the consequences of fortuitous or temporary necessity; not dictated by a cool examiner of human nature, who...had this only end in view, the greatest happiness of the greatest number.”⁵ Based on this passage, Bentham and many other English legislators saw Beccaria as the forerunner of Utilitarian legal theory. But this view should not be exaggerated. To a large extent, Beccaria’s theory is established on the theoretical basis of natural right and social contract. These two concepts were dominant in French Enlightenment thought, and Beccaria absorbed them from Montesquieu and Rousseau. In Bentham’s legislative theory, however, these two concepts have no place at all.

Following Hume’s rejection of the Lockian theory of social contract, Bentham also repudiated the concept of “natural right.” He held that right, obligation and crime were not the reason for law but the consequence of law.⁶ For him these two concepts are unnecessary

² Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.X* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), p. 194.

³ Elio Monachesi, "Pioneers in Criminology. IX. Cesare Beccaria (1738-1794)," *The Journal of Criminal Law, Criminology, and Police Science* 46, no. 4 (1955): p. 448.

⁴ Beccaria, "Dei Delitti E Delle Pene," (1764), Introduction

⁵ Cesare Beccaria and Richard Bellamy, *On Crimes and Punishments and Other Writings* (Cambridge; New York: Cambridge University Press, 1995), p. 7.

⁶ In this point, Bentham belongs to the classical school of criminology, which claims that there is “no crime without

metaphysical assumptions. To establish a rational theory of legislation, these abstract philosophical fictions must be eliminated. Everything must start from the two empirical notions of pleasure and pain, not from the dubious notions of natural right and natural contract. One main target for Bentham was applying the simple principles of Utilitarianism to clear away the obscurity and confusion of traditional ethical, legal and political theories, which were burdened with irrational metaphysical obstacles. What he wanted was a scientific social theory based on absolute principle, comparable to Newtonian physics.

In Bentham's criminology theory, individuals are rational beings of "free will." They all deliberately pursue pleasure and avoid pain, and are responsible for their own actions. For Bentham, "there is no such thing as any sort of motive that is in itself a bad one,"⁷ only the consequence of the action can be bad if it affects others. This assumption of rational beings is close to Adam Smith's similar model in economics, and constituted the basis of the Classical School of criminology. Bentham also accepted Helvetius's view that the human character is determined by environment. It follows that criminal behavior is generally learned behavior. Referring to this aspect, Geis argues that Bentham "deserves considerable credit, nonetheless, for his adherence to a theory of social (i.e., pleasure pursuit) causation of crime rather than a concept of biological, climatic, or other non-social causation."⁸ This kind of understanding also lays the foundation for the optimistic belief in the effect of reformative institutions in Bentham's other reform schemes.

Bentham's theory of punishment follows Beccaria's rule that "the aim of punishment is neither to torment nor to afflict a sensible being, not to prevent a crime which has already been committed from taking effect ... the aim of chastisement is nothing but to prevent the criminal from injuring society any more, and to deter his fellow citizens from attempting similar crimes."⁹ This rule was contrary to the traditional 18th century view that was based on the idea of "la vindicte publique" (public vengeance). For Bentham the old doctrine was to be rejected as it is founded on the arbitrary principle of sympathy and antipathy. But according to Utilitarian principles, punishment in nature is an evil because it causes pain rather than pleasure. It is a kind of specific crime, but a necessary crime authorized by the law to prevent future crimes. He argues: "all punishment is mischief: all punishment in itself

a law." See Clarence Ray Jeffery, "Pioneers in Criminology: The Historical Development of Criminology," *The Journal of Criminal Law, Criminology, and Police Science* 50, no. 1 (1959).

⁷ Bentham, *An Introduction to the Principles of Morals and Legislation, Etc. Ms. Notes [by the Author]*, ch. x

⁸ Gilbert Geis, "Pioneers in Criminology. Vii. Jeremy Bentham (1748-1832)," *The Journal of Criminal Law, Criminology, and Police Science* 46, no. 2 (1955): p. 164.

⁹ Beccaria and Bellamy, *On Crimes and Punishments and Other Writings*, p. 9.

is evil. Upon the principle of utility, if it ought at all to be admitted, it ought only to be admitted in as far as it promises to exclude some greater evil.”¹⁰ As the function of punishment is deterrence, it should not be abused. Bentham emphasizes: “never use a preventive means of a nature to do more evil than the offense to be prevented.” To abide by this principle, a close and proportionate relationship between the scale of crime and punishment must be established. Aiming at this goal, Bentham tries to establish a classification of crimes and punishments, and to define mathematically the true proportion of punishment for a crime. He believes his classification is “natural” because it is derived from the Utilitarian principle and the more specific evaluation of the different degrees of pleasure or pain that he discusses in *An Introduction*. As Bentham believes his arguments are based directly on human nature, it is quite reasonable to use them to replace the former traditional “sentimental” or “technical” classifications.

For the punishment to be proportionate to the crime, it must be determined quantitatively, which is to say that the punishment should be measurable and divisible; whenever a more serious crime committed, or the same crime is aggravated, it must be possible to make a proportionate increase in the punishment.¹¹ According to this requirement, a practical solution is needed for the choice of the appropriate form of punishment. A fine and a punishment by imprisonment are essentially divisible, being capable of any numerical degree. Even today, these two options constitute the largest part of legal punishment. Of the two choices, Bentham is quite aware of the limits of financial fines, as the same level of fine might produce quite different effects between a rich man and a poor man. This kind of punishment fails to meet the requirement of universality. On the other hand, imprisonment appears to be a more ideal option. It is not surprising, therefore, that the prison became the centrepiece of Bentham’s penology.

This brief introduction addresses only the main features of Bentham’s legal theory, which aimed at constructing a scientific system based on pleasure, pain and the Utilitarianism principle of the greatest happiness. Together with Beccaria, Bentham initiated the earliest positive and systematic explanation of illegal behaviour and the attempt to establish rational control of such behaviour.¹² Bentham fiercely attacked the traditional penal system of England, which in his eye was arbitrary, barbarous, and useless. On the other hand he made many proposals for reform, many of which were successful and are still used

¹⁰ Bentham, *An Introduction to the Principles of Morals and Legislation, Etc. Ms. Notes [by the Author]*, p. clxvi.

¹¹ Élie Halévy, *The Growth of Philosophic Radicalism*, New ed. (London: Faber, 1934), p. 65.

¹² Geis, "Pioneers in Criminology. Vii. Jeremy Bentham (1748-1832)," p. 170.

in modern penal systems.

Notwithstanding these merits, shortcomings are also evident in Bentham's legal theory. His understanding of human nature, the assumption that humans are essentially rational beings, his uncritical belief in the principle of greatest happiness, and the mathematical calculation of utility all seem too simple and crude. Many theoretical problems were ignored by his over optimistic "scientific" analysis. Today, many of the weaker points in Bentham's legal theory have become key issues in contemporary criminological debate.

2.2 Early Prison Reform in Britain

In Bentham's theory, there are generally two ways to prevent the crime: to remove the physical condition of crime and to redirect the will to commit crime.¹³ Here, Bentham anticipated the theory of modern delinquent control. As to the latter part, Bentham emphasizes the significance of psychological interference. He advocates attention to "the culture of honour, the employment of the impulse of religion, and the use to be made of the power of instruction and education."¹⁴ In the *Introduction to the Principles of Morals and Legislation*, Bentham includes moral reformation as one of the eleven effects of legal punishment. How to incorporate this function into the penal system was one of the most important issues for 18th century legal reformers. Imprisonment plus reformatory measures appeared the best choice, making necessary a new type of penal institution, which in turn led to the emergence of the modern prison system.

Although prison reform and a new prison system are central to Bentham's penal theory, he was neither the initiator nor the dominant voice in these fields. On the contrary, it was the work of other reformers that led Bentham's attention to this area. Before looking at Bentham's own work in this area, it is necessary to consider the contribution of these forerunners.

Before prison reform, English jails were generally used to detain offenders before trial, execution, transportation, or the payment of debts. In many aspects, the prison system shared similar characteristics with the English legal system, such as disorder, caprice and

¹³ Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.I* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), p. 390.

¹⁴ *Ibid.*, Principles of Penal Law, Pt. III

malfunction. Since the early 18th century, many attempts had been made to investigate the problem of jails. In 1702 the Society for the Promotion of Christian Knowledge carried out an enquiry into the London jails, and in 1729 a Parliamentary Committee investigated the state of the jails in England. They both criticized the cruelty, barbarity and extortion in the jails. Unfortunately, these investigations produced few tangible results.

One of the most serious problems of the old jails was that they had become schools of vice. As lack of any strict segregation among prisoners, people were not reformed but rather given the knowledge of how to commit crime. No discipline was enforced to stop these communications. As Bentham argues: “an ordinary prison is a school in which wickedness is taught by surer means that can ever be employed for the inculcation of virtue ... United by a common interest, the prisoners assist each other in throwing off the yoke of shame ... Upon the ruins of honor is built a new honor, composed of falsehood, fearlessness under disgrace, forgetfulness of the future and hostility.”¹⁵

Accompanying this mental contagion was physical contagion. As traditional jail buildings were not designed to prevent the spread of infection, an outbreak of “gaol fever” might cause large numbers of deaths among prisoners. Furthermore, this harm was not limited only to those inside the prison, as other people who had contact with them, including keepers, judges, lawyers and jurors were also exposed to this danger. In the mid 18th century many medical men and reformers investigated these cases. The surgeon Thomas Day reminded his readers of the “Black Assizes” of Taunton in 1730 during which over 100 had died. And in April 1750, attendants at the Old Bailey sessions remembered being struck by a “noisome smell” in the court. A week later a number were taken with a highly malignant fever, and most died.¹⁶

These two problems were greatly exaggerated by the soaring crime rate and the resultant overcrowding in the prisons. This may be attributed to the enclosure of land and the industrial revolution, which caused the rise of population in cities. The large number of soldiers returning from the Napoleonic Wars also increased this problem. But probably the most crucial factor leading to prison reform was the ending of transportation to America. After the War of Independence, it was no longer possible for the British government to send prisoners to America. No satisfactory alternative was found after 1776. Although some

¹⁵ Ibid., Principles of Penal Law, Pt. II

¹⁶ Robin Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840* (Cambridge: Cambridge University Press, 1982), p. 95.

former hulks for transporting prisoners were transformed into floating prisons, this did not improve the general situation. The problem of the penal system could no longer be overlooked, and reform became inevitable.

The turning point came with John Howard, the most important promoter in the early phase of prison reform. Over 18 years, he visited nearly all the important prisons in Britain and extended his journey into continental countries including France, Holland, Germany, Denmark, Russia, Poland, Italy, and Switzerland. His meticulous investigation not only informed the public of the extremely bad conditions in English prisons, but also established the direction of later reform. His book *The State of the Prisons in England and Wales* was published in 1777, and soon produced a wide impact on the public. Howard's work made prisons the focus of public reconsideration of the penal system, and consequently inaugurated nation-wide prison reform.

The direct triumph of the reformers was the Penitentiary Act or Hard Labour Bill passed in 1779. The act was mainly drafted by Sir William Blackstone, the first Professor of English Law at Oxford, and John Howard with the help of Charles Bunbury, Gilbert Elliot, William Eden and other reformers. Bentham also contributed to the discussion of the details. The act accepted many of the ideas that Howard had proposed in *State of the Prisons*. It stressed the reformatory function of punishment because it is "the means under Providence not only of deterring others ... but also of reforming the Individuals and inuring them to habits of industry."¹⁷ According to this Act, two national penitentiaries were to be constructed in London, one for men and one for women. A committee of three members was appointed to take charge of the process of building these penitentiaries. They had the right to acquire land and to appoint the governors and other officials. The first three members of this committee were John Howard, John Fothergill and George Whatley.

Unfortunately the 1779 Act did not succeed in making the national penitentiary a reality. The first committee did not progress beyond a vigorous debate over the choice of land, and in March 1782, a second committee was formed. This committee chose two sites for the penitentiaries and an architectural competition was held for the designs. Sixty-three entries were considered. The first prize for the female penitentiary was won by Thomas Hardwick and the prize for its male counterpart was won by William Blackburn, who later became the leading prison architect. But after that, the idea of national penitentiaries was suspended and

¹⁷ Statutes 19 Geo. III, c.74, p. 58

the focus of prison reform shifted from central government to local government.

This does not mean, however, that the 1779 Act achieved nothing. Legally speaking, the penitentiary committees were still empowered to build national prisons, and played an important role in Bentham's Panopticon scheme. At the official level, the Act opened the door of prison reform and embodied the creeds of early prison reformers with Howard as representative. It provided a model for the Gaols Act of 1784 and 1791 and many other local acts for building new prisons.

Bentham was consulted on the draft of the Bill in 1778. He expressed his approval of this bill and published his comments in March 1778 with title *A View of the Hard Labour Bill*. At this point, Bentham was relatively happy with the bill, and offered many practical suggestions for the prisons and their management. One notable point is that Bentham highly praised the clause in the bill that stated that the salary of the governor should be proportionate to the profits made by the prison. This clause is compatible with Bentham's principle of combining interest and duty. He wrote, "the means that are employed to connect the obvious interest of him whose conduct is in question, with his duty, are what every law has to depend on for its execution."¹⁸ He subsequently insisted on this principle in the Panopticon scheme. As L. J. Hume argues, this principle also underlies Bentham's other political proposals.¹⁹

As time progressed, Bentham's attitude to the 1779 Bill and the Howardian prison became more critical, mainly because he had envisaged a better type of prison and management. He named it Panopticon.

2.3 Bentham's Panopticon

2.3.1 The History of Bentham's Efforts to Build Panopticon Prisons

It is probably Bentham's involvement in the 1779 Penitentiary Act that provoked his interest in the practical problem of prison design, which is different with his theoretical work on legislation. In both fields, Bentham proved his outstanding competence. His book *A View*

¹⁸ Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.Iv* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), p. 12.

¹⁹ L. J. Hume, *Bentham and Bureaucracy* (Cambridge; New York: Cambridge University Press, 1981), pp. 56-58.

of the Hard Labour Bill is full of technical solutions, and could be looked at as a sign of his enthusiasm for the practical aspects of penal reform. It was in his writing on the Panopticon that we see the full representation of his competence in practical questions.

The origin of the Panopticon idea can be traced to Bentham's visit to Russia. When his demand for a complete and systematic reform of the legal system attracted no public interest in England, Bentham decided to go to Russia and seek the support of Catherine the Great. At that time, continental governments including Russia, Prussia, and revolutionary France were all turning their attention to legal reform. Russia became Bentham's choice because his brother Samuel was working as a technical expert on Prince Grigorii Potemkin's estate at Krichev in White Russia.²⁰ Bentham joined his brother in 1785 and spent two years there preparing a Code for the empress Catherine.

Bentham's brother, Samuel, was trained as a shipbuilder and shared with Bentham a genius for practical solutions. To solve the problem caused by a lack of skilled Russian workers Samuel built a circular manufactory. At the centre of the plan was the directors' post from which the whole establishment could be easily overlooked.²¹ Hence one master can supervise dozens of unskilled workers at the same time. Bentham borrowed this idea of central surveillance and incorporated it into his prison designs. He gave it the name "Panopticon": the all-seeing eye.²² Bentham sent his writings on the new prison back to his father in England for publication, but his text did not come out immediately. In February 1788, Bentham returned London. In 1791 he employed an architect, Willey Reveley, to help him give an outline idea of architectural form. Samuel also returned in the next year and joined Bentham's scheme as an engineer. Bentham's writings on the Panopticon were published in 1791 with a long postscript describing the management plan in exhaustive detail.

Meanwhile Bentham began to persuade the government to build Panopticon prisons. In 1790 a copy of his *Panopticon Letters* was sent to Sir John Parnell, Chancellor of the Irish Exchequer, via Lord Landsdowne. The Chancellor expressed a strong interest at first, but the hope of erecting a Panopticon in Ireland vanished when he gradually lost enthusiasm. Bentham also contacted the French government and sent a French version of the Panopticon

²⁰ J.H. Burns, "Utilitarianism and Reform: Social Theory and Social Change, 1750-1800," *Utilitas* 1, no. 2 (1989).

²¹ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 196. Today, most of Bentham's manuscripts are stored in UCL, see: UCL Bentham Project, <http://www.ucl.ac.uk/Bentham-Project/>

²² *Ibid.*

proposal to the National Assembly, suggesting the construction of a large number of Panopticons to accommodate the 3,850 patients and prisoners of the Bicêtre Hôpital-Général. Again this attempt achieved nothing. The Panopticon project was first realized in Scotland. The Scottish architect Robert Adam contacted Bentham in 1791 praising the Panopticon design as infinitely superior to the Blackstone model. He then incorporated the idea into his own design for the Edinburgh Bridewell. This was the first Panopticon-like institution in Britain. I will discuss this project in more detail later.

Bentham was not closely involved in the building of the Edinburgh Bridewell. He concentrated most of his efforts on persuading the British government to adopt his ideas. In early 1791, he wrote a letter to the Prime Minister, William Pitt, outlining his proposals for a Panopticon prison and suggested that he himself should be the contractor-governor of the institution. Although there was no response to this letter, Bentham did not cease his campaign. Progressively he established contact with several officials in the government. The most important of them was Sir Charles Bunbury, who had been chairman of the 1778 parliamentary committee of inquiry into the hulks, and was one of the three commissioners appointed under the 1779 Penitentiary Act.²³ Clearly these supporters provided great support in spreading Bentham's ideas in the political world. In May 1792, the Home Secretary, Henry Dundas, began to take an interest in the Panopticon. He visited Bentham's home, saw the Panopticon models, and expressed his support for the scheme. According to Bentham, he agreed that the prison could be built on the site already chosen in Battersea under the powers of the 1779 Act.²⁴ The campaign achieved a significant boost in July 1793, when Dundas and Pitt visited Bentham's house in Queen's Square Place, expressed their approval, and encouraged the Bentham brothers to push the project ahead.

In the summer of 1793, the future of the Panopticon seemed quite hopeful. With the support of Pitt, Bentham was convinced that the Panopticon could be realized very quickly. From October 1792 to February 1794 he absorbed himself in drafting a bill for the Panopticon. The Panopticon Act was passed in 1794. But, as Semple points out, the final bill was not Bentham's work, and his drafts were all rejected. This issue anticipated the future difficulty of the Panopticon scheme. After that, little progress was made despite the great effort of Bentham and his friends. The stagnation continued until March 1811, when a committee was appointed to evaluate the scheme. The committee was mainly controlled by

²³ Janet Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary* (Oxford: Clarendon Press, 1993), p. 107.

²⁴ *Ibid.*, p. 109.

Howardian reformers who were hostile to Bentham's proposal of contract management. They finally rejected Bentham's scheme and ordered a compensation of £23,000 to be awarded to Bentham for his hard work over the preceding 20 years. Of course this compensation could not comfort the dispirited Bentham. He believed that the project had failed mainly by reason of the King's personal dislike. In defense of his scheme Bentham wrote a volume entitled *History of the War between Jeremy Bentham and George the Third, by one of the Belligerents*.

But this could not change the reality. Bentham's dream of the Panopticon collapsed. A crucial result of this failure is that it helped to convert Bentham to democracy. He could not imagine how his perfect Panopticon had been abandoned. There must be some problem in the organization or operation of the government. Thus the government must be reformed, and what he proposed was democracy, because only democratic government could avoid the abuse of power. It was this engagement in political reform that gave Bentham and his disciples the name of "philosophical radicals."

2.3.2 Architecture and Management

One question that has puzzled many historians is why Bentham spent so much time, energy and money on the Panopticon project. An ordinary answer is that the Panopticon was one of the best manifestations of Utilitarianism, and for Bentham, a man who had infinite interest in practical solutions, the Panopticon represented a good chance to promote his vision. Whether or not we agree that the Panopticon is the symbol of Utilitarianism does not deny the fact that in Bentham's mind the Panopticon was perfect. He opened the preface of *Panopticon Letters* with an eulogy to this device: "Morals reformed - health preserved - industry invigorated - instruction diffused - public burthens lightened - Economy seated, as it were, upon a rock - the gordian knot of the Poor-Laws are not cut, but untied - all by a simple idea in Architecture!"²⁵ It may be interesting to note the similar accents that we can find in the architectural manifestos of the Modern Movement. But in this case, it is hardly contingent, as the Panopticon was the brainchild of an 18th century philosopher rather than an architect.

The words on the cover of the *Letters* describe the Panopticon idea as "a new principle

²⁵ Jeremy Bentham, *Panopticon. In a Series of Letters* (Dublin: Thomas Byrne, 1791), p. iii.

of construction applicable to any sort of establishment, in which persons of any description are to be kept under inspection. And in particular to penitentiary houses, prisons, houses of industry, work-houses. Poor-houses, manufactories, mad-houses, hospitals and schools.” Clearly Bentham’s dream was to spread this architectural model into all possible areas in society. In his later writings, the Panopticon idea was involved both in the context of poor relief and of educational reform.

What is the “simple idea in Architecture” that Bentham praised so fervently? He wrote, “the essence of it consists then, in the centrality of the inspector’s situation, combined with the well known and most effectual contrivances of *seeing without being seen*.”²⁶ In other words the idea that Bentham cherished so much was the joining of central inspection and invisible inspection. Although it is the idea of central inspection that Bentham found in his brother’s manufacture that determined the circular shape of prison building, the real peculiarity of Panopticon was, in fact, the second property, invisible inspection. To distinguish these two ideas was of importance, because many later centric prisons were claimed to be Panopticons, but only incorporated the central inspection and discarded the idea of invisible inspection, thus lacking the most significant character of a real Panopticon.

The use of central inspection in prison was not Bentham’s initiative. Evans argues that it was Blackburn who first made use of it in the design of Nothleach, Ipswich and Liverpool prisons.²⁷ But Markus points out that this idea was already evident earlier, in a 1782 proposal for the Edinburgh Bridewell.²⁸ Either way, the fact that Bentham was not the inventor of this idea is agreed by both. But with respect of the principle of invisible inspection, no one denies that Bentham was the initiator.

Bentham illustrates his ideas in voluminous writings. His published work on the Panopticon includes mainly four parts. The *Letters* was a rough sketch and was expanded and altered in some respects in the *Postscripts*. It was then condensed into a *Proposal*, which Bentham wrote in the nature of prospectus, and finally cast into legal form in the draft contract that Bentham hoped to make with the government.²⁹

The building described in the *Letters* is just a rough concept rather than a viable proposal.

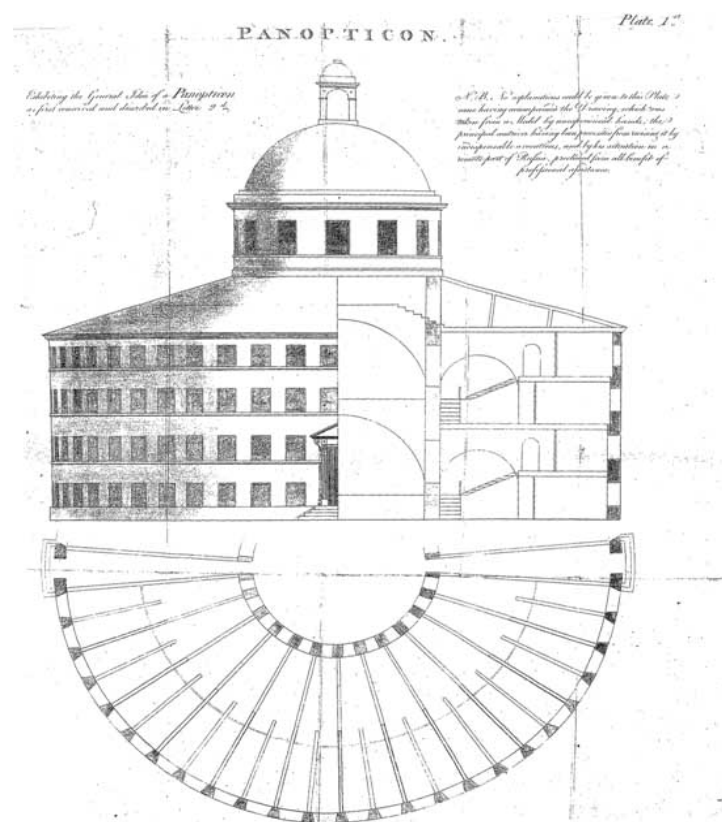
²⁶ Ibid., p. 21.

²⁷ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 211.

²⁸ Thomas A. Markus, *Buildings & Power: Freedom and Control in the Origin of Modern Building Types* (London: Routledge, 1993), p. 122.

²⁹ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 111.

Nevertheless the invisible principle is already clearly stated. He describes: “The building is circular. The apartments of the prisoners occupy the circumference. You may call them, if you please, the *cells*... The apartment of the inspector occupies the center: you may call it if you please the *Inspector’s lodge*... Each cell has in the outward circumference, a *window*, large enough not only to light the cell, but, through the cell, to afford light enough to the correspondent part of the lodge...The inner circumference of the cell is formed by an iron *grating*, so light as not to screen any part of the cell from the Inspector’s view... To the windows of the lodge there were *blinds*, as high up as the eyes of the prisoners in their cells can, by any means they can employ, be made to reach,”³⁰ thus the prisoner cannot detect the inspector’s activity. To continue the inspection at night, Bentham even suggests that “small lamps, in the outside of each window of the lodge, backed by a reflector, to throw the light into the corresponding cells, would extend to the night the security of the day.”³¹



Bentham’s early Panopticon drawing

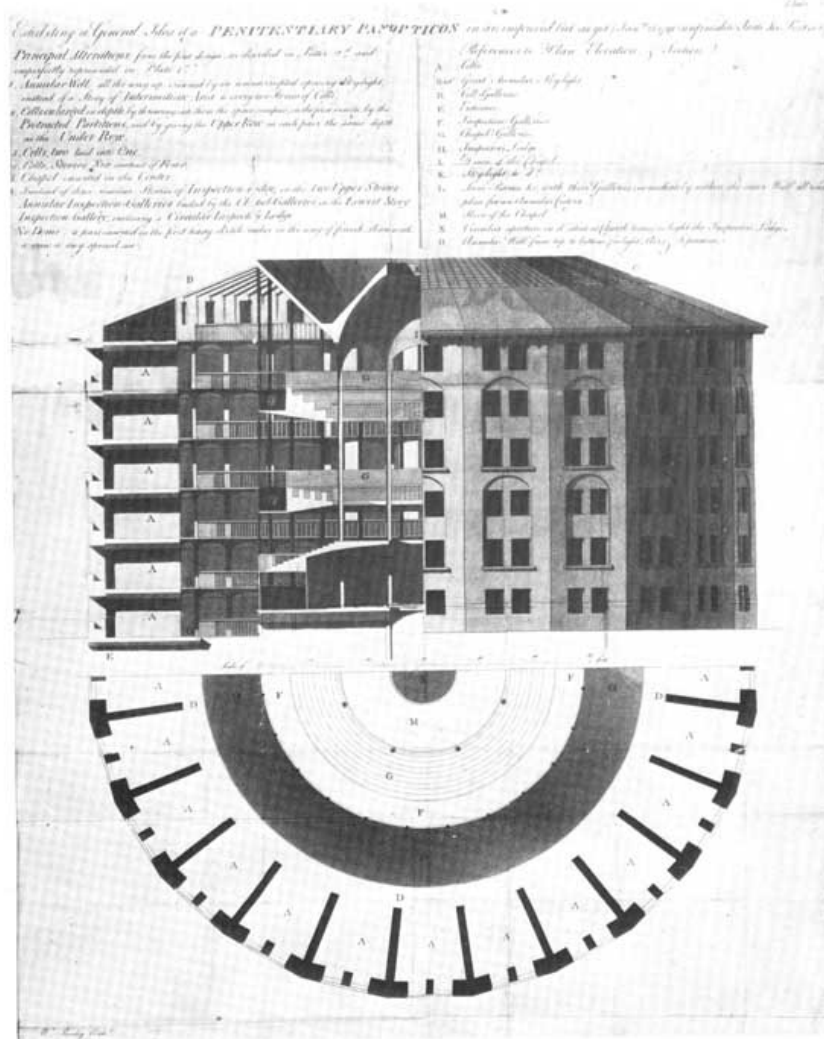
Source: Jeremy Bentham: *Panopticon: In A Series of Letters*, 1791

In this early version, the central lodge was used to accommodate the principal inspector, or head keeper and his family. The advantage is that “the more numerous also the family, the

³⁰ Bentham, *Panopticon. In a Series of Letters*, pp. 4-6.

³¹ *Ibid.*, p. 7.

better; since, by this means, there will in fact be as many inspectors as the family consists of persons, though only one be paid for it.”³² But in the mature scheme recorded in the *Postscript*, the governor’s house was removed from the center into a part of the circuit. With a projecting front, this part was also used to accommodate a chaplain, a surgeon and a matron. Bentham called it the dead part. Only this arrangement rather than the central lodge could provide the governor “a space sufficient for a style of living equal or approaching of that of a gentleman.”³³



“Penitentiary Panopticon”, Jeremy Bentham and Willey Reveley

Source: Jeremy Bentham, *Management of the Poor: In A Series of Letters*, 1796

In a later version of the Panopticon, a more complex structure is introduced to the central

³² Ibid., p. 24.

³³ Jeremy Bentham, *Panopticon: Postscript; Part I* (Dublin: Thomas Byrne, 1791), p. 162.

tower. The centre is emptied, and, following Willey Reveley's suggestions, the annular inspection-galleries are added, which are "low and narrow, surrounding in the lowermost story a circular Inspection-Lodge; instead of three stories of Inspection-Lodge, all circular, and in height filling up the whole space all the way up."³⁴ Thus the invisible inspection is extended into two levels. On the one hand the prisoners in their cells are under surveillance of subordinate guards that walk around in the inspection galleries and record the irregularities and infractions of prisoners. On the other hand, both the prisoners and guards are under the invisible inspection of the governor situated in the central chamber. Just as advertised on the cover of *Letters*, the Panopticon model can be used in any circumstances in which inspection is needed. Not only the prisoners but also the staffs are to be governed by the same surveillance mechanism in order to achieve the greatest efficiency.

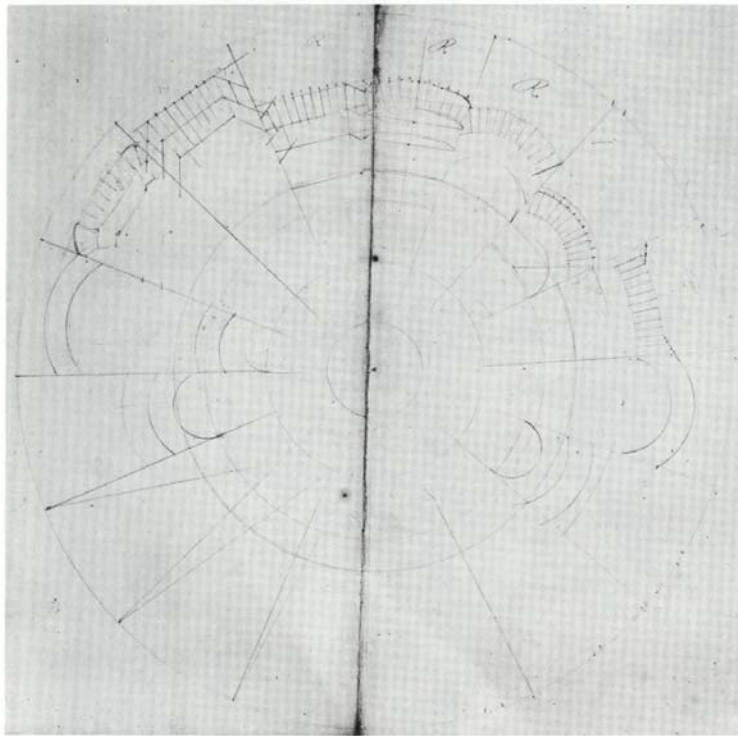
According to Evans, Bentham even tried to extend the invisible inspection to both larger and smaller scales. In 1824 he made a sketch of a large, multiple Panopticon in which the governors of each segmental Panopticon were inspected by a governor of governors.³⁵ He also envisaged a kind of lantern, only large enough for one person, to be situated near the geometrical centre of the building. The principal governor would sit in the lantern and watch the guards and prisoners through pin-holes.³⁶ Evans argues that "with the lantern the systematic application of a single principle encroached on the liberty of the governor to such an extent that he too became its prisoner as much as were the convicts under his charge, its concentric centripetal geometry fixing him in an exact position just so that he might fulfill the duties of his office."³⁷

³⁴ Ibid., p. 175.

³⁵ Bentham Mss., U.C.L., 119a, cited from Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*.

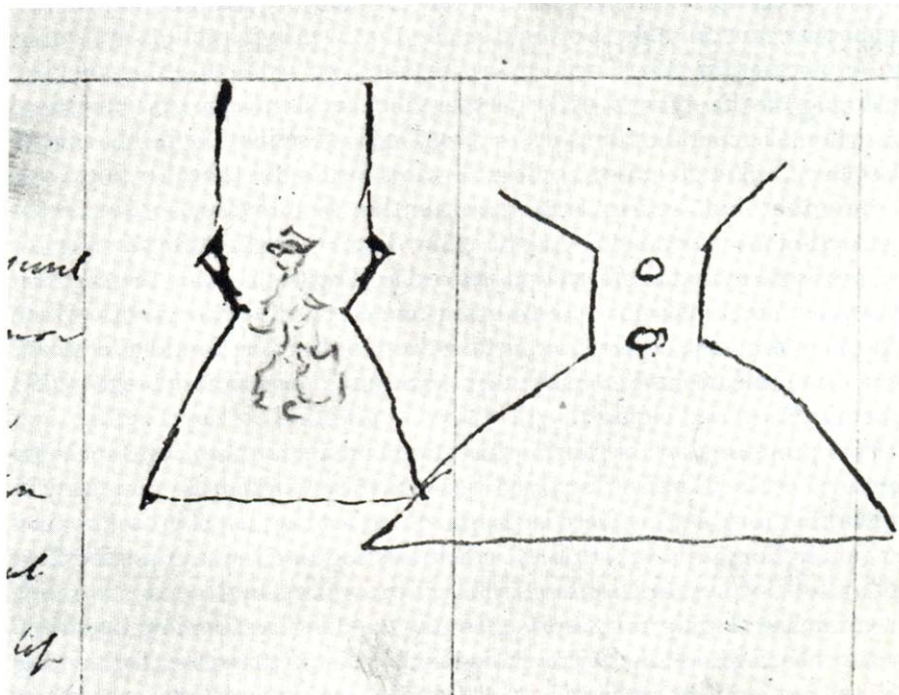
³⁶ Bentham, *Panopticon: Postscript; Part I*, pp. 182-85.

³⁷ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 208.



A sketch by Jeremy Bentham watermarked 1824, for 16 segmental Panopticons emanating from a common centre.

Source: Robin Evans, *The Fabrication of Virtue*



Marginal outlines of the inspection lantern from the Bentham Papers

Source: Robin Evans, *The Fabrication of Virtue*

The secret of invisible inspection is that it is asymmetric. The inspector can gain information from the prisoner while the prisoner cannot gain the information from the inspector. If the prisoner can see the inspector, he can control the surveillance by inspecting the governor in turn. He can learn the inspector's ways, his weaknesses, his habits, and then find measures to elude the surveillance. If the eye is hidden, information about the inspector is not attainable, the prisoners will feel to be seen even the inspector is not observing him. "By concealing itself in the shadows, the eye can intensify all its powers – and the economy gains even further, for the number of those on surveillance duty can be reduced with no loss of service."³⁸ It is this imbalance of information that makes the largest efficiency possible. This factor explains why Bentham changed his design of conversation-tubes. In the *Letters*, Bentham suggests installing tin tubes from every cell to the inspector's chamber, so that the slightest whisper of the prisoners could be heard by the governor.³⁹ The tubes function as a parallel to the visual surveillance. But the problem is that it is isotropic, while the governor can hear the prisoners, the prisoners can do the same thing. There is no information imbalance here, and the magic of invisible inspection disappears. So in the *Postscript* Bentham confined the utilization of the tubes only to the communication between guards and governor.⁴⁰

The system of conversation tubes also shows Bentham's deep interest in technical innovations. To achieve the greatest efficiency for greatest happiness, he never hesitated to push technology to the extreme in order to achieve his goals. For architectural historians, one astonishing characteristic of the Panopticon is the "new technologies" proposed for it, which made the building an 18th century "High-Tech" architecture. Two of the most advanced aspects are the use of the material of iron and glass, and the integration of heating and ventilation.

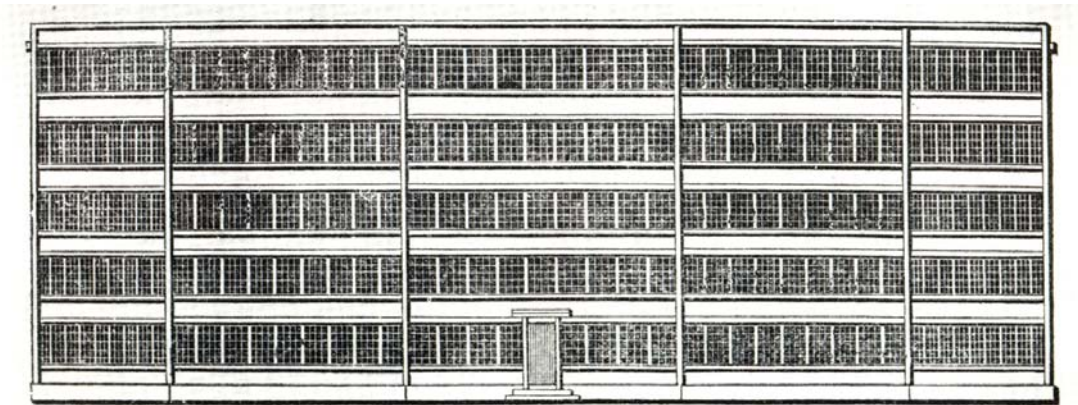
The building represented in the *Letters* is a massive brick or stone construction. In the refined scheme of 1791, iron is abundantly used. Bentham listed the multiple advantages of an iron structure as follows: "sometimes to admit air, sometimes to save room, sometimes for the sake of strength. In all instance it has the advantage of being peculiarly impregnable to putrid contagion." And at the level of costs and economics, Bentham found that the iron structure was cheaper than a brick or masonry building, "since cast-iron, and in most

³⁸ Jacques-Alain Miller and Richard Miller, "Jeremy Bentham's Panoptic Device," *October* 41, no. Summer (1987): p. 4.

³⁹ Bentham, *Panopticon. In a Series of Letters*, p. 8.

⁴⁰ Bentham, *Panopticon: Postscript; Part I*, p. 189.

instances, even that not of the finest quality, would answer as well as hammered with half the expense.”⁴¹ Reveley’s drawing shows that the cell-galleries are converted into an iron structure, at the centre of which the inspection tower is supported by two rings of iron columns upon which the roof rested. The light and transparent structure of this later version represents a sharp contrast to the previous design, and clearly meets Bentham’s requirement of unobstructed surveillance. The design also proposed that the hollow columns could be used as water pipes and chimneys to save more space. The extensive use of glass windows is also welcomed as a guarantee of sufficient light in the cells. But the security requirements and the masonry structure of cells places limitations on the size of the glass windows in a Panopticon prison. The full use of glass is perfectly represented in a later design of Panopticon House of Industry provided by Samuel Bentham and the architect Samuel Bruce. The building is a regular twelve-sided polygon with an iron structure and large glass windows. Such a structure may appear common today, but at the end of 18th century it was very striking.



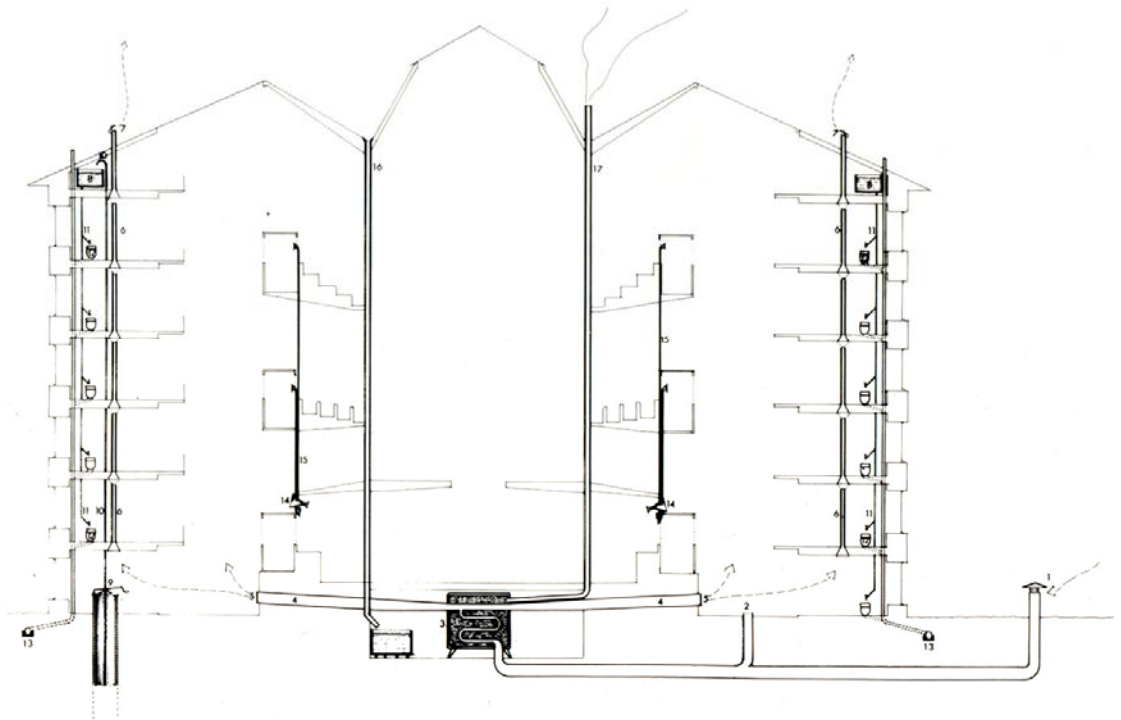
Panopticon House of Industry, Samuel Bentham and Samuel Bunce, 1797

Source: Jeremy Bentham, John Bowring, *The Works of Jeremy Bentham*, Vol.8

The other innovation is the combining of heating and ventilation, a measure widely used in early Victorian institutions. Bentham’s Panopticon was criticized by Howard for lacking sufficient ventilation. On the other hand, as the spaces in Panopticon are closely interconnected, the whole building must be heated at the same time. Bentham’s idea is that the two processes can be joined by using the ventilated air as a medium of heating. Fresh air is to be led to a Franklin stove under the center of rotunda. Heated by the stove, the air is transmitted through a radial array of tubes out towards the cells. Bentham was reminded that the hot air would rise directly to the ceiling rather than the cells, so he added a chain of vertical, inter-linked ventilator tubes in the cells to enhance the heating efficiency. This

⁴¹ Ibid., pp. 253-54.

arrangement was later adopted in Pentonville Prison.⁴²



Section showing the combination of ventilation and heating system in the Panopticon Penitentiary.

Source: Robin Evans, *The Fabrication of Virtue*

Bentham's investigations of technical specifications of the Panopticon prison are both wide-ranging and highly detailed. In the two postscripts he discusses every single element of the building. Miller suggests that Bentham was trying to control everything in the detail.⁴³ Although this is a slight exaggeration, it does correspond to Bentham's dream of a complete, rational, and non-arbitrary system similar to those he pursued in the context of legal theory.

Bentham's will to control is clearly represented in his proposal for the management of the Panopticon - the most distinct characteristic of the project besides its architectural singularity. "I would do the whole by contract,"⁴⁴ Bentham declares. It was, however, precisely the contract-management that caused the largest disagreement between Bentham and other Howardian reformers, who supported trust-management. The advantage of contract management is that it is both economic and efficient. Driven by the principle of

⁴² Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 225.

⁴³ Miller and Miller, "Jeremy Bentham's Panoptic Device," p. 5.

⁴⁴ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Iv*, p. 47.

joining interest and duty, the contractor would run the prison as a harmonious negotiation between private and public interests. In this point, Bentham exhibited himself as a disciple of Adam Smith's free-market ideology.

In Bentham's scheme, the contractor concentrates nearly all power in his own hands. He would have the right to appoint all subordinates; he would decide the prisoner's regime; he would regulate their work and impose his own discipline. Bentham states clearly that the contractor would act as a king in the Panopticon. But this monarchical regime is not necessarily a bad thing, he claims: "monarchy, with publicity and responsibility for its only checks: such is the best or rather the only tolerable form of government for such an empire."⁴⁵ Bentham is fully aware that unchecked power would cause abuse. In response, he emphasizes the transparency of management, which is guaranteed by the rigorous inspection system. But that is not enough; "jealousy is the life and soul of government. Transparency of management is certainly an immense security; but even transparency is of no avail without eyes to look at it."⁴⁶ The eyes that Bentham suggests should watch the governor are those of the public. The design of the building makes it possible for the public to see all the prisoners and subordinate guards without being detected. It formed the best check for any abuse of power in the prison. To guarantee the maximum transparency to the public, Bentham argues: "I take for granted as a matter of course, that ... the doors of these establishments will be, as, without very special reasons to the contrary, the doors of all public establishments ought to be, thrown wide open to the body of the curious at large – the great *open committee* of the tribunal of the world."⁴⁷ Here Bentham anticipates the enthusiasm for transparency that characterizes contemporary European government. In the 1990s, "transparency" was elevated to a high status by the European Union as a counter-measure to "democratic deficit."⁴⁸ From an architectural viewpoint, Bentham's Panopticon also has a similarity with Norman Foster's Reichstag addition project in Berlin, in which the public can see the parliament from the top copula.

Unfortunately, all these management innovations proposed by Bentham were rejected, together with the Panopticon. As subsequent history has proved, without transparency the higher officials can always collude with prison keepers to conceal abuses and cover up

⁴⁵ Ibid., p. 85.

⁴⁶ Jeremy Bentham, *Panopticon: Postscript; Part II* (Dublin: Thomas Byrne, 1791), p. 381.

⁴⁷ Bentham and Bowring, *The Works of Jeremy Bentham Vol.IV*, p. 46. Cited from Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 142.

⁴⁸ Nigle Whiteley, "Intensity of Scrutiny and a Good Eye: Architecture and Transparency," *Journal of Architectural Education* 56, no. 4 (2003): p. 13.

scandals. Moreover, without a public access, the prisons become more and more isolated from society, and are transformed into secret worlds.

2.3.3 Power and the Panopticon

The main reason that led the Holford committee to finally reject Bentham's Panopticon scheme was its contract management. They feared that to give the governor absolute power would cause corruption and abuse of power. They also expressed their distrust of public inspection as an efficient check on the governor's power. This sentiment also fuels many of the subsequent attacks on the Panopticon as a totalitarianism institution.

It cannot be denied that Bentham envisaged the absolute power of the governor. With the help of the architectural layout, this power could be expanded to an unprecedented degree. In an often quoted passage he uses the 139th Psalm to draw a similarity between the "apparent omnipresence" of the inspector and the God:

"Thou art about my path, and about my bed: and spiest out my ways.

If I say, peradventure the darkness shall cover me, then shall my night be turned into day.

Even there also shall thy hand lead me; and thy right hand shall hold me."⁴⁹

In Bentham's view, this kind of enormous power is necessary and beneficial, both for the control and reform the prisoners, and also because Bentham believes that the governor has the ability to decide what is the best for the prisoners' own good. This confidence is based on his Utilitarian explanation of human nature and the validity of pleasure calculation.

But this justification does not convince critics who do not accept Bentham's theoretical understanding of human nature. For some liberal thinkers the Panopticon is a forerunner of totalitarian state: in the name of public interest, it sacrifices the freedom of individual and leaves no privacy and no tolerance for the deviant.⁵⁰ This attack is supported by Halévy's argument that Bentham's Utilitarianism theory is not essentially a liberal theory. He explains that for Bentham, liberty is not a good for its own sake. Borrowing Montesquieu's definition,

⁴⁹ Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.Xi* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), pp. 96, note.

⁵⁰ See Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, pp. 2-4.

Bentham sees liberty as security of pleasure. Liberty is understood to consist in that “constraints are not imposed on ourselves;” and security in that “constraints are imposed on others.”⁵¹ In this respect, Bentham’s view is different from that of the advocates of natural rights, who regarded liberty as an absolute right that cannot be violated. To them, Bentham’s response is to ask what is liberty? Is not the liberty of doing evil also liberty, and should it also be protected? If we define liberty as “the power of doing every thing which does not hurt another,” is it not also subject to the same principle of pleasure and pain? Thus liberty is just a notion secondary to the concepts of pleasure and pain. It does not have an inviolable value when set against the principle of utility. The sacrifice of individual liberty for the public interest is reasonable since not liberty, but public happiness is the final end.

Bentham’s argument is still useful in responding to the totalitarianism accusation leveled at the Panopticon. It is true that the prisoners are deprived of their liberty, but this phenomenon is not peculiar only to the Panopticon, it is common to all prisons. As a punishment, the deprivation of some part of freedom constitutes the most important part of modern penal system. When the liberal critics equate the Panopticon with totalitarian society they neglect to see that the Panopticon is a measure aimed at the practical problem of crime control. If the deprivation of prisoner liberty is not tolerable, a viable alternative must be proposed – a task the radical liberals never accomplish. Bentham states clearly that imprisonment is an evil in itself, the loss of liberty is a suffering and a part of the punishment. He writes that: “they are in health, they suffer neither hunger thirst nor cold; true; but not a moment of their time is at their own disposal ... what they do is for their ultimate good; true: but in the mean time they do nothing as they please. They are not worn down by excessive labour: true: but except what is absolutely necessary for meals and sleep there is not a moment of their time during which they are not either at work or under discipline.”⁵² It also partly explains Bentham’s rejection of cruelty in prisons, as the restrictions that would be imposed by his system would already constitute a form of punishment.

In the common view, Bentham’s totalitarianism is so strong that his humanitarianism is neglected. Sometimes he is seen as a contrast to Howard, who is an altruistic Christian philanthropist. But the fact is that the living conditions Bentham proposed in the Panopticon are no worse than in Howardian prisons. In some aspects the Panopticon is even designed to temper such hardships and discomforts as the meagerness of diet, dark cold cells and strict

⁵¹ Halévy, *The Growth of Philosophic Radicalism*, p. 144.

⁵² UC cxix. 82, cited from Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 114.

solitude imposed in other Howardian prisons.⁵³ Despite the strict control, Bentham's goal is a humane prison. He lays down three rules for prison: the rule of leniency which safeguards the well-being of prisoners; the rule of severity which guarantees the ends of reformation and deterrence; and the rule of economy which promotes efficiency.⁵⁴ It is not surprising that the rule of leniency is placed in the first place. For a Utilitarian who puts the most important value on pleasure and sees all punishment as an evil, to limit bodily suffering is a reasonable conclusion.

Unfortunately this point does not interest many modern researchers, who only see strict control as the sole aim of the Panopticon, and dismiss the humane considerations as subordinate tools for domination. Evans, for example, in his discussion of the heating system in the Panopticon argues that "the earliest attempt to supply a comprehensive technology of services arose from a desire to dominate, not a desire to serve."⁵⁵ If not wrong, this view is clearly partial and biased.

This negative understanding of the Panopticon must be largely attributed to Foucault's most famous work *Discipline and Punish: The Birth of the Prison*. In this book Foucault represents the Panopticon as the ideal archetype of modern power domination, which he calls "Discipline." Foucault analyzes the sudden change in the second half of 18th century when the traditional spectacle of public execution was replaced by strictly controlled imprisonment as the principal measure of punishment. In Foucault's view this transformation represents the emergence of a new model of power– discipline. Consequently, as discipline became the general formula of domination, the whole society was transformed into a disciplinary society.

In contrast to the traditional mechanisms of power, which stressed violence upon the body, the new model of discipline functions in systematic, non-violent and hidden ways. It is no longer cruel and conspicuous, but vastly more powerful than the former model in its scope, scale and delicacy of power-control. The driving force of this transformation, Foucault argues, is not humanity as usually understood but the more efficient level of control required by the capitalist society. Through the new power technology of distribution, observation, investigation, research, examination, and recording, discipline works "at the level of those continuous and uninterrupted processes which subject our bodies, govern our

⁵³ Ibid., p. 115.

⁵⁴ Bentham, *Panopticon: Postscript; Part II*, p. 351.

⁵⁵ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 227.

gestures, dictate our behaviours etc.”⁵⁶ By incorporating the human body in the machinery of power that exploits it, breaks it down and rearranges it, “discipline produced subjected and practised bodies, ‘docile’ bodies.”⁵⁷

But this is not the only secret of discipline. Its success not only depends upon a meticulous control of human body and behaviour, but also on control of the human mind. One of the most striking points of Foucault’s theory is that the human mind or the consciousness as a subject is the production of power/knowledge. Thus the idea of an autonomous individual is just an illusion. What is left is a social formation, “the individual is an effect of power.”⁵⁸ In Foucault’s theory, knowledge is not an independent entity outside power. He argues that “power produces knowledge (and not by encouraging it because it serves power or by applying it because it is useful); that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, not any knowledge that does not presuppose and constitute at the same time power relations.”⁵⁹

In the disciplinary operation, the “power-knowledge relation” works in close cooperation. It is knowledge that defines the binary division of mad/sane; dangerous/harmless; ill/healthy, abnormal /normal. Based on such dichotomies, power justifies its repression of the abnormal for the consolidation of normal. Furthermore, in disciplinary institutions all the abnormal individuals are regulated according to the standard of the normal. The ordinary understanding of knowledge as objective science conceals the conspiracy of power-knowledge cooperation and renders the operation of power a scientific solution. Under this cover, modern power passes through the consciousness of the individual in a way that entails a recognition of the normalized subject; individuals are then induced to regulate themselves according to this standard. Thus, far from resisting the normalizing effects of power, people act so as to promote them. The individuals become the prisoner of their own consciousness.

Foucault regards the Panopticon as the ideal architectural figure of discipline because it achieves perfect control of both body and mind. He argues that in the Panopticon every inmate is enclosed in a cell; contacts between prisoners are forbidden to avoid disorder;

⁵⁶ Michel Foucault and Colin Gordon, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977* (Brighton: Harvester Press, 1980), p. 97.

⁵⁷ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (Harmondsworth: Penguin, 1979), p. 138.

⁵⁸ Foucault and Gordon, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, p. 98.

⁵⁹ Foucault, *Discipline and Punish: The Birth of the Prison*, p. 27.

everyone can be observed, analyzed and controlled specifically; beside this control of body and behaviour, the invisible inspection can “induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power.”⁶⁰ The inmates are under the control of an internal mechanism imposed by power. While being self-disciplined, “he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection.”⁶¹ The result is the perfection of power, where its actual exercise is rendered unnecessary, as the inmates are inspected by themselves.

According to Foucault, the function of the Panopticon is not a humanitarian penitentiary but an innovative power mechanism that he calls Panopticism. Its importance does not lie in the social utility that Bentham envisaged but rather as a discipline model that was later spread into much wider areas.

Is Foucault’s expatiation of the Panopticon fully acceptable? First, it should be noted that Foucault’s account is not based on detailed historical research. In regarding the Panopticon as the ideal vehicle for imposing discipline he diverged from Bentham’s true scheme. He argues, for example, that in the Panopticon every inmate is isolated in a cell so that the power can be precisely imposed upon him without intervention. But Foucault is not aware that this interpretation contradicts the fact that in the mature *Postscripts* Bentham had already suggested that two to four prisoners could share one cell. In another case, emphasizing the perfect effect of invisible inspection, Foucault claims that it makes the actual power unnecessary. Bentham’s proposal, however, requires the guard to record every small offence committed by the prisoners.

Despite these inaccuracies, Foucault’s analysis of the power mechanism in the Panopticon is generally right. Compared with the traditional English jail, the reformed prisons including the Panopticon did impose a much stricter control on prisoners. At the same time the reformers also supported the reformatory measures in prison to transform the criminals into honest and industrious citizens. Together with physical labour, religious instruction and education were also required to reform the prisoner’s mind. In the case of the Panopticon, it is true that the architectural configuration helps to bring a higher efficiency, since invisible inspection imposes self-discipline on the individual. Thus the difference between Bentham and Foucault is not the existence of power or how the power works but the justification of the use of power. For Bentham it can be justified according to the

⁶⁰ Ibid., p. 201.

⁶¹ Ibid., p. 203.

Utilitarianism theory, but for Foucault such a justification is itself merely power in disguise.

The basis for Bentham's theory is the relationship between pleasure and pain. Other concepts such as punishment, liberty and power are derived from this basis. As he believes pleasure and pain constitute the rational and scientific understanding of human nature, the penal theory and the Panopticon scheme can be understood to be rational and scientific. It is unsurprising that this kind of simplistic Enlightenment theory does not convince Foucault, who sees the basis of all social activities as power. Foucault follows Nietzsche's aphorism that: "Knowledge works as a tool of power. Hence it is plain that it increases with every increase of power."⁶² If the objectivity of knowledge is refused, it is only a small step to refuse the objectivity of moral theories. It is in this rationale that Nietzsche clearly rejected all the Enlightenment projects to establish rational foundations for an objective morality.⁶³ And if there is no such objective basis, all the claimed rational moralities are just a mask of the fundamentally non-rational will to power.

This explains why, in *Discipline and Punish*, Foucault uses the term power as an independent and autonomous concept without investigating its value basis. For no such basis exists. Foucault illustrates power as a goal for its own sake, not for pleasure, utility or anything else. Under the same reasoning, the Panopticon stripped of the Utilitarian value becomes a pure machine for power and repression. Even prisons in general, in Foucault's view, are not really aimed at preventing crime and reforming criminals. The real essence is to identify "delinquency" and to fabricate an enclosed, separated and strictly controlled domain in which abnormality is repressed as a threat to power.⁶⁴ Here Foucault's interpretation of power inevitably invites challenge. Can all the knowledge and morality be reduced to power? Is the function of prison only repression, and is there no reason for that repression except the exercise of power? And, fundamentally, to whom does the power belong and for what reason?

Even if we accept Foucault's critique of power, there is still another problem: how do we then proceed? Foucault only provides a vague answer to this question. In his later life, he developed an ethical theory of the aesthetics of existence, which is related to Existentialism. According to this thesis, true human liberty is the ability to change the normalization of

⁶² Friedrich Nietzsche, Walter Kaufmann, and R. J. Hollingdale, *The Will to Power* (London: Weidenfeld & Nicolson, 1968), p. 266.

⁶³ Friedrich Nietzsche et al., *The Gay Science: With a Prelude in German Rhymes and an Appendix of Songs*, *Cambridge Texts in the History of Philosophy* (Cambridge: Cambridge University Press, 2001), section 335

⁶⁴ Foucault, *Discipline and Punish: The Birth of the Prison*, pp. 277-80.

power. The ethical life consists in questioning the limits of the traditions, knowledge, rules, practices we inherit and also the social institutions that control us. This appeal is also one of the key issues in poststructuralism, which insists upon the importance of thinking otherness.

Today, no one can deny the importance of questioning the existing regulations and theories which are claimed to be objective. But does this form a complete value basis for the practice of individual and social institutions? Even though we agree to consider other choices, criteria are still necessary to guide the decision on which option to choose. In short, another value theory is still needed for a good decision. This is an inevitable and practical problem. If the prisons are only instrument for the exercise of repressive power, then we might naturally consider other alternatives, such as freeing all criminals. But against which criteria can we decide which measure is better? Foucault himself does not provide any viable alternative to prisons. This is hardly an omission, but a crucial problem to which Foucault's theory does not give a satisfactory answer.

On this problem, Bentham and Foucault offer contrasting positions. Bentham is too confident about the objectivity and scientific accuracy of his final end and gives an overwhelming justification for absolute control for that end. And Foucault does not accept any justification of power and then deprives the foundation of the existence of social control. The former produces an excessive level of constraint, which contemporary people cannot accept, while the latter leaves too wide a space of uncertainty for a "free" individual.

A possible solution is combining the two extremes. Contemporary Utilitarianism may be an example. While the classic definition of pleasure and pain is replaced by a more flexible and loosely defined concept of social utility, Utilitarianism still plays an important role in political theory, public policy, biological ethics and many other practical fields.

All these do not deny Foucault's insightful assertion that the Panopticon is the ideal model of a new social ideology. It is "an architecture that would operate to transform individuals: to act on those it shelters, to provide a hold on their conduct, to carry the effects of power right to them, to make it possible to know them, to alter them."⁶⁵ It is definitely an ideal for Bentham because it is a way of "obtaining power, power of mind over mind, in a quantity hitherto without example."⁶⁶ But the failure of Bentham suggests that there was a huge gap between ideal and reality. Bentham's belief in the rationality of his own scheme

⁶⁵ Ibid., p. 172.

⁶⁶ Bentham, *Panopticon. In a Series of Letters*, p. iii.

made him unable to accept any compromise. But on the other hand, when compromise could be accepted, the Panopticon may have greater chance to be realised. This is exactly what happened in the Edinburgh Bridewell, the earliest and the largest Panopticon-like building ever built in Britain.

3 The Panopticon and the Edinburgh Bridewell

Although the Scottish legal system was different from that of England in many aspects, it took the same step of prison reform after the example of its southern neighbour. The Edinburgh Bridewell was the first result of this reform. Its close relationship with Bentham's Panopticon signified how heavy the English influence was on Scottish legal reform. It clearly showed the strong influence of new reform ideologies, including Utilitarianism, in Britain despite the existence of different traditions. Not only in prison reform, it was the same case in Scottish poor relief reform and education reform, which will be discussed later. But for now, I will discuss how the design of the Edinburgh Bridewell was influenced by Bentham's Panopticon model.

3.1 Early Proposals for the Edinburgh Bridewell

3.1.1 Howard and the Proposal of the Edinburgh Bridewell

The transformation of the Scottish prison system paralleled the English debate. The earliest achievement of this transformation was the construction of the Edinburgh Bridewell, which in many aspects represented the principles suggested by the reformers. The most significant influence was John Howard.

He made three comprehensive inquiries in Scotland in 1779, 1782 and 1783. These visits leave us a detailed account of Scottish prisons. In fact, his earliest visit to a Scottish prison took place in 1775, when he saw the prisons in Glasgow, and was presented with the freedom of the city for his disinterested labours in prison inquiry. In Glasgow, Howard was pleased to find the prisons were well managed and he was especially impressed by the following regulation: "The gaoler every morning and evening at the opening of, and before

the shutting up of, the prison, shall personally visit every room and place therein.”¹ This regulation was later incorporated into the improvements he proposed in *The State of the Prisons*.

Howard’s three later journeys to Scotland were more comprehensive and covered all the important Scottish prisons including those in Edinburgh, Glasgow, Perth, Stirling, Jedburgh, Haddington, Aye, Kelso, Nairn, Banff, and Inverness. On these journeys, he found most Scottish prisons to be “old buildings, dirty and offensive, without courtyards and also generally without water.”² He summarized the following defects of Scottish prisons: they have no exercise courts; there is a general lack of water and sewerage provision; the cells are not clean; the prisoners are not visited by the magistrates; too little attention is paid to the separation of the sexes; the keepers are allowed licenses for the sale of the most pernicious liquors, with the consequence that the prisoners generally spend their money allowance on whisky instead of bread.³

Nevertheless, Howard also found many advantages in Scottish prisons compared with those in England and on the Continent. For example, the debtor were treated more humanely: if he declared “upon oath that he has not wherewithal to maintain himself, the creditor must alimnt him within ten days after notice is given for that purpose, with at least three pence a day, but generally the magistrate order sixpence.”⁴ By the process of *cessio bonorum*, a debtor after being a month in prison, may obtain his liberty, and be secured against execution for any previous debts, by making a surrender to all his effects to be divided among his creditor...this compassionate law prevents a creditor putting his debtor in prison, unless he had good reason to believe he is acting fraudulently.”⁵ This confirmed Howard’s view that the Scottish penal code was much milder than the English, which affirmed Hume’s conviction that: “I repeat it therefore, without fear of contradiction, that generally speaking, and with a view to the ordinary course of vulgar practice ... our custom of punishment is eminently gentle.”⁶

Howard observed that one noticeable characteristic of Scottish prison was that “there are

¹ John Howard and Kenneth Ruck, *The State of the Prisons, Everyman's Library; No.835* (London: J.M. Dent, 1929), p. 27.

² *Ibid.*, p. 147.

³ *Ibid.*, p. 149.

⁴ *Ibid.*, p. 147.

⁵ *Ibid.*

⁶ David Hume and Benjamin Robert Bell, *Commentaries on the Law of Scotland: Respecting Crimes*, 2 vols., vol. 1 (Edinburgh: Bell & Bradfute, 1844), p. ii.

in Scotland but few prisoners” compared with the crowded prisons in England. He attributed this to the “shame and disgrace annexed to imprisonment, the solemn manner in which oaths are administered, and trials and executions conducted; and to the general sobriety of manners produced by the care which parents and ministers take to instruct the rising generation.”⁷ This explanation illustrates Howard’s faith of the beneficial effect of religious piety as a counter to criminality. He particularly emphasized the significance of oath and parish school, and said “it is scandalous for any person not to be possessed of a Bible.” As a Christian philanthropist, Howard’s belief in the beneficial impact of religion persisted throughout his life, and largely affected his reform proposals. This constitutes one of the biggest differences between him and Bentham, who did not reject the utility of religion, but regarded it only as a beneficial instrument rather than as a matter of true belief.

Howard visited Edinburgh in 1779 and 1782. In his book, he expresses a low evaluation of the prisons in the city and mentions “the close confinement of poor criminals in the Tollbooth, the horrid cage in the room known by that name, and the severity practised there of chaining the condemned to an iron bar.”⁸ Contrary to this was the liberty given to rich criminals. In the same prison Howard saw several of them, who were “confined for a riot, drinking whisky in the tap-room, in company with many profligate townsmen, who were readily admitted, as they promoted the sale of the gaoler’s liquors.”⁹

Clearly this image of an unbalanced and undisciplined prison was far from Howard’s ideal penitentiary institution. In a time of prison reform, Howard’s judgement was shared by local officials. In 1780 the council published a plan for building a new bridewell for public consideration. It was followed by another scheme for building a new prison and bridewell proposed by the Lord Provost David Steuart and the sheriff depute of the county, Archibald Cockburn in 1782.

Unfortunately, these proposed schemes were not executed, which was clearly a disappointment for Howard when he revisited Edinburgh in August 1787. While being respected and honoured with the freedom of the city, Howard candidly and honestly expressed his dissatisfaction with the prisons to the Lord Provost. “The Tollbooth,” he said, “has no court; it is never whitewashed. The gaoler has no apartment in it, and he is permitted to sell spirituous and other liquors to the prisoner.” With characteristic openness, he

⁷ Howard and Ruck, *The State of the Prisons*, p. 148.

⁸ *Ibid.*, p. 148.

⁹ *Ibid.*, p. 148.

remarked that “the splendid improvements now making in your places of entertainment, streets, squares, bridges, and the like, occupy all the attention of the gentlemen in office, to the entire neglect of this essential branch of police.”¹⁰ It is probable that Howard’s criticism had some impact on the minds of local officials, as the scheme for a new prison was revived and came into being as the Edinburgh Bridewell, the first penitentiary institution following the reform principles.

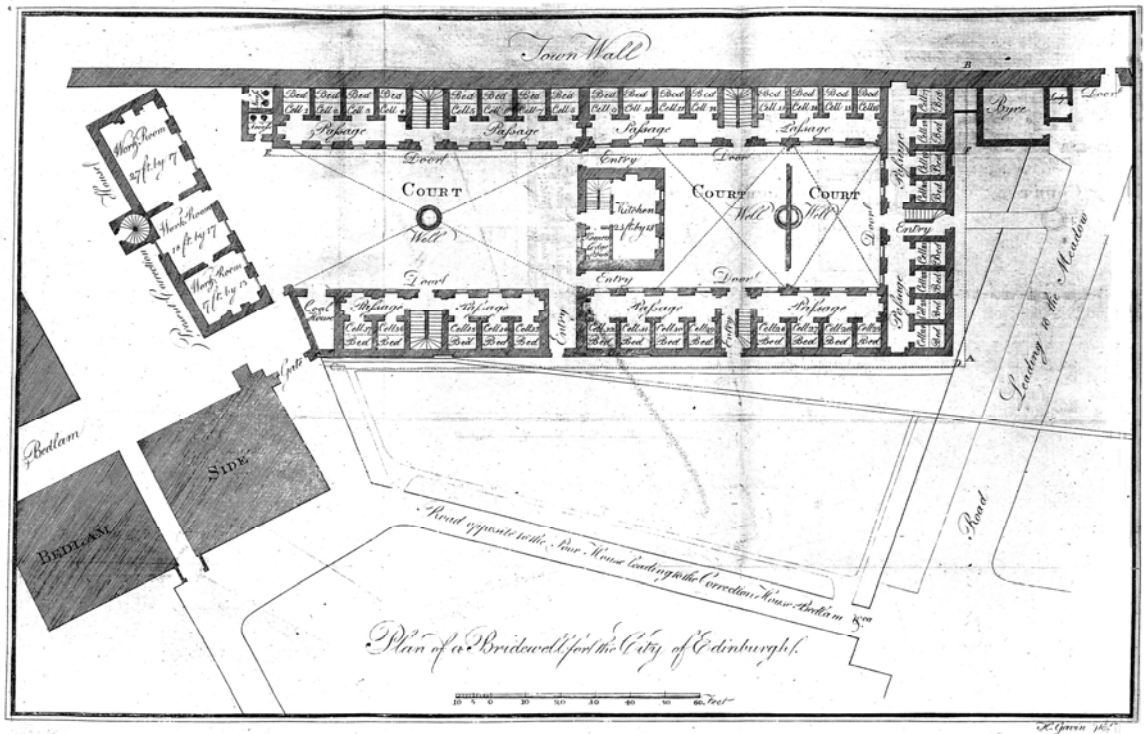
3.1.2 The 1780 and 1782 Proposals

As mentioned already, the first edition of Howard’s book had appeared in 1777, and largely promoted the debate on prison reform. As a consequence, the Penitentiary Act of 1779 was passed: it proposed the construction of two reformed penitentiaries, one for men and the other for women. A three-person committee with Howard on it was appointed to supervise the whole process. In the subsequent competition for the new prison, William Blackburn, who later became the most famous prison designer in Britain, won first prize. Although this national project ultimately failed to be realized, it inspired a burst of prison-building activity at the county level. The large-scale construction of local gaols started from 1785. The next three years saw the inception of more than 14 major prison projects.¹¹ The Edinburgh proposals of new bridewell and prison paralleled this activity, and although they did not mention the Penitentiary Act or the 1782 competition, the strong influence of Howard can be clearly detected.

As early as 1780, the council had asked the architect James Craig, the designer of Edinburgh’s First New Town, to provide a scheme for a new Bridewell. This design was published anonymously under the title “Plan for a General Bridewell”, together with a plan of management. This is the first design for a reformed prison with strongly Howardian character in Scotland.

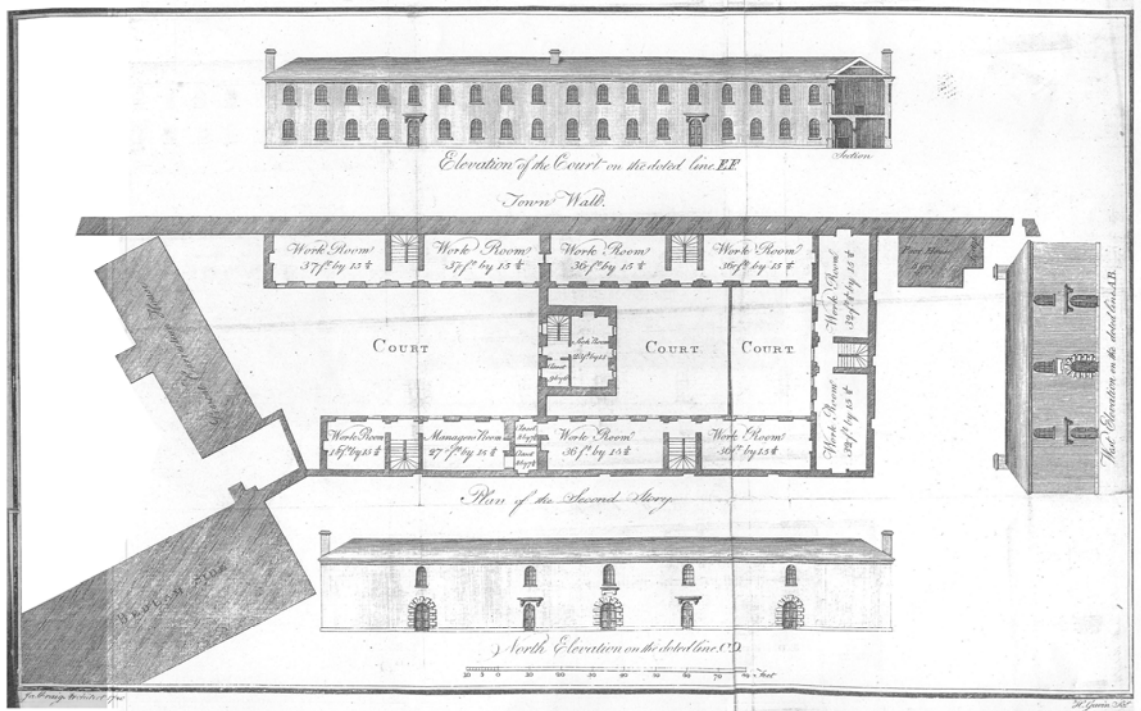
¹⁰ Thomas Taylor, *Memoirs of John Howard, F.R.S., the Christian Philanthropist: With a Detail of His Most Extraordinary Labours in the Cause of Benevolence and a Brief Account of the Prisons, Hospitals, Schools, Lazarettoes, and Other Public Institutions He Visited*, 2nd ed. (London: J. Hatchard and Son, 1836), p. 321.

¹¹ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 139.



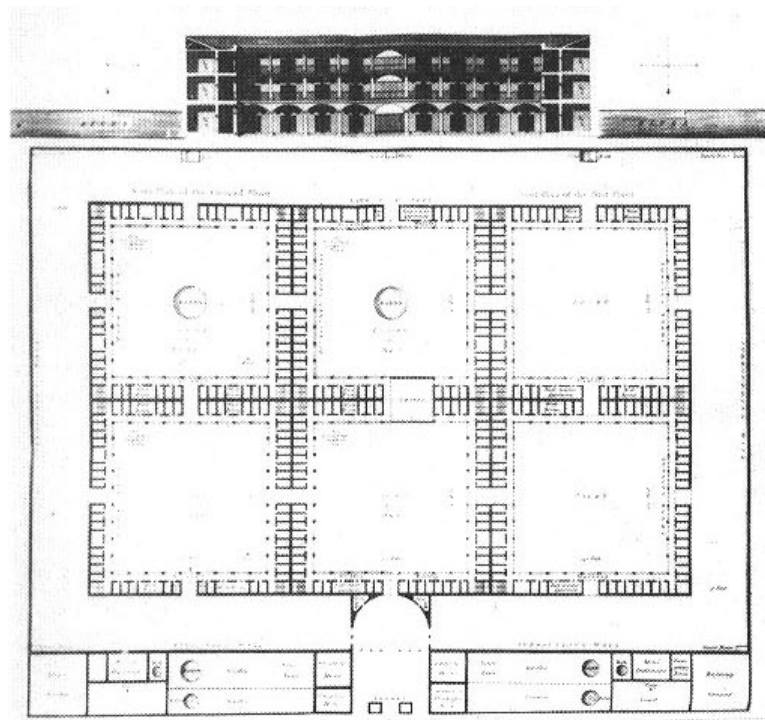
Ground plan of James Craig's design of a new bridewell, 1780

Source: *Plan for a General Bridewell*



First floor plan of James Craig's design of a new bridewell, 1780

Source: *Plan for a General Bridewell*



Howard's Plan for an ideal Penitentiary
 Source: John Howard, *State of the Prisons*, 1777

The design is an enlargement of the original correction house, which was one part of the Edinburgh Charity Workhouse at Greyfriars. Shown in the ground plan, the original correction house is a rather small detached building with three workrooms. Clearly it was not different from common civil buildings and there is no indication of any special consideration for its specialised function. By adding a huge building block, Craig turned the enterprise into a courtyard based complex. It consists of three courtyards, each for a different group of inmates. "The largest court is for the prisoners that behave well, and have a task assigned them. One of the small courts may be made use of to confine the most abandoned of the prisoners night and day. A part of this or the other court to be set apart from beggars: and the third court is destined for boys of eight to fourteen years of age, who can scarcely be

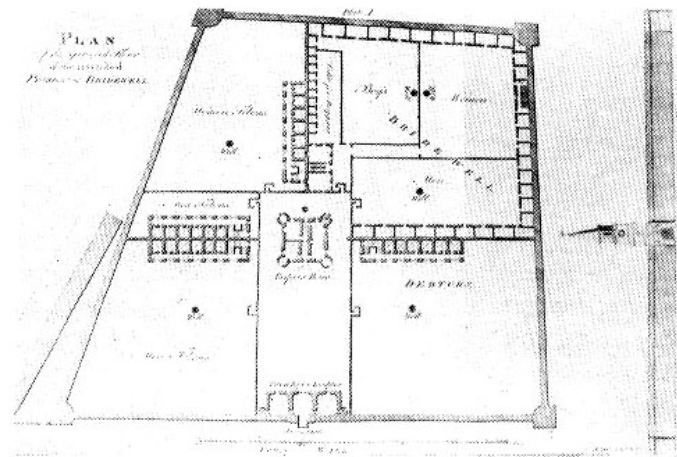
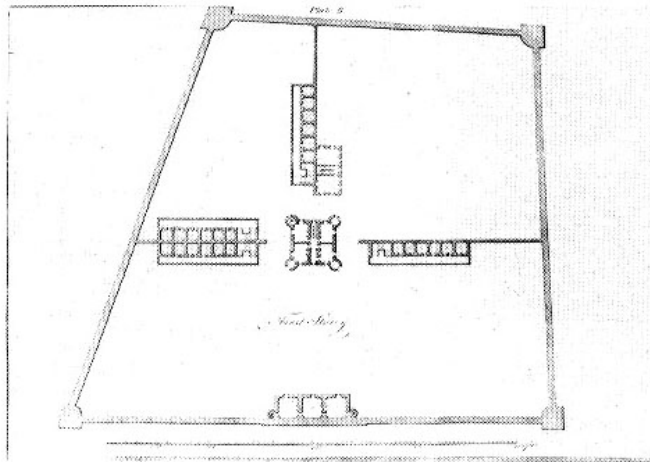
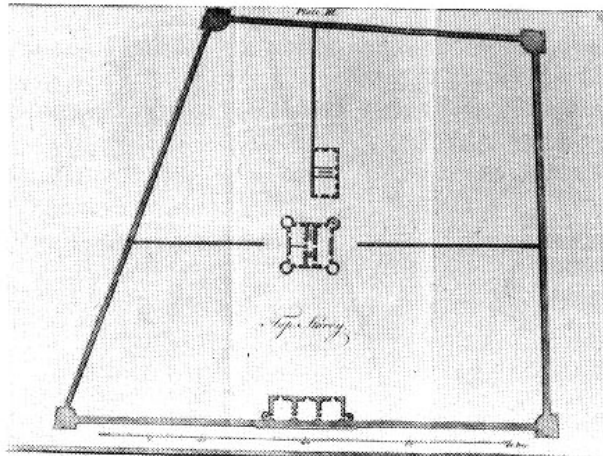
considered as objects of public justice.”¹² The main part of the ground floor is occupied by bed cells, and the first floor is used as work rooms. The character of the large portion of building areas allocated for work rooms was continued by later designs and the realized plan of Edinburgh Bridewell. This kind of courtyard layout was quite common in the early phase of prison reform. Howard adopted it in his own design of the Ideal Penitentiary, in which the prison cells were laid along the periphery of the central yards. An even clearer evidence of Howard’s influence is that Craig stated clearly that the institution follows the principle of solitary confinement in night and collective working in day time, a principle that Howard put much emphasis in *The State of the Prisons*. It was largely this characteristic that defined this design as a reformed design. Another significant characteristic of this design is the location of the keeper’s lodge in the centre of the block. It enables the keeper to supervise the largest court and obtain convenient access to other areas. This idea of central supervision was largely developed in later designs of Edinburgh Bridewell.

Craig’s plan was not turned into a real construction. In 1783 another proposal was made by David Steuart, Lord Provost of Edinburgh from 1780-1782, and the Sheriff Depute of the Country, Archibald Cockburn. The two officers were more ambitious, they expanded this Bridewell into a all-in-one facility following the principle: “that the Jail and Workhouse, or Bridewell, should be united and laid out in divisions, in such a manner as to afford one for the reception of felons, with a suitable area and court belonging to it; another for young offenders, with a court and area; a third for debtors with the same conveniences; and, lastly, a Bridewell, consisting of separate accommodations for men and women, with proper courts and areas: And, that there may be no communication between the refractory and incorrigible, and such as are less hardened, distinct places of abode are to be prepared for each.”¹³ It was then proposed that this new combination goal and Bridewell could also serve the neighbouring counties. Furthermore, as “Edinburgh being the place where all the Supreme courts meet for the dispatch of business, its jail ought not to be regarded as a local and partial accommodation merely, but as a reception for prisoners of the nation at large.”¹⁴ In this aspect, the proposed new prison could be understood as the Scottish counterpart of the national penitentiary proposed for London in the 1779 Act.

¹² James Craig, *Plan for a General Bridewell* (Edinburgh: 1780), p. 1.

¹³ David Steuart and Archibald Cockburn, *General Heads of a Plan for Erecting a New Prison and Bridewell in the City of Edinburgh. Offered to the Consideration of the Public, by the Right Honourable the Lord Provost of the City of Edinburgh, and Archibald Cockburn* ([Edinburgh]: 1783), p. 7.

¹⁴ *Ibid.*, p. 13.



Plan of the proposed new prison for Edinburgh

Source: Steuart and Cockburn, *General heads of a plan for erecting a new prison and Bridewell in the city of Edinburgh, 1783*

The published material includes a description of the defects of current prisons in Edinburgh, a plan for a new prison, and some management ideas. This plan clearly follows the Howardian reform principles. The plan shows a three-storey radial structure with three arms and a central tower for keepers. The most significant feature is the segregation of different sexes and prisoners of different degree of criminality, an arrangement which was already present in Craig's plan and was much developed here. There are three parts: the prison for felons, in which men and women are separated in two courtyards; the prison of debtors; and the Bridewell, in which men, women and boys were separately accommodated.

In the Edinburgh proposal, special consideration is given to security: "the places allotted for felons, and such others, from whom there may be any danger of an attempt to escape, are all to be laid to the division-walls; so that if they should succeed in breaking through the wall of their own apartment, it will still remain for them to break through, or get overt the outer-wall, which it is next to an impossibility they should accomplish without detection."¹⁵ On the other hand, the spacious airing yards reflect the emphasis on ventilation and the possibility for a further expansion of prison cells.

The keeper's house was located in the central tower and detached from the courtyards. Two main advantages could be obtained from this layout: security of keepers and central surveillance. Insecurity was a continuing problem in British prisons. The Gordon Riots that took place in Newgate prison in 1780 served to raise the guard's concerns for security. By setting their house in the fortress-like central tower, the governors could easily defend themselves.

Thomas Markus has pointed out the originality of the idea of central surveillance: "the situation of this house (the jailor's house) being central, will enable him, from the second storey, to look into all the different subdivisions, and discover immediately if any thing amiss is going on" also it "will render the number of inferior officers and servants much smaller than would otherwise have been necessary."¹⁶ Markus argues that the utilization of central surveillance is not only in advance of Blackburn, who is regarded by Evans as the inventor of this inspection principle, but also uncannily anticipates Bentham's ideas on central surveillance and economy of staff by nine years.¹⁷ But as we have seen, to some extent, Craig's 1780 design can also be seen as an early implication of this principle in prison

¹⁵ Ibid., p. 7.

¹⁶ Ibid., p. 8.

¹⁷ Markus, *Buildings & Power: Freedom and Control in the Origin of Modern Building Types*, p. 122.

design although it was quite incomplete compared to Stuart, Blackburn and Bentham's designs.

With regard to the management, the proposal suggests "there must also be a Surgeon and a Chaplain, with such an allowance as can be afforded to each; the former to attend upon the sick, and the latter to preach every Sunday to the people in the House, on other days, to wait on any of them, as occasion may require." It also insists that "the servants employed, from the highest to the lowest, shall have fixed salaries; that it shall not be in their power to reap the smallest profit or advantage from the furnishing to the prisoners, or the general consumption of the Bridewell or Jails."¹⁸

The Steuart and Cockburn scheme is an embodiment of Howardian principles in Scottish prison reform. Its stress on segregation, airing yards, surgeon and chaplain and the fixed salaries of keepers is close to those of English reformers. Unfortunately, this did not proceed beyond the planning stage, as Steuart's term of office as Lord Provost came to an end in 1782, and his successor as Provost had no interest in continuing this ambitious plan. Edinburgh had to wait a further nine years to see the erection of a new Bridewell.

3.1.3 The 1791 Act of Parliament

In 1788, Thomas Elder was elected as the new Provost of Edinburgh and shared with David Steuart an enthusiasm for building a new prison. A petition was made to the House of Commons, and in 1791 "An Act for Building and Maintaining a Bridewell and Correction-house, in and for the City and County of Edinburgh" was passed in the parliament. Different from the 1782 proposal which gives prominence to the architectural design, the 1791 Act stresses the regulations and policies in both constructing and managing the Bridewell. It also rejects the idea of combining jail and bridewell together, proposing a new gaol or prison be erected adjacent to the bridewell.

A site at Calton Hill was nominated for this building "in regard to air, dryness and healthiness, and every other desirable circumstance connected with such an

¹⁸ Steuart and Cockburn, *General Heads of a Plan for Erecting a New Prison and Bridewell in the City of Edinburgh. Offered to the Consideration of the Public, by the Right Honourable the Lord Provost of the City of Edinburgh, and Archibald Cockburn*, p. 11.

Establishment.”¹⁹ It was also a result of public debate about whether a jail could and should occupy a visible, central city site, or a peripheral site. The choice of Calton Hill is a compromise between the two opposite opinions. The other advantage is that it was public property, and little expense would be needed for obtain the site.²⁰

The most prominent feature of this Act is its detailed regulation of the work or employment of prisoners. In the English prison reform, working is a crucial factor in turning prisoners into moral and industrious people: it also constitutes one of the biggest differences between the reformed prison and old jails. While the former aimed at reforming, the latter only stressed detention and punishment. For Bentham, this is particularly important, for he regarded the labour of prisoners as a resource mutually beneficial to both the prisoners and governors. But this principle did not gain easy acceptance in Scotland, perhaps due to the traditional uninterest and intellectual hostility against prisoners. Thus as late as 1822, we still see Rev. Sidney Smith’s comment in the *Edinburgh Review* that he would “banish all the looms of Preston Jail and substitute nothing but the treadwheel ... or some species of labour where the labourer could not see the result of his toil ... where it was as monotonous, irksome and dull as possible.”²¹ This harsh attitude was shared by a large part of public, including Sir Walter Scott, who argued that prisons “should be places of punishment, and that can hardly be if men are lodged better, and fed better than when they were at large...As to reformation, I have no great belief in it, when the ordinary classes of culprits, who are vicious from ignorance or habit, are the subject of the experiment.”²² This negative temper obstructed certain aspects of the reform. J.J.Gurney and James Neild’s inspection of Scottish prisons in the early 19th century found hardly any prisoners usefully employed. But the Bridewell was an exception: in Gurney’s 1818 visit to Edinburgh he found the prisoners employed in weaving linen, cotton, and woolen stuffs. Indeed, all the bedding and clothing used in the prison were made on site.

This practice can be traced to the 1791 Act, which ordains that “the said commissioners and their committee, shall have power to provide a stock of such tools, materials, or other necessaries as they shall see expedient, for the employment and labour of the different

¹⁹ *An Act for Building and Maintaining a Bridewell and Correction-House, in and for the City and County of Edinburgh*, (1791), 3.

²⁰ Thomas H. Shepherd and John Britton, *Modern Athens Displayed in a Series of Views, or Edinburgh in the Nineteenth Century: Exhibiting the Whole of the Cew Buildings, Modern Improvements, Antiquities and the Picturesque Scenery of the Scottish Metropolis and Its Environs* (Newcastle upon Tyne: Frank Graham, 1969), p. 45.

²¹ Joy Cameron, *Prisons and Punishment in Scotland: From the Middle Ages to the Present* (Edinburgh: Canongate, 1983), p. 49.

²² *Ibid.*, p. 50.

classes of prisoners, in the said Bridewell and correction-house... The work and employment to which the prisoners shall be sent, shall be proportioned to, and consistent with, the sex, age, and ability of each individual; and that the work in which they shall be employed, be as little as possible liable to be spoiled by ignorance, obstinacy, or neglect; and where it is necessary to give previous instruction, that proper persons be employed for that purpose, to whom a suitable gratification shall be given.”²³ And concerning the profit raised by the prisoners’ labour, the Act decrees that “a regular account shall be kept of the work performed by every prisoner, and the profits therefore arising; which profits, after deducting maintenance, clothing, and every other expense attending such prisoner, the annual committee shall have full power from time to time to order to be paid to his wife, or for behoof of his or her family; but in every case, then there shall be neither wife nor family to receive them, or in so far as they shall not have been paid to such wife or family, the said profits shall be divided into three parts, one of which to be given to the prisoner, upon his or his dismissal, either in cash or useful articles, as he or she inclines; another third in six months after, upon his or her producing an authentic certificate, under the hands of one of his majesty’s justice of the peace, that he or she had been honestly and industriously employed since his or her dismissal; and the payment of the last third at twelve months after his or her dismissal, upon producing a like certificate provided always, that no such money shall be paid to such person, unless the governor shall certify to the commissioners or committee, that he or she, on account of good behaviour, is entitled to the whole of the said profits of labour; and if he shall certify that the prisoner was only entitled, on account of behaviour, to a portion of these profits, then such portion only shall be divided into three parts, and be paid in Moieties, in manner and upon the conditions herein-before mentioned.”²⁴

Another point of importance in this Act is the relationship between the governors’ salaries and the work of prisoner. “The salaries and allowances to the governor, governess, and other servants under them, shall depend as much as possible upon, and be proportioned to the quantity of work done and performed by the prisoners, so that it may become the interest, as well as the duty, of such governor, governess and other servants, to take care that all persons under their care and custody be regularly and profitably employed.”²⁵ This combination of interest and duty was strongly supported by Bentham in his Panopticon design, while on the other hand it also met opposition from some reformers, who worried

²³ *An Act for Building and Maintaining a Bridewell and Correction-House, in and for the City and County of Edinburgh*, 5.

²⁴ *Ibid.*, 10.

²⁵ *Ibid.*, 7.

that the profit may lead the governors into the abuse of their rights. Compared to Bentham's rather radical scheme to turn the governors into contactors, the measure in the 1791 Act is a compromise between the two alternative positions.

With regard to the segregation of the sexes and the differentiation between degrees of criminality, the Act requires that "there be a number of cells and apartments constructed, so as to allow of a separation by day and night, of male and female prisoners; and also apartments adapted to solitude and separate labour, and to a greater degree of restraint for refractory prisoners;...also proper yards or airing places, separate and distinct from each other, for different classes of prisoners."²⁶

All these characteristics illustrate the purpose of the bridewell as a site of reformation and correction rather than mere punishment. Compared to other Scottish jails, including the Calton Hill jail that followed it, it conforms much more closely to the models proposed by the prison reformers.

3.2 The Edinburgh Bridewell

3.2.1 The Competition

In August 1790 Thomas Elder and Archibald Cockburn, together with the Duke of Buccleuch, decided to commission William Blackburn as the architect of the new Edinburgh Bridewell. Blackburn at that time had gained national fame and was regarded as the best interpreter of the Howardian principles in prison design. Following his success in the 1782 competition for the national penitentiary, he had designed a number of new prisons around Britain, including Gloucester, Preston, Manchester, Oxford, and Ipswich. He was invited by the town council to make a visit to Edinburgh, and actually set off on this journey. Unfortunately, he died on the way. As a consequence, a competition was held for the design of the Bridewell. Three architects provided designs, James Wardrop, John Baxter and Robert Adam. Finally it was Robert Adam that won this project with a unique Panopticon-like design.

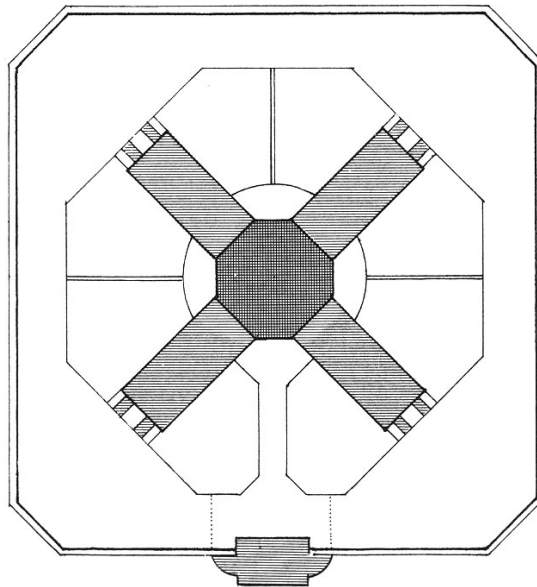
It should be noted that in 1791, the trend of constructing new prisons had continued for

²⁶ Ibid., 4.

about 6 years at local level in British, which means that the design paradigm had developed to a rather mature stage, greatly influenced by Blackburn's contribution. So prominent was his success, that his direct influence can be identified in the designs by James Wardrop and John Baxter.

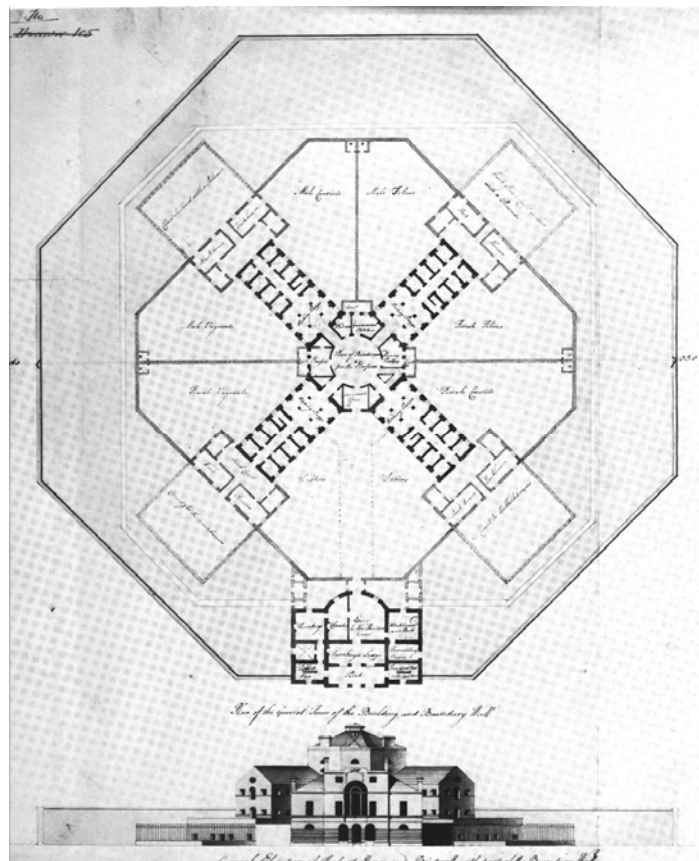
3.2.2 Wardrop and Baxter's Designs

John Baxter's design is a cross shaped building with four radial arms, each with a double-banked corridor of cells for a single class of prisoner. The "Rendezvous for Keepers" is located in the hub, which makes the direct surveillance of the yards and corridors possible. The chapel and keepers' apartments are put on the central axis above the main entrance. It is clear that Baxter's design absorbs the characters of Blackburn's design for Ipswich County Gaol, particularly in plan and elevation.



Block plan of Ipswich County Gaol, William Blackburn, started 1786

Source: Robin Evans, *The Fabrication of Virtue*

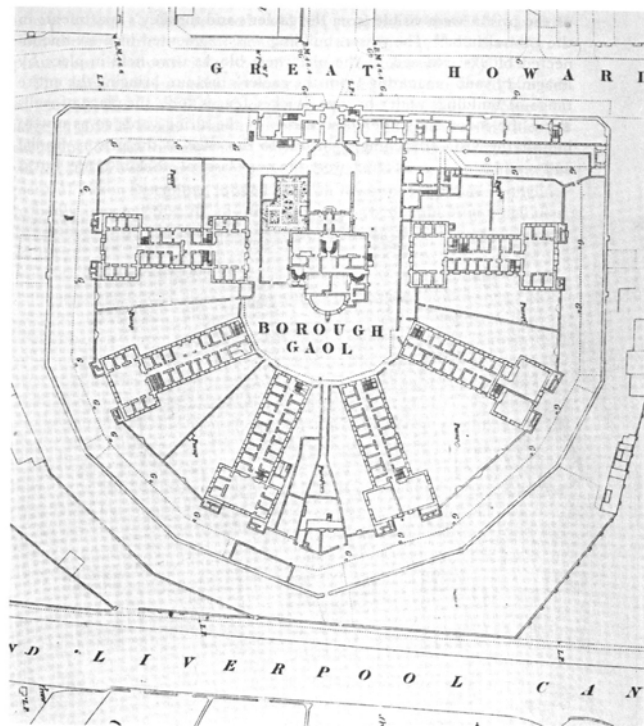


John Baxter's plan for the Edinburgh Bridewell, 1791

Source: Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS)

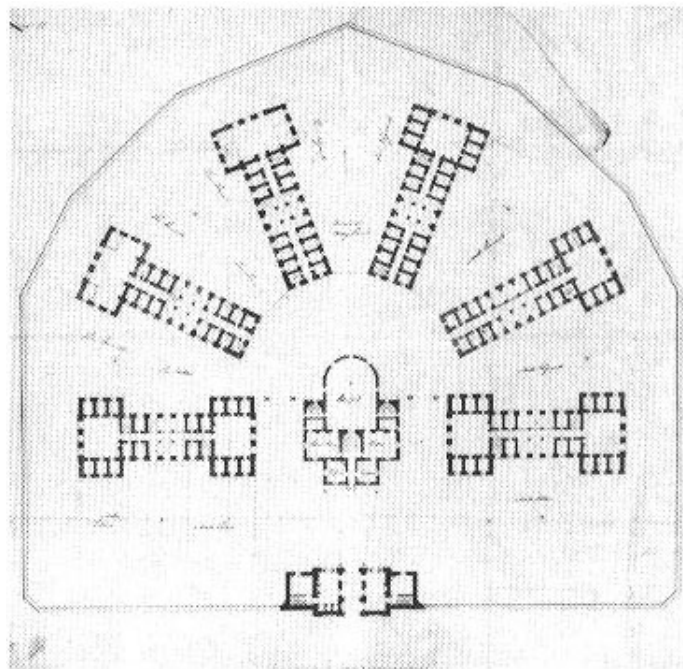
James Wardrop's design also adopts the hub-radial model. Different from the above design, the arms are detached from the hub. One advantage of this model is that more radial arms can be arranged around the hub without sacrificing the central surveillance of the courtyards, and in Wardrop's design, there are six arms altogether. The earliest realization of this idea was in Blackburn's design for Liverpool Borough Gaol built in 1785-9. Again we can see how much Baxter's design resembled that of Blackburn. It was argued that this model might also have been used by Blackburn in his winning design for the 1782 national penitentiary competition.²⁷ Broadly viewed, the 1782 proposal of Steuart and Cockburn also belongs to this type, although there is no surviving information that would confirm a direct influence from Blackburn's design.

²⁷ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 126.



Plan of Liverpool Borough Gaol, William Blackburn, 1785-9

Source Robin Evans, *The Fabrication of Virtue*



Wardrop's plan for the Edinburgh Bridewell, 1791

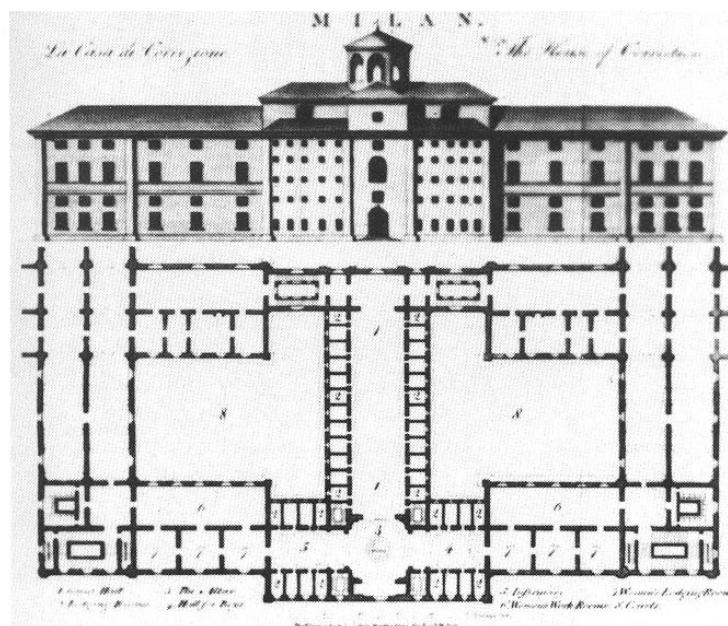
Source: RCAHMS

3.2.3 Robert Adam's Designs

The final winning architect was Robert Adam. He clearly had put great effort into this project. No less than five designs were produced with some other variations. Generally, the whole evolution of his design can be divided into two stages, the classical period with two designs and the Panopticon period with three more designs.

The Classical Phase

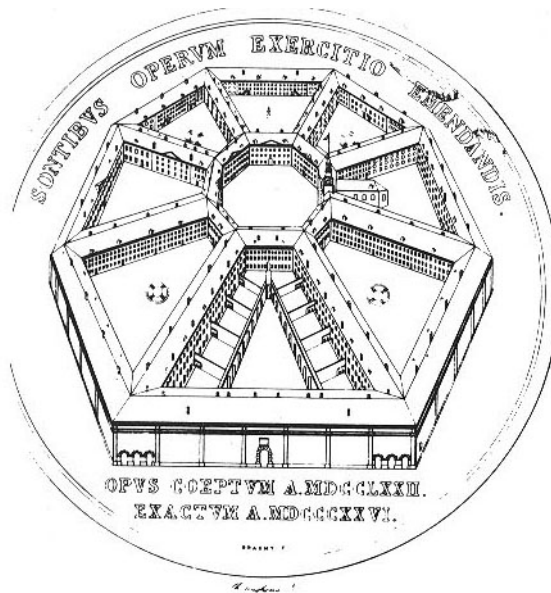
It is very hard now to determine the chronological sequence of the first two classical designs. Unlike Baxter and Wardrop, who adopted Blackburn's mature models which had been consolidated as the paradigm at that time, Adam chose a less novel layout. The general plan is based on symmetrical courtyards with cells on the periphery, a type that can be found in Howard's own ideal prison design. Markus argues that this kind of layout has a continental origin, proposing the House of Correction in Milan as an example.²⁸ The other similarity between these two classical plans is the use of semicircular courtyards, which also has a precedent in continental prisons such as the Maison de force in Ghent, which was visited and praised by Howard.



Plan of the Milan House of Correction

Source: John Howard, *State of the Prisons*

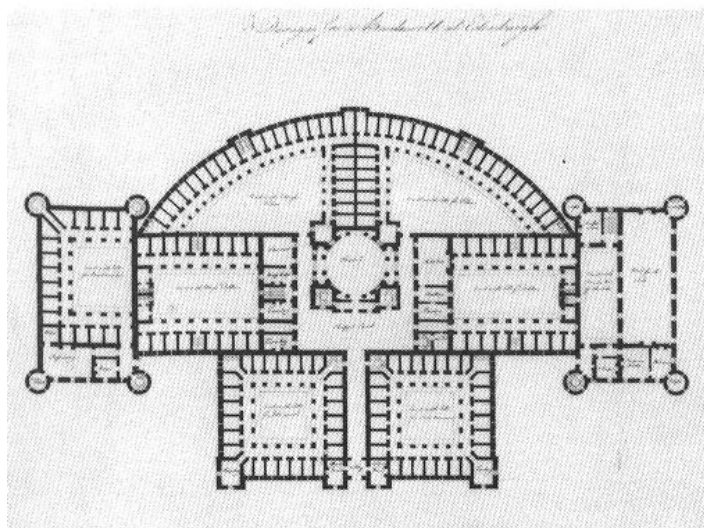
²⁸ Thomas A. Markus and Honor Mulholland, *Order in Space and Society: Architectural Form and Its Context in the Scottish Enlightenment* (Edinburgh: Mainstream, 1982), p. 69.



Aerial view of Maison de force, Ghent

Source: John Howard, *State of the Prisons*

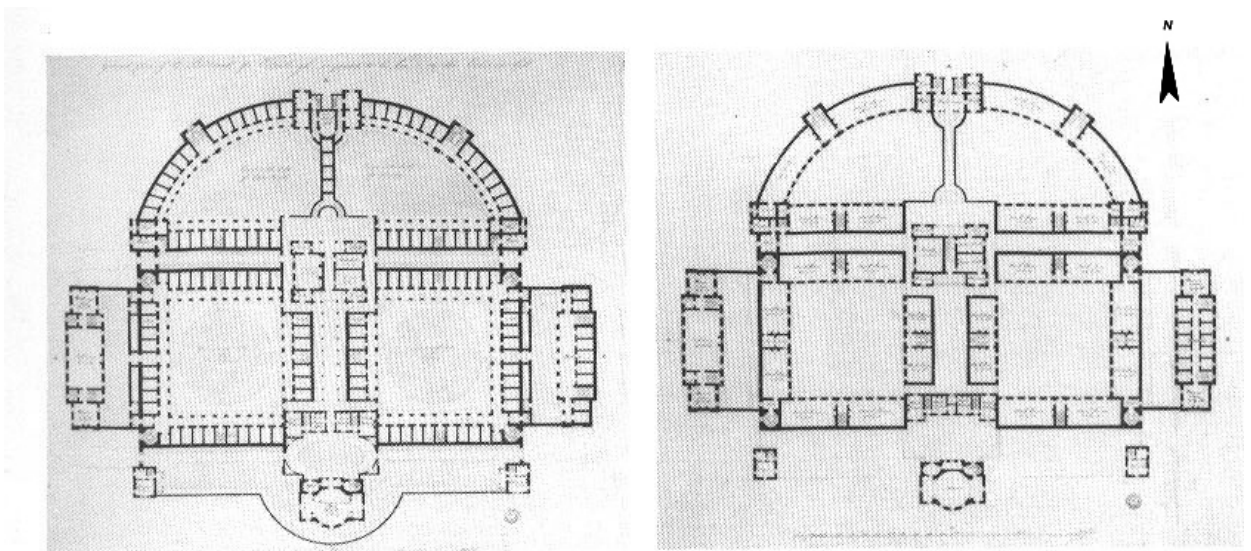
For the first scheme of the two designs, only one plan is available today. It shows six courtyards with peripheral cells, a central tower and two side blocks. Following the segregation principle, the courtyards are assigned to Felons, Villains, Debtors, Idle Women and Idle Youth. The two side blocks serve the functions of infirmary (right) and bedlam (left). The centre of the plan is occupied by a tower that houses the chapel. The main entrance is located on the street front, with a long walkway leading to the central open courtyard, from which access to the other courtyards can be gained.



The first classical design of Edinburgh Bridewell, Robert Adam, 1791

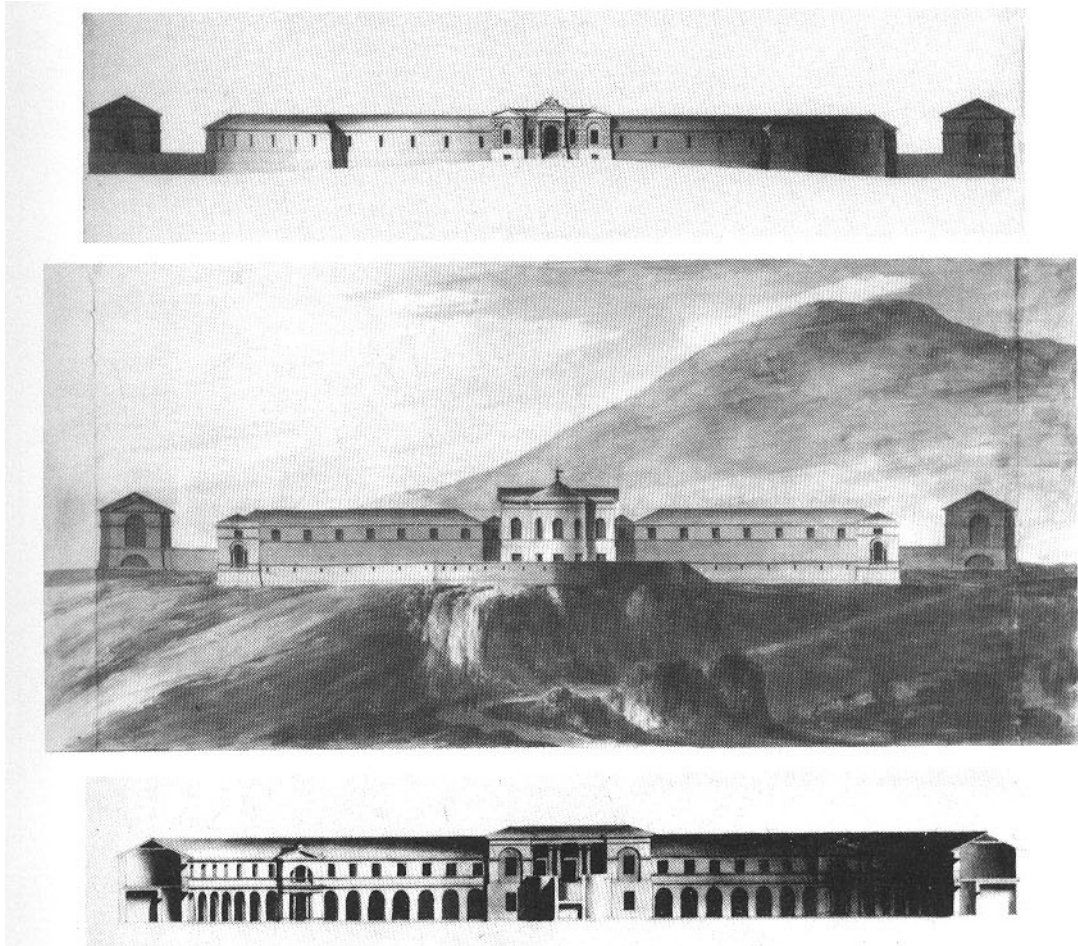
Source: RCAHMS

More material survives for Adam's second design. The major courtyards are reduced to four, one for idle youth, one for women, one for small crimes, and the other for debtors. The two side blocks serve the same function as in last scheme. The chapel is detached from the main building and is located at the southern end of the main axis. The main entrance is shifted to the semicircular, northern frontage, but the long walking way is retained, with steps leading to the central tower. The building has two storeys, the ground floor is mainly composed of prisoner cells, and the upper floor is mainly used for large workrooms. In this way, Howard's idea to have prisoners working together in daytime and separated in night could be realized.



Robert Adam's second design for the Edinburgh Bridewell, Plans, 1791

Source: RCAHMS



Robert Adam's second design for the Edinburgh Bridewell, elevations, 1791

Source: RCAHMS

The Panopticon Stage

It appears that at this stage, Adam encountered some difficulty. In a letter to his friend, Pole Carew, he mentioned that the Magistrates in Edinburgh were more inclined to Blackburn's model of prison design.²⁹ This is not a surprise, as Blackburn was nationally recognized as the leading architect in prison design at that time. To win the competition, Adam clearly needed something more powerful. At this time, he was introduced by Carew to the Panopticon scheme of Bentham, which had been published in 1791. After reading the writings of Bentham, he was soon arrested by this new idea and praised it as "the most ingenious plan I ever saw." Enthusiastically, he asked Pole Carew for more help in this

²⁹ Jeremy Bentham and Alexander Taylor Milne, *The Correspondence of Jeremy Bentham. Vol. 4, October 1788 to December 1793; Edited by Alexander Taylor Milne, The Collected Works of Jeremy Bentham* (London: Athlone Press, 1981), p. 299.

subject “to endeavor to influence our Magistrates here, who are attached to Mr. Blackburn’s ideas, and join with me in showing them the infinite superiority of Mr. Bentham’s inspection principle over his, and everything of the kind hitherto thought of.”³⁰ Pole Carew then informed Bentham of Adam’s strong interest in the Panopticon design.

At that period, Bentham was working hard to put his idea into realization. He warmly responded to Adam’s interest in using the Panopticon model in Edinburgh. He even had an idea to become himself a contractor for the future Panopticon prison in Edinburgh.³¹ At the end of May, Bentham wrote to Robert Adam asking him to suggest architectural improvements to his proposal: he also shared Adam’s view that the Panopticon was superior to Blackburn’s models. At the same time as sending some further copies of his books for Adam to distribute among interested parties, he suggested a meeting with Adam in London.³² Adam replied that he would prefer to work on this idea quietly rather than distribute it among the public, because “all the gentry” in Scotland “are architects, they know, or think they know much more than any professional man, be he ever so eminent.” And the scattering of the Panopticon idea may give them the chance to produce “a million Panopticons, fraught with every kind of absurdity... and would end in their executing perhaps the worst design of the cluster.” He also acknowledged that “the alteration I have made, may perhaps be honoured with your approbation, or at least may furnish hints for your to consider and improve.”³³ At last he mentioned that he had started working on the “principle of invisible inspection” and proposed to have a model made in London. No information indicates the further communication between the two persons. We do not know how much Bentham was involved in the design. But Robert Adam did adhere to the Panopticon idea, and radically transformed his early design.

According to the surviving materials, Robert Adam made at least three Panopticon designs besides the final realised one. While plans of the early three designs are available today, the original plans of the real building were not kept. However the 19th century city map provides information of the layout of the building. The early three designs were not clearly dated. One of the plans is marked 1791, but there is not enough information to determine the sequence of the three designs definitely. Considering the different sizes of the three designs, and the fact that the built Bridewell was smaller than any one of the three

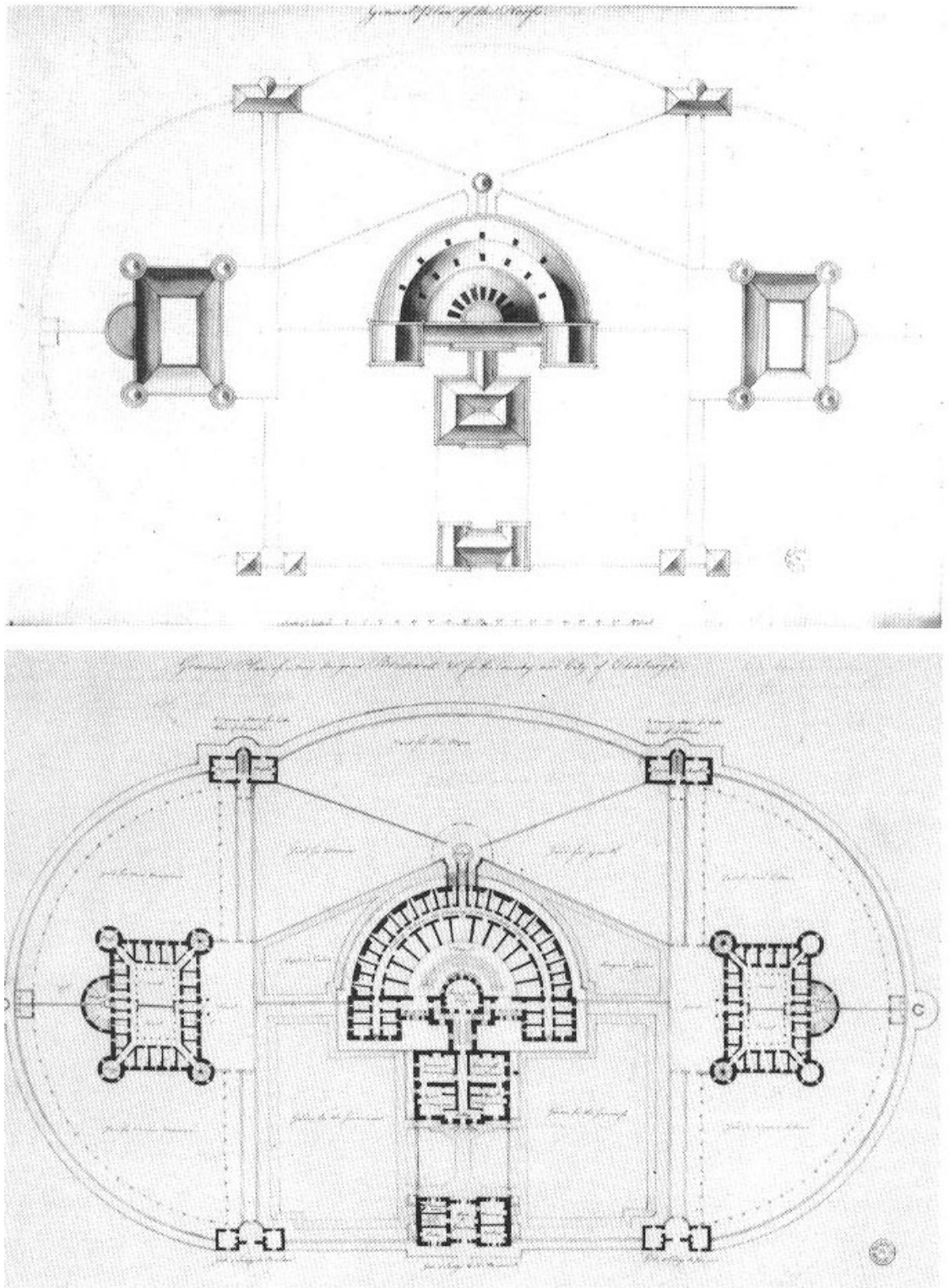
³⁰ Ibid.

³¹ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 107.

³² Bentham and Milne, *The Correspondence of Jeremy Bentham. Vol. 4, October 1788 to December 1793; Edited by Alexander Taylor Milne*, p. 306.

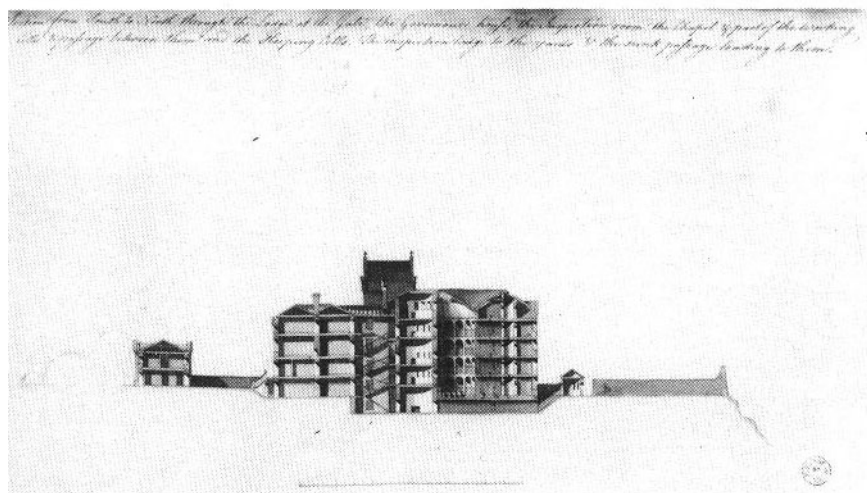
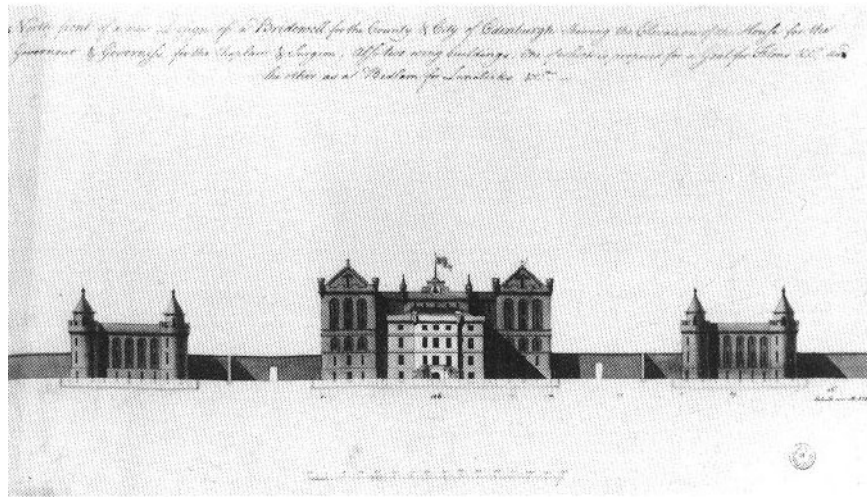
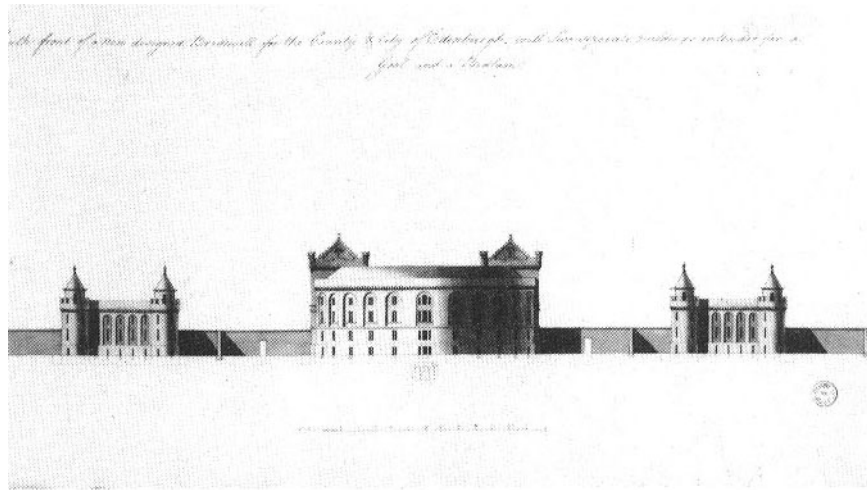
³³ Ibid., p. 310.

designs, it is very possible that these designs were produced continually with diminishing size. I will discuss these plans according to this conjectural sequence.



Robert Adam's first Panopticon design, plan, 1791

Source: RCAHMS



Robert Adam's first Panopticon design, elevation and section, 1791

Source: RCAHMS

Robert Adam's first and also the largest design consists principally of four parts: a semicircular Panopticon prison with four storeys, a block for the gaoler's apartment on the south side, and two detached side blocks. The chapel is incorporated into the semi-circular block. As Bentham proposes, the atrium space between the inspection tower and cells is used as a chapel with tiered concentric pews, enabling the chaplain to instruct the prisoners from the central tower.

Although the central block is generally based on the Panopticon model, Adam introduced a major change to Bentham's original plan. Workrooms are inserted between the peripheral cells and the inspection tower. This would enable the prisoners to work together in the workrooms in daytime and sleep in solitary cells in night. This was the normal arrangement in Howardian prisons and was adopted in the two early Bridewell designs proposed by Craig and Stuart. Thus the introduction of workrooms in the Panopticon Bridewell could be read as a compromise to the Howardian model. This aspect will be discussed in detail later.

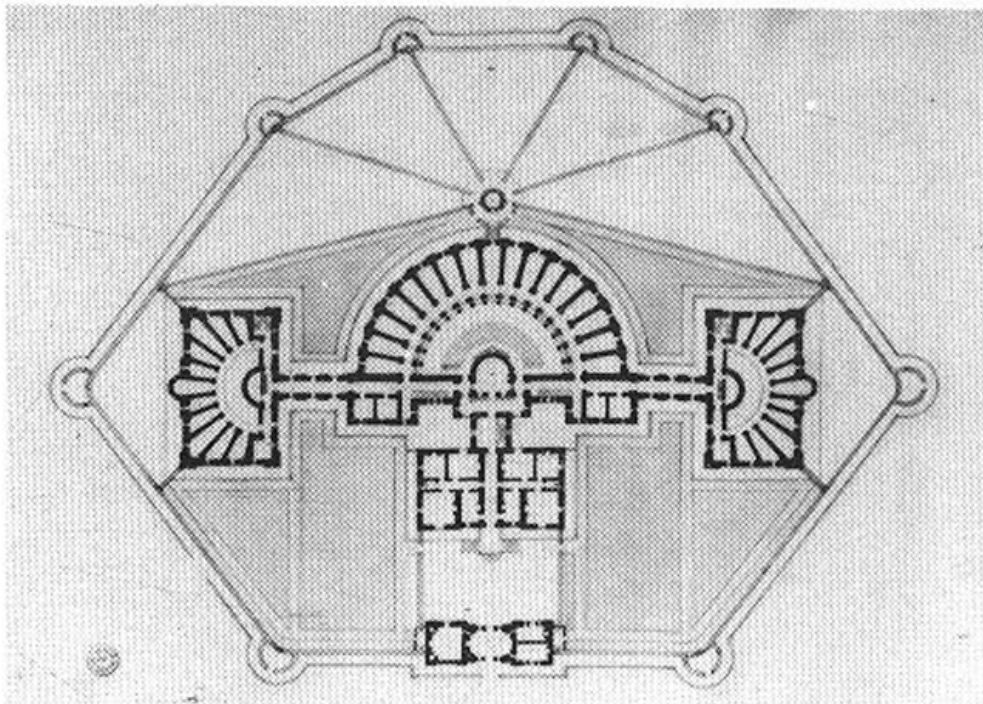
One serious problem brought by the introduction of the workrooms is that Bentham's idea of complete surveillance of all prisoners at any time is no longer possible. Although the workrooms are still under invisible inspection from the tower, the surveillance of the sleeping cells is sacrificed. The other problem is that the increase in the depth of the rooms largely reduces the light entering the workhouses, which do not have windows facing outside and may, in consequence, lack the natural light needed for effective surveillance. In compensation, the one side facing the inspection tower is largely open, separated from the internal space only by iron railings. But this could not change the fact that the one essential characteristic of the Panopticon model, uninterrupted surveillance at all time, has been undermined very heavily. It was not surprising that Bentham would be very unsatisfied with this change.

Different from the central block the two side blocks adopt the traditional courtyard model, with four turrets on the corners and a hemispherical chapel on the side. Their form represents strong Scottish character.

One of the principal differences between Bentham's Panopticon and the normal Howardian prisons is that the segregation of different classes of prisoners cannot be represented directly in the Panopticon. As this principle was of great significance for early

prison reformers, it is not hard to imagine why they were not satisfied with Bentham's scheme. Howard clearly pointed out this problem in his comments on the Panopticon. Nevertheless, the segregation in Adam's Panopticon design is still represented in the separation of courtyards, in which bedlamites, women, debtors, felons, convicts, idle men and youth and sick are all assigned a specific yard. Even here, the invisible inspection is loosely used by setting a one-storey inspection house at the hub of the four courtyards.

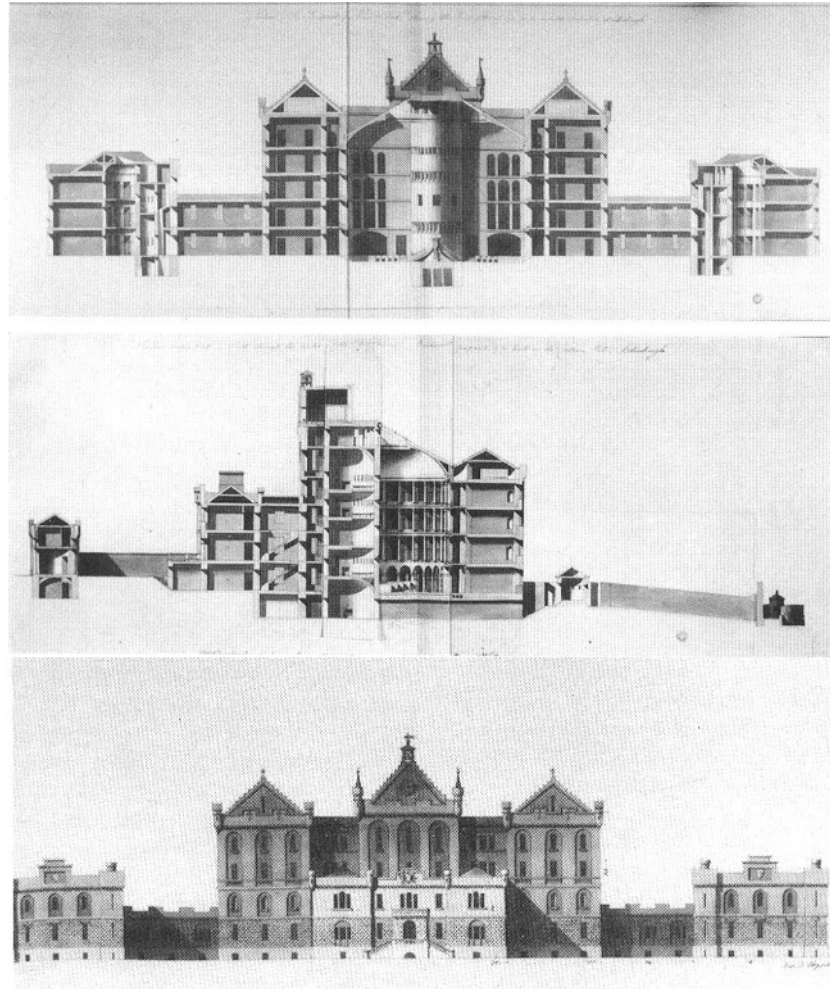
Another radical transformation is in the elevations. Adam abandoned the former classical style and replaced it with a castle style with stepped gables, corner turrets and battlements. It is argued that the Edinburgh Bridewell is the only public project for which Adam used the castle style, a style he usually saved for private mansions. It seems that Adam wanted to use this style to produce an appearance of permanence, endurance and security that was compatible with prison architecture. But the public did not appreciate his intention; some were suspicious that the fortress-like architecture would create a sort of Bastille, and be used for secret and tyrannical purposes.³⁴



Robert Adam's second Panopticon design, ground floor plan, 1791

Source: RCAHMS

³⁴ Shepherd and Britton, *Modern Athens Displayed in a Series of Views, or Edinburgh in the Nineteenth Century: Exhibiting the Whole of the Cew Buildings, Modern Improvements, Antiquities and the Picturesque Scenery of the Scottish Metropolis and Its Environs*, p. 44.

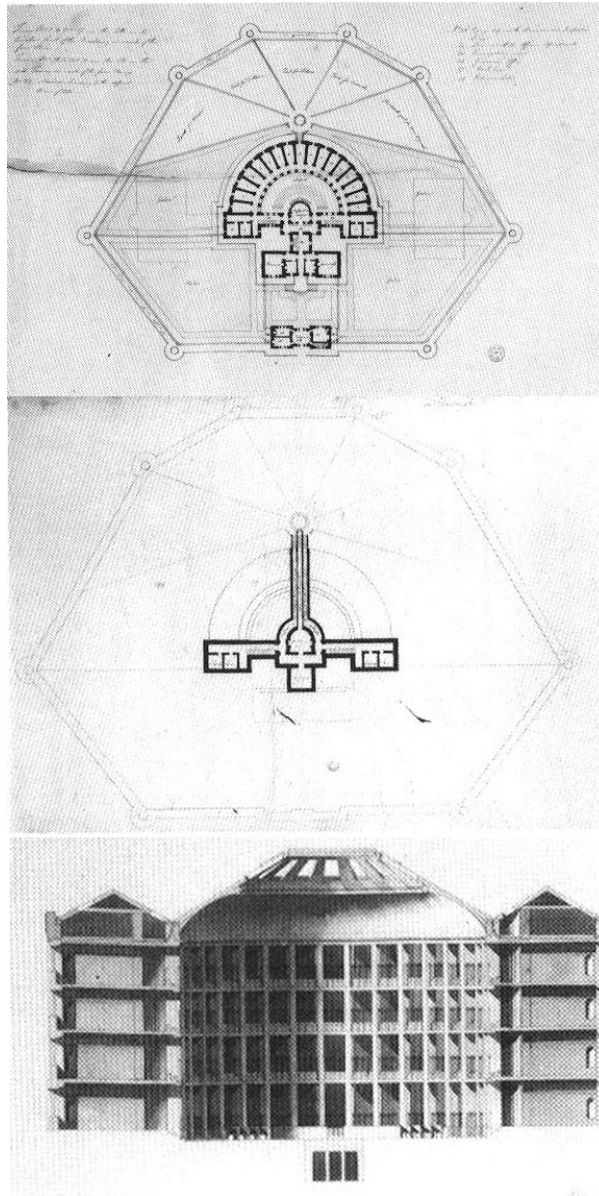


Robert Adam's second Panopticon design, elevation and section, 1791

Source: RCAHMS

The second design made by Robert Adam implements Bentham's original idea most thoroughly. In the central Panopticon block the workrooms were removed. It is consistent with Bentham's idea to have group cells, for day and night use, under continuous surveillance. One interesting point is that the two side blocks also use the Panopticon layout although the outer shape is rectangular. The principle of invisible inspection is carefully implemented, and the slit windows on the central tower are carefully designed to allow only one-way vision from the center outwards.

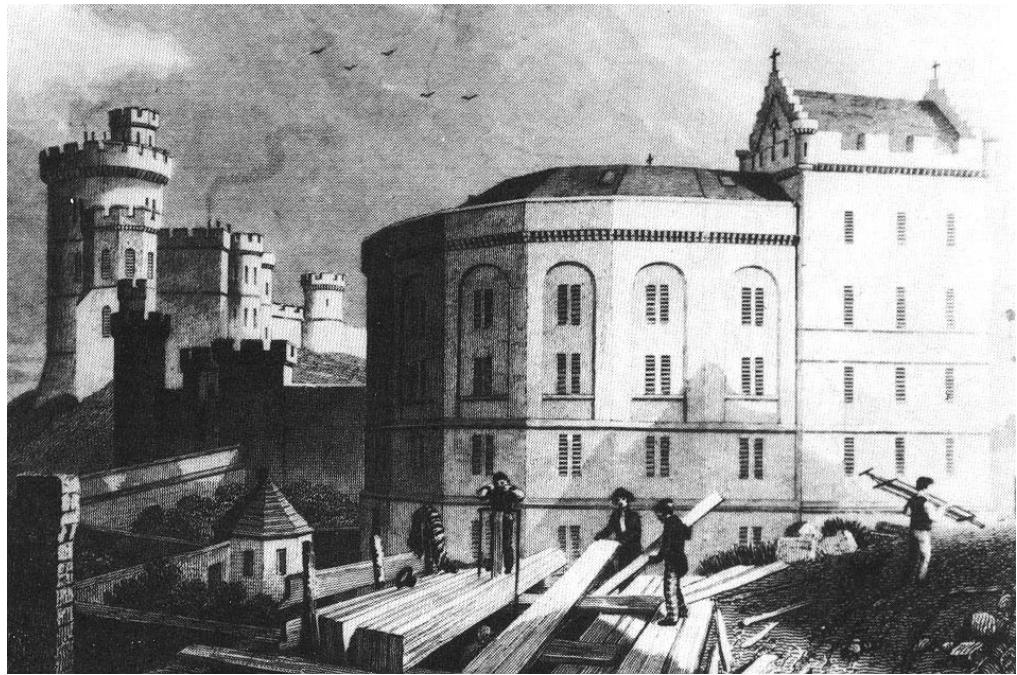
Adam enriched the interior design of the central block by adding a Doric column to each square pier. He also connected the two side blocks to the central block with corridors. With a smaller size, the general plan is more compact than the first one.



Robert Adam's third Panopticon design

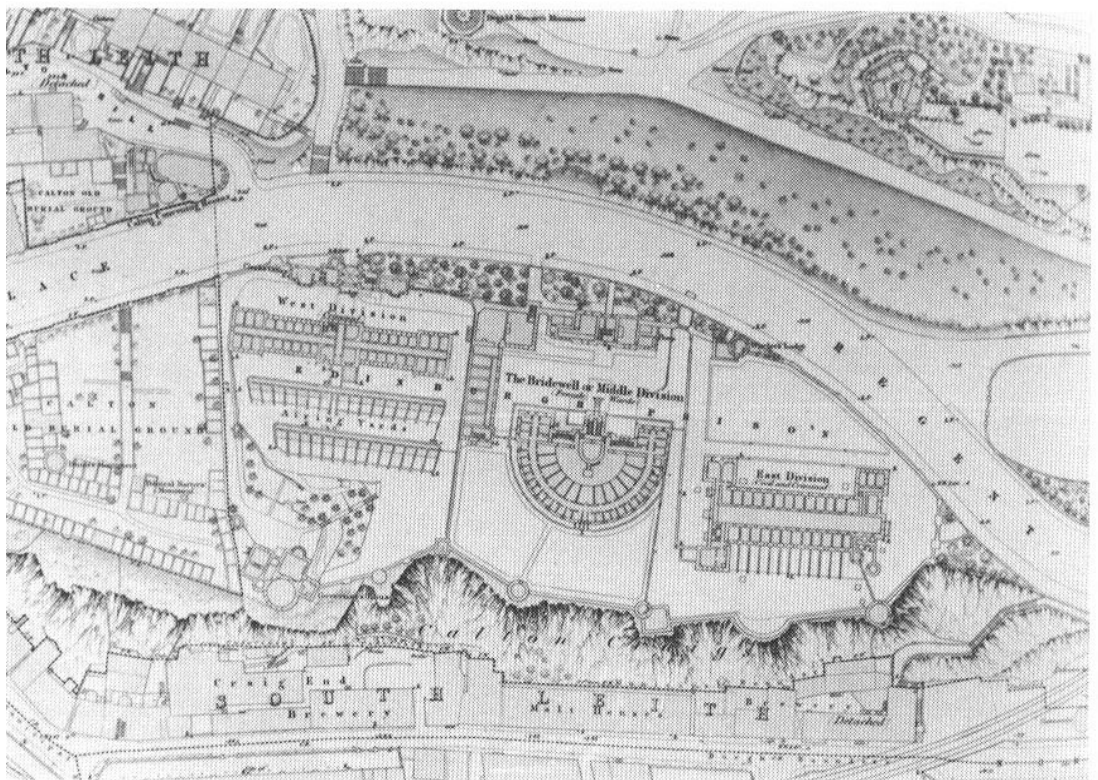
Source: RCAHMS

The third Panopticon scheme of Adam omitted the two side wings, clearly due to economic considerations. Another change is the simplified interior decoration, with the arcade on the ground floor of cells are following the same type as upper floors. Meanwhile all the former Doric columns are replaced by square piers, which give a stronger feeling of simplicity and unity. A plan for an underground level is provided, indicating the connecting corridor from cells to courtyards. The former space for side blocks is now marked as garden. The size of the governor's house is reduced by half, and split to provide apartments for both a governor and governess.



The completed Bridewell

Source: Shepherd and Britton, *Modern Athens displayed in a series of views*



The Edinburgh Bridewell complex

Source: *Ordnance Survey Map, 1852-54*

It was the central block of the first design that most closely resembles the Bridewell as ultimately built, with work rooms returned to their original positions. But with regard to the size, the third version was the closest. The pictures from *Modern Athens* show that the two side blocks were finally omitted. The block housing the governors' house was not built either. A map dating from 1852 shows there were only two courtyards in the Bridewell. These reductions may have been caused by financial constraints and by the particular difficulties posed by the Calton Hill site.

Robert Adam did not see the completion of the Bridewell, as he died suddenly in 3rd March, 1792. His brother James Adam took over the job and the Bridewell was finally completed in 1796. It seems that Bentham was informed by his brother, Samuel Bentham, that the plan had been changed and the invisible inspection principle largely compromised. Clearly, Bentham was greatly dissatisfied with this outcome. In July 1792, he sent a letter to James Adam, asking for an urgent meeting. The letter was written in a strong and unpleasant tone. In a later letter to one of his friends, Bentham also accused Robert Adam of claiming "the Panopticon plan is spoken of as thing of his, executed at Edinburgh and by him."³⁵ This is not the first time that Bentham had been angry with somebody who had claimed the authorship of the Panopticon idea. Indeed, the architect who had collaborated with him in drawing the prison in *PostScript* had been attacked by him for the same reason. For a man who spent 20 years on this subject, this kind of sensitivity is perhaps unsurprising.

Nevertheless, the Bentham brother's contact with James Adam achieved nothing, and the architect refused to change his brother's design. In September 1793, during the construction of the prison, Samuel Romilly sent Bentham an illustrated letter describing the defects that had resulted from the deviation from Bentham's original idea. He wrote that "it differs from your plan very materially in this respect that the cells in which the Convicts are to work are not placed at the outer extremity of the building but look upon the annular well in the Center of which the Inspector's room is placed. At the outer extremity are cells in which the convicts are to sleep and in which they are to be in solitary confinement and between the two ranges of cells there is a passage into which the doors of both cells open but as these doors are not facing each other there is no thorough light as in your design nor the same free circulation of air."³⁶ It was a serious disappointment that the first built Panopticon was compromised in this way. Nevertheless, of all the prisons constructed since the initiation of

³⁵ Bentham and Milne, *The Correspondence of Jeremy Bentham. Vol. 4, October 1788 to December 1793; Edited by Alexander Taylor Milne*, p. 374.

³⁶ *Ibid.*, p. 469.

prison reform, the Edinburgh Bridewell remained the only one to implement the Panopticon idea on a large scale.

3.2.4 A Comparison of the Edinburgh Bridewell and Bentham's Panopticon

Although Bentham was quite dissatisfied with Robert Adam's design of the Edinburgh Bridewell, he must have accepted the fact that the Edinburgh Bridewell was the only large Panopticon-like building ever built in Britain. Its architect was praised for putting an essentially impractical idea into practice.³⁷ The compromise Robert Adam adopted illustrates the conflicts between Bentham's radical idea and more conventional view of prison reform supported by Howardian principles. A more detailed comparison between Bentham's Panopticon scheme and Robert Adam's Edinburgh Bridewell will illuminate the tension between the two sides more clearly.

At first sight, the most prominent architectural difference between the two is that the Panopticon is a circular building and the Edinburgh Bridewell is a semicircular building. This is mainly determined by the different scales of the structures. The Panopticon in Bentham's *Postscript* was considered as a national penitentiary, intended to accommodate no less than 1000 prisoners. In the plan drawn by Willey Reveley, therefore, there were some 288 cells on the circle. Clearly, the Edinburgh Bridewell did not need such a big scale. In the executed plan there were 104 cells on the half-circle, and a further 40 in the traverse section. But even these 144 cells were too much for Edinburgh sometimes, and as a later report of Gurney and Joseph John shows, many of the cells in the upper floor were used as storerooms rather than living cells.

The Panopticon is always called the symbol of Utilitarianism in architecture. In modern architectural vocabulary, Utilitarianism, in many aspects, is regarded as the synonym of functionalism. So can we call the Panopticon a symbol of functionalism? Although the equation between Utilitarianism and functionalism is disputable, it should not be denied that the Panopticon is quite functional for its time. Its shape, spatial organization and even the size of windows are all decided by practical requirements, while the traditional decorative

³⁷ Ronald MacInnes, "Robert Adam's Public Buildings," *The journal of architectural heritage society of Scotland*, no. 20 (1993): p. 17.

elements are reduced to the minimum. Moreover, since the shape of the Panopticon is circular, quite rare in ordinary buildings, it represents a challenge to its designers, for there are not many examples to follow. By adding a transverse section to the half-circle, Robert Adam made it possible to give the Edinburgh Bridewell a normal façade which was not possible for Bentham's scheme.

It should be noted that the Edinburgh Bridewell was one of Adam's biggest public projects. Although he was given the post of Surveyor to the King in 1761, it brought him no commissions for any important public buildings. Thus Adam's ambition in the public domain met no opportunities in his stay in London. But this situation did not extinguish Adam's dream of creating "megastructure." It can be detected from his proposals for multiple public projects such as the design for North Bridge in 1751, the sketch design for Calton Hill viaduct in 1791 and his early design for the Edinburgh Bridewell. One common character of these projects is the huge size, which almost renders these designs impractical. It clearly shows Adam's vision of grandiose public buildings. It follows, therefore, that he would not give up the opportunity to fulfill his dream in the Edinburgh Bridewell.



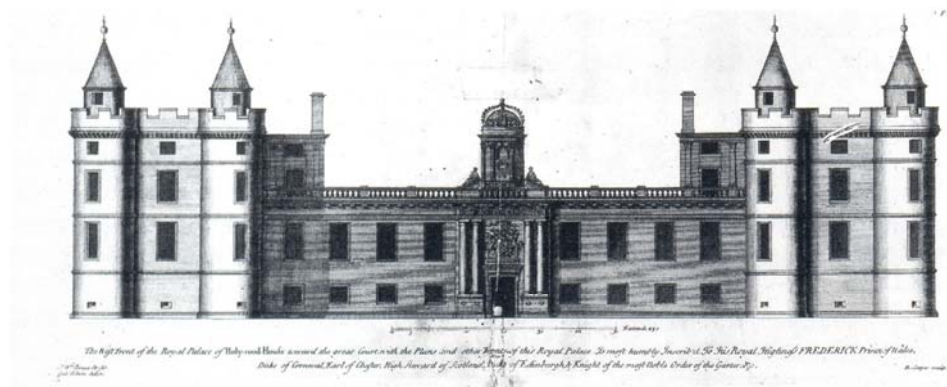
Robert Adam's sketch design for Calton Hill viaduct, Edinburgh, 1791

Source: Ranald MacInnes, "Robert Adam's Public Buildings"



North elevation of Robert Adam's unexecuted scheme for the Edinburgh Bridewell

Source: RCAHMS



West elevation of Holyrood Palace

Source: RCAHMS

Ronald MacInnes has pointed out the similarity between the façade of Adam’s first Bridewell design and Holyrood Palace.³⁸ Although this similarity was largely impaired by the omission of the two side blocks, it does illustrate Adam’s intention to enoble a pragmatic public enterprise. Compared with his early design, we can find that the general structure with rectangular blocks in front and half-circle block in the back was never changed. Here, the functional requirement coincided with Adam’s commitment to architectural form, which is much weaker in Bentham’s scheme.

We have mentioned that the castellated effect of the Edinburgh Bridewell was so extraordinary that many people thought it was a Bastille. This impression might largely derive from the fortress-like façade, the rather large volume of semicircular element and also the loop-hole windows. These windows represent another difference between the Panopticon and the Edinburgh Bridewell. In Bentham’s scheme, the windows are much larger, because there must be enough light in prisoner cells for the governors to inspect the cells clearly. Bentham even envisaged that these large windows with glass would make the Panopticon like “a cage, glazed – a glass lantern” rather than an intimidating prison. The Panopticon would then become a pleasant decoration for neighbouring areas. Contrary to this joyful image, Adam’s windows stress the function of this building as a confining enterprise, designed to make an forbidding impact on the public.

Behind this formal difference also lies the functional factor. Bentham’s big windows were mainly for surveillance, while in Adam’s design, with the surveillance of the cells sacrificed, large windows become unnecessary. As mentioned above, this is caused by the

³⁸ Ibid.

incorporation of work-rooms between the central chamber and living cells, a compromise between the Panopticon and the Howardian model. It is clear that Howard was much more famous than Bentham at that time. The Howardian principles had been largely implemented around England since the passing of the 1779 Act, while Bentham's Panopticon writing was published more than ten years later in 1791. Only a small circle of people knew of the idea. The Scottish officials were mainly supporters of the Howardian model, as they originally commissioned Blackburn, the best interpreter of Howardian principles, to be the designer for the Edinburgh Bridewell. On the other hand, Robert Adam was also acquainted with Howardian prisons. On his way back to Scotland in May 1791, he visited the Baily prison in Manchester, a standard, radially-planned prison designed by William Blackburn. Today, it is hard to see whether it was the governmental pressure or Adam's own intention that led to the inclusion of work rooms, behind which lies the crucial difference between Howardian and Utilitarianism ideology.

Both Bentham and Howard regarded working as an important way of reforming prisoners and idle people in prisons. Actually this was not a new idea. Early in 16th century, England had passed several Acts to punish vagabonds including beggars, strumpets, gypsies, jugglers and so on. The institutions used to reform these people were the bridewells or correction houses. The general assumption was that the misdemeanours of these criminals and vagabonds were caused by their moral defects, of which idleness was the most serious problem. The reformers believed that working could cultivate good habits in these persons, elevate their moral standard and at last reform them into industrious workers. In this respect Bentham and Howard shared similar beliefs.

The only discrepancy was on the venue. Howardian model requires all prisoners to work together in workrooms in the day time and sleep solely in the separated cells. But Bentham insisted that prisoners should both sleep and work in the cell, and each cell should accommodate two to four persons. Here is one of the focuses of disagreement: whether the prisoners should be confined in solitude or not.

Solitary confinement was one of the most important issues in prison reform. Most reformers supported this measure, seeing it as a strategy that could both prevent contagion and also promote mental redemption. The former is based on common sense, but the latter is based on a strong belief of the power of religion. Here the word contagion has double meanings. The one is the contagion of physical disease and the other moral disease. Clearly

the separated cells can prevent the jail fever spreading from one patient to his roommate; on the other hand solitary confinement can decrease the mutual influence of prisoners, ridding the prison of its reputation as a school of vice. It was for the second reason that the classification and segregation of criminals according to the degree of their offence, and solitary confinement were strongly supported by Howardian reformers.

The other function of solitary imprisonment as promoting mental reform had a strong Christian background, of which Howard was the most distinguished representative. As early as 1724, a French monk, Jean Mabillon had suggested the building of monastic prisons in each province. Different to the secular jails, these religious prisons would have strict rule of solitude, which made the cell an abode for the soul in communication with god, not with man.³⁹ This stress on spiritual power was further developed in the writings of later reformers. They argued that solitary confinement could control the passion of inmates and ennoble their sentiments. It also provided prisoners with the opportunity to reflect on their mistakes. Through self-contemplation, inner compulsions would be finally cleansed, and the prisoners' souls would change from evil into good. This confidence in spiritual force and religious awakening was shared by many reformers. Thus in the Edinburgh Bridewell every cell was given a bed and a bible. This enthusiasm for solitary confinement culminated in Johas Hanway's essays *Solitude and Imprisonment* and *Distributive Justice and Mercy*. It also found its place in the 1779 Act, in which solitude is used as the initial stage of felony sentences.⁴⁰

But the dark side of solitude was never neglected. From the outset critics had pointed out that complete solitude could not instruct but only destroy man: its overwhelming force could destroy those without such inner resources as Christian belief. Howard was clearly aware of this point. As early as 1777, he had decided that separation in both day and night was impractical and severe, and he suggested group working in day time and solitary confinement in night, a principle followed in many reformed prisons designed by Blackburn.

Against this mainstream, Bentham seems quite unique, because in his later Panopticon writings, solitary confinement is totally abandoned. In his early writings such as *A View of the Hard Labour Bill*, *Rational of Punishment* and more important, the *Panopticon Letters*, the practice of solitude is unhesitantly approved. But in the *Postscript* his attitude reverses, and this measure is unequivocally rejected. Semple regards this as the most important

³⁹ Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 57.

⁴⁰ *Ibid.*, p. 73.

development in Bentham's ideas on penology between 1786 and 1790. One main reason for this transformation is Bentham's consideration of the wellbeing of prisoners. He sees solitude as a "torture in effect." This shows a distinction between Bentham, an atheist, and other religious reformers such as Howard. Bentham did not have a strong belief in religious spirituality and then did not accept the power of "inner force" driven by religious contemplation. He criticized solitary confinement as "productive of gloomy despondency, or sullen insensibility. What better can be the result, when a vacant mind is left for months, or years, to prey upon itself."⁴¹ In his view there is no consequence in condemning the prisoner to a vacuum of self-reflection except driving him to mental collapse. This argument was supported by the story of Comte de Lauzun. Kept in a dark dungeon for nine years at Pignerol, he nearly died of grief when his keeper trod on a spider, his only companion.⁴²

To improve the mind of the prisoners, Bentham argues, "it is by well filling it, not by leaving it unfilled, that I (in Panopticon) should have operated."⁴³ The way Bentham chooses to occupy the vacant minds was to place two, three, or perhaps four prisoners in one cell. Bentham believes that by limiting the contact of prisoners within a small group and imposing invisible surveillance on it, the mutual influence of prisoners could be beneficial rather than pernicious. In Bentham's vision the benefits of his arrangement are remarkable, "Each cell is an island: - the inhabitants, shipwrecked marines, ... partners in affliction, indebted to each other for whatever share they are permitted to enjoy of society, the greatest of all comforts ... Quitting the school of adversity, they will be to each other as old school-fellows."⁴⁴ In this picture, Bentham turns the evil associations of prisoners into beneficial instructions.

The other supportive argument for Bentham's choice is economic advantage. First, by confining more than one inmate in a cell, the number of cells can be largely reduced, and also, as all prisoners worked in their cells, there is no need for extra working rooms. Second, by dividing all prisoners into small groups, the efficiency of the prisoner's work can be enhanced, because the experienced worker can help the newcomers. Moreover, the efficiency of the prisoners' work could be augmented by the introduction of mechanical production and the type of machines designed by Bentham's brother Samuel. Samuel's talent in mechanical design was highly appreciated by Bentham. After returning to Britain in 1791,

⁴¹ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 131.

⁴² Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*, p. 73.

⁴³ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 132.

⁴⁴ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Iv*, p. 71.

Samuel joined Bentham's campaign for the Panopticon and provided several designs for mechanical systems that could integrate the labour of separate prisoners into a machine that would generate power: a man-powered engine. Bentham was fully confident of the efficacy of his brother's invention. He wrote that "the system was in such forwardness that we were upon the look-out for a steam-engine. Human labour, to be extracted from a class of persons, on whose part neither dexterity nor good-will were to be reckoned upon, was now substituted to the steam-engine."⁴⁵

In the context of these calculations, it is not hard to understand Bentham's omission of work rooms and his anger at Adam's modification. It is not only a problem of where the work should be conducted, but also a distinct difference in the understanding of the reform measures. While Howardian reformers placed heavy emphasis on of religious mental power, Bentham rather trusted surveillance and the efficacy of mechanical innovations.

In addition to the workroom, another significant difference between the Edinburgh Bridewell and Bentham's Panopticon is the location of the governor's apartment. In Adam's two earlier designs, the apartments of the governors were attached to the semicircular part. But in the final construction, the apartments were detached from the main body. Like John Baxter's Blackburn-inspired design, Adam put these apartments above the main entrance, which stands as a separate block from the prison building. It has been noted that John Baxter's plan had its origin in William Blackburn's design of Ipswich County Gaol. We have no evidence to explain Adam's modification in this element, but it is clear that his final design is compatible with the Howardian model.

But in Bentham's scheme, the location of the apartment of the governors' accommodations in the main block is of special significance. In the *Letters* Bentham had thought that the governor should live in the central lodge which is "a complete and constant habitation for the principal inspector ... and his family."⁴⁶ But after consulting with his cooperative architect, Willey Reveley, Bentham changed this arrangement in the later *Postscript*. Reveley suggested that the idea of using central lodge as apartment for the governor was impractical. He changed the living place to a quarter abutting on to one side of the circle of cells and projecting from it. This change leaves the central area opened to light and air, and also creates a "dead part" in the circle to adopt for staircase, passages, a vestry,

⁴⁵ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 157.

⁴⁶ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Iv*, p. 45.

and organ, a clock tower, and a belfry.⁴⁷ Despite this change, the governors still live with all prisoners and his subordinates in the same building.

This arrangement has two advantages for Bentham. The first advantage is that, living in the building, the governors could be more easily inspected. It may seem odd that the governor is under inspection as well. But Bentham does stress that the governor should also be inspected by his subordinates. The mutual surveillance is expanded to every one to guarantee the good performance of the institution. The second advantage is that, when the governors are living with prisoners in the same space, it would become his own interest to improve the sanitary conditions of the prison, because he has to breathe the same air as the prisoners. “Encompassed on all sides by a multitude of persons, whose good or bad condition depends upon himself, he stands as a hostage in his own hands for the salubrity of the whole,”⁴⁸ Bentham writes. This rather risky idea could hardly be accepted by Howardian reformers, because preventing disease contagion was one of the most important motives of prison reform. To prevent disease they insisted that classification and segregation should be strictly applied. It was hard for them to imagine placing the governors under the risk of contagion rather than keeping them in a safe place.

Bentham was obviously aware of this problem. But his strategy is to utilize this risk as an impetus for governor to accomplish his duty of keeping the prison as a healthy place, because this is also beneficial for his own interest. Thus the architectural arrangement makes the governor’s interest and duty automatically compatible with each other. Bentham insisted that “to join interest with duty, and that by the strongest cement that can be found.”⁴⁹

Here we touch the core principle of Bentham’s management proposal for the Panopticon besides the principle of invisible surveillance. For Bentham the Panopticon is not only a place for punishment and reformation, but also a resource from which profit can be produced. With a combination of architectural design and management rules the interest and duty of both prisoners and governors can be integrated into a solid whole. Under this idea, Bentham had suggested himself as the governor of the Panopticon. “I would do the whole by contract,” he claimed, “I would farm out the profits ... to him who, being in other respects unexceptionable, offered the best terms.”⁵⁰ Semple argues that these words make Bentham

⁴⁷ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 118.

⁴⁸ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Iv*, p. 62.

⁴⁹ *Ibid.*, p. 125.

⁵⁰ *Ibid.*, p. 47.

the forerunner of modern free-market ideology.⁵¹ Of course, this free-market theory was not new, its most famous advocate was Adam Smith, whose classic work *Wealth of Nations* appeared in 1776, fifteen years before Bentham's publication of *Panopticon Letters*. Clearly Bentham saw himself as a disciple of Adam Smith: "should it be my future to gain any advantage over you, it must be with weapons which you have taught me to wield, and with which you yourself have furnished me; for, as all the great standards of truth which can be appealed to in this line, owe, as far as I can understand, their establishment to you, I can see scarce any other way of convicting you of any error or oversight, than by judging you out of your mouth."⁵²

Bentham's adoption of contract management gives the legal problem of penitentiary a dimension of economy, which is absent in the Howardian model. The Panopticon program then covers the two most important domains of the Utilitarianism: legislation and political economy. Élie Halévy has pointed out that Utilitarian theory in Bentham's time adopted two different doctrines: the natural identity of interest and the artificial identity of interest.⁵³ Adam Smith was the representative of the first and Bentham the second. Roughly speaking this demarcation is acceptable, but not accurate in detail. In the Panopticon the two doctrines both play important roles. The reformation of prisoners belongs to the artificial identity of interest. The prisoners are forced to receive administration and are transformed to industrious persons, who would benefit public interest. Meanwhile the contract management of the governor belongs to the natural identity of interest, for the governor driven by his own interest would automatically keep the prison in a good order and then contribute to the public interest. To achieve this target, Bentham adopts several measures to tie the self-interest of the governor with the duty of managing the prison and reforming prisoners. The special consideration of the location of the governor's apartment is just one aspect of these measures.

In Bentham's contract management, the income of governors depends on the profit gained from the labour of prisoners rather than salaries coming from government. It not only alleviates the economic burden of the state but also benefits the governors who might become rich because of the prison profit. This was one reason for Bentham to suggest himself as the governor of the Panopticon. Actually, the similar doctrine also existed in the

⁵¹ Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary*, p. 134.

⁵² Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.Iii* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), p. 89.

⁵³ Halévy, *The Growth of Philosophic Radicalism*, pp. 15-17.

administration scheme of the Edinburgh Bridewell. As already noted, the 1791 parliament Act of Edinburgh Bridewell had ordained that “The salaries and allowances to the governor, governess, and other servants under them, shall depend as much as possible upon, and be proportioned to the quantity of work done and performed by the prisoners, so that it may become the interest, as well as the duty, of such governor, governess and other servants, to take care that all persons under their care and custody be regularly and profitably employed.”⁵⁴ Here the principle of joining interest and duty is clearly declared as it is in Bentham’s writings. The difference is that in the Edinburgh Bridewell the salaries and allowances of governors are still provided by government, but in the Panopticon they come directly from the profit of prisoners’ labour. Bentham’s intention is to transfer the prison into a reform institution and a productive factory as well.

Here we meet another crucial discrepancy between Bentham and Howardian reformers. Contrary to Bentham’s position, precisely the elimination of contract management was one of the main targets of Howard and his followers. They believed that contract management was responsible for the disastrous situation in traditional jails: “the Political Science student has nowadays no difficulty in seeing that the appalling condition of the prisons in the 18th century ... is to be ascribed less to any culpable neglect of the sheriffs and the Justices ... than to the amazing administrative device ... of converting the keeping of a prison into a profit-making private business.”⁵⁵ Prior to prison reform, most English jails were managed under contract. The jailor always could extract considerable profit from selling drinks or providing special services to prisoners. The position of jailor became so valuable that sometimes people paid for it. This history made Howardian reformers suspicious of Bentham’s idea of contract management. They tended to equate Bentham with the greedy jailors in traditional jails. Although Bentham emphasized the harmony between self interest and duty guaranteed by both architectural layout and regulations, they did not trust his measures and questioned the whole Panopticon scheme. In the 19th century it was the contract management, rather than the invisible inspection that attracted the most vehement attack on the Panopticon. A large part of Bentham’s failure of building a Panopticon prison was ascribed to the Howardian officials’ opposition to this management system

The Edinburgh Bridewell, in contrast, aroused little controversy. This may be attributed

⁵⁴ *An Act for Building and Maintaining a Bridewell and Correction-House, in and for the City and County of Edinburgh*, p.7.

⁵⁵ Sidney Webb and Beatrice Webb, *English Local Government* [Vol. 6], *English Prisons under Local Government* (London; New York: Longmans, Green, 1922), p. 18. Cited from Semple, *Bentham’s Prison: A Study of the Panopticon Penitentiary*, p. 134.

to Adam's compromise between Bentham and Howard's different principles. Behind the architectural alternations is the conflict of two different ideologies in prison reform. Architectural space is deeply integrated into various reform schemes aiming at a rational social order. Starting from the end of 18th century, prison reform clearly represented the enlightenment ambition for improvement. As Foucault argues: "in the 18th century one sees the development of reflection upon architecture as a function of the aims and techniques of the government of societies. One begins to see a form of political literature that addresses what the order of a society should be, what a city should be, given the requirements of the maintenance of order; given that one should avoid epidemics, avoid revolts, permit a decent and moral family life, and so on."⁵⁶ Compared to the Howardian reformers, Bentham represented this character more strongly. Not only was his prison reform scheme backed by a Utilitarian social theory that Howardian ideology lacked, but his reforming ambitions were not confined only to the field of imprisonment. To promote the public utility he was always ready to use his Panopticon, an efficient spatial model, in any possible areas. His aim was broader and deeper than that of the Howardian reformers. As Foucault's words make clear, what he aspired to was "the government of society" rather than mere reform of the prisons.

The failure of Bentham's project of building a Panopticon prison was not the failure of Benthamism. On the contrary, through this process, Bentham's ideas, including his rationale of Utilitarianism and the Panopticon model were largely spread. Together with his growing reputation in foreign countries, his influence in Britain also grew rapidly. Gradually a group of supporters gathered around Bentham and formed a strong intellectual as well as political power which played a significant role in 19th century British government reform. His influence became so strong that many later prisons were claimed to be Panopticon prisons despite the fact that they were closer to Blackburn's model and lacked the significant character of the Panopticon model, the invisible inspection.

To make use of the great advantage of the Panopticon model remained a central concern in Bentham's later reform projects. The most distinguished examples are the poor relief reform and the education reform. In the next part, I will discuss them respectively.

⁵⁶ Michel Foucault and Paul Rabinow, *The Foucault Reader* (Harmondsworth: Penguin books, 1986), p. 239.

4 Utilitarianism and Poor Relief Reform

At the age of 84, Jeremy Bentham died on 6th June 1832, just one day before the Reform Bill received the Royal assent and became law. As many historians recognized, the passing of the Reform Bill symbolized the first half of 19th century as an “Age of Reform.”¹ After a long period of political agitation, the Reform Bill, as a compromise rather than radical innovation, did not mark the end of reform aspirations, but rather started a new series of governmental changes, which, in many aspects, established the basis of modern Britain. In his influential work on 19th century Britain, Halévy regards the decade after 1830 as a period of the Triumph of Reform,² and, in a broader scale, Briggs defines the period between 1783 and 1867 as the “Age of Improvement.”³

Although there is dispute about the role of Bentham and his disciples in these reforms, many recent researchers have identified Benthamism as a central ideological impetus of 19th century governmental transformation.⁴ During the parliamentary reform debates, Utilitarians were not the decisive force, but they were nevertheless the most ardent advocates of reform. The failure of the Panopticon prison scheme made Bentham believe that it was the sinister interests of an aristocratic group that had ruined his plan and impaired the public interest. To solve the problem, the power structure in the parliament must be reformed, and this goal was the basis of the various proposals of the Philosophical Radicals, such as annual parliament, universal suffrage and the secret ballot.⁵ These measures, based on Bentham’s Utilitarian principles, were more radical than the 1832 Act. Even though they were not accepted immediately, they did help to

¹ For one example see Llewellyn Woodward, *The Age of Reform 1815-1870*, 2nd ed., *The Oxford History of England*; 13 (Oxford: Clarendon Press, 1962).

² See Élie Halévy, *The Triumph of Reform, 1830-1841*, 2nd (rev.) ed., *A History of the English People in the Nineteenth Century*; 3 (London: Benn, 1950).

³ See Asa Briggs, *The Age of Improvement, History of England*; 8 (London; New York: Longmans, Green, 1965).

⁴ See Henry Parris, "The Nineteenth-Century Revolution in Government: A Reappraisal Reappraised," *The Historical Journal* 3, no. 1 (1960); L.J. Hume, "Jeremy Bentham and the Nineteenth-Century Revolution in Government," *The Historical Journal* 10, no. 3 (1967); Hume, *Bentham and Bureaucracy*.

⁵ See Joseph Hamburger, *Intellectuals in Politics: John Stuart Mill and the Philosophic Radicals*, *Yale Studies in Political Science*; No. 14 (New Haven: Yale University Press, 1965).

promote the general direction of parliamentary reform in the direction they advocated. Meanwhile, Benthamites now also present on the government side, and several of them became the members of the reformed Parliament. Through their governmental posts they successfully spread the influence of Benthamism into practical reality.

Of all these areas, it was in poor relief that Benthamism's influence was most manifest. Only a few months after Bentham's death a Royal Commission was formed to investigate the general situation of poor relief in England and Wales. Among the members of the commission were Edwin Chadwick, a secretary of Bentham in his last years, and Nassau Senior, a leading economist who was strongly sympathetic to Bentham's ideas. These two determined the fundamental direction of the final report and proposals that formed the basis of the new poor law passed in 1834. The strong similarity between Bentham's writings on poor law in the 1790s and the new poor law suggests a direct influence. Through Chadwick and Senior, many of Bentham's ideas were implemented in the new English poor law, which constituted an important part of Victorian government reconfiguration.

Similar to the case of prison reform the Benthamite reform schemes addressed by the poor law were not theoretical and abstract, but concrete and practical. Spatial structures embodied in architectural ideas played a vital role in the general plan of administration. This character was prominent in both Bentham's own plan and in the policy created by the new poor law. The direct architectural result of this Utilitarianism project was hundreds of Victorian workhouses, many of which still can be seen throughout Britain. But behind the walls was a large-scale social scheme, which symbolized the bureaucratic character of 19th century government reform. Victorian workhouses illustrate well the close correlation between architectural ideas and political ideologies driven by Benthamism.

4.1 Background of Poor Relief Reform

4.1.1 Old Poor Law and Workhouses

As Longmate records, English legislation on poor relief started in the mid 16th century.⁶ From 1547 onwards, new laws were passed every few years. One of the earliest acts, passed in 1552, suggested the “aged, impotent or lame” be provided for in “tenantries, cottages and other convenient houses, to be lodged at the costs and charges of the said cities, towns, boroughs and villages, there to be relieved and cured by the devotion of good people.”⁷ The culmination of early English legislation for poor relief is the famous Elizabethan Poor Law, also called the old poor law or by its official name “the 43rd Elizabeth” passed in 1601. It codified the various laws and practices adopted over the previous half century into one major statute. For the next 250 years the Elizabethan Poor Law determined the basic principles of poor relief in England.

The most important principle in the Elizabethan Poor Law is that the parish had the responsibility to relieve the poor. It enacted that in each parish, overseers should be appointed to take charge of the poor relief. As officials they had the compulsory right of levying tax to relieve the poor. This legal requirement of governmental provision constituted one of the most distinct characters of English poor relief system. Based on the specific administration and public fund raised by tax, English poor relief was able to extend to a much larger scale than its counterparts in most other European countries.

The other important point of the old poor law is the scope of relief. It required the Overseers to “take order from Time to Time...for setting to work the Children of all such whose Parents shall not by the said Churchwardens and Overseers, or the greater Part of them be thought able to keep and maintain their Children: And also for setting to work all such Persons, married or unmarried, having no Means to maintain them, and use no ordinary and daily Trade of Life to get their Living by ; And also to raise weekly or otherwise (by Taxation of every Inhabitant, Parson, Vicar and other, and of every Occupier of Lands, Houses, Tithes impropriate, Propriations of Tithes, Coal-Mines, or saleable Underwoods in the said Parish, in such competent Sum and Sums of Money as they shall think fit) a convenient Stock of Flax, Hemp,

⁶ See Norman Longmate, *The Workhouse* (London: Temple Smith, 1974).

⁷ Cited from *Ibid.*, p. 14.

Wool, Thread, Iron, and other necessary Ware and Stuff, to set the Poor on Work ; And also competent Sums of Money for and towards the necessary Relief of the Lame, Impotent, Old, Blind, and such other among them being Poor, and not able to work, and also for the putting out of such Children to be apprentices.”⁸ The importance of this section is that it clearly identifies the able-bodied who cannot support themselves as a part of the consideration of poor relief. Although the relief was to be provided by setting them to work, the 1601 Act nevertheless made provision for the unemployed able-bodied a legal responsibility of the parishes. The criterion of deciding who should be relieved in this case was an economic one, based on whether or not a person has enough material resource to maintain his life, no matter if he is a child, an able-bodied man, or disabled. This amalgamation of both able-bodied and disabled in the relief scheme distinguished the English poor relief system from its Scottish counterpart, which refused to relieve unemployed able-bodied. This criterion also became a central theme in the debate around poor law relief in the early 19th century.

The 1601 Act also required parishes “to erect, build and set up in fit and convenient Places of Habitation, in such Waste or Common, at the general Charges of the Parish or otherwise of the Hundred or County as aforesaid, to be taxed, rated and gathered in Manner before expressed, convenient Houses of Dwelling for the said impotent Poor.”⁹ The buildings used for this function were generally called poorhouses. As the Act described, these institutions were only for the impotent poor, and were separated from the workhouses where able-bodied poor were set to work. In early form, the workhouses seem to have been non-residential and were more like workshops.

As Himmelfarb points out, by confirming the central role of government in poor relief, England established itself as an exemplar of the social welfare system. On the one hand poor people received better relief than those in other countries; but on the other hand this large-scale provision also increased the public burden. The consequence of this welfare system was a paradox recorded by Tocqueville that “one-sixth of the inhabitant of this flourishing kingdom live at the expense of public charity.” While “the English poor appear almost rich to the French poor; and the latter are so regarded by the Spanish poor,” the number of paupers in England was

⁸ 43 Elizabeth I c. 2, § I

⁹ 43 Elizabeth I c. 2, § V

much larger than in the other two countries.¹⁰ In this sense the 1601 Act planted the root of the extremely high expense of poor relief, a problem that still exists in modern welfare states.

Although the 1601 Act confirmed governmental intervention, it did not specify unified regulations for the construction and administration of poorhouse and workhouses. It was left to local government to make these decisions. For a rural parish to build a new building for poor relief was not economic since the overall population was not big enough. In most cases existing buildings were rented for the purpose. These were generally small establishments and did not have much distinct architectural character since they were converted from other building types.

A rather unusual example of an early workhouse is Chichester Workhouse, which from 1681 to the mid-20th century occupied the building of a former almshouse. The most prominent character of the two storey building is the central chapel with a crow-stepped gable and a bell-turret. It signified the benevolent character of its previous function as almshouse.¹¹

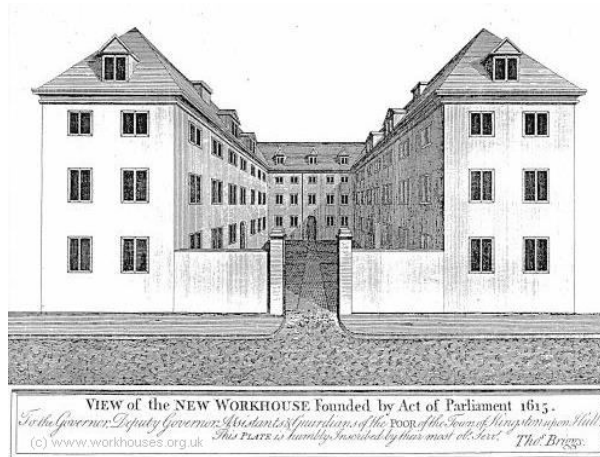


Chichester Workhouse (from <http://www.workhouses.org.uk/>)

Larger workhouses appeared in urban areas where several parishes working together could afford a workhouse of considerable size. In towns where manufacturing industry was more advanced and the problem of unemployment more severe due to business fluctuations, these big corporations had the power and also the requirement to build large institutions. One example of a corporation workhouse was the “Charity Hall” of the Kingston-upon-Hull Incorporation. This three-storey, U-shaped building was built in 1698. The external elevations were kept very simple, with no indication of its function as a workhouse.

¹⁰ Cited from Gertrude Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age* (London: Faber, 1984), p. 147.

¹¹ Kathryn Morrison, *The Workhouse: A Study of Poor Law Buildings in England* (Royal commission on the historical monuments of England, 1999), p. 8.



Workhouse of the Kingston-upon-Hull Incorporation
Source: Kathryn Morrison, *The Workhouse*

Another example of a large workhouse was the Exeter Incorporation Workhouse. As Morrison records, the building was designed by Ralph Mitchell and erected between 1699 and 1707. A 1744 plate shows a large two-storey building forming a broad courtyard open to the south. In the middle there were two shorter wings that formed a U-shaped block set back from the centre of the north side. A chapel signified by the bell tower was located in the center; the two shorter wings were the houses of masters. An important feature of this workhouse is that the 200 poor people not only worked here but also were accommodated in the workhouse.¹² The big courtyard was clearly provided for their outdoor activity. By providing lodgings for the poor the boundary between poorhouse and workhouse was blurred.



The Exeter Incorporation Workhouse
Source: <http://www.workhouses.org.uk/>

¹² For a description of Exeter workhouse see *Ibid.*, pp. 11,12.



A 1905 photo showing the central part of the old building
Source: <http://www.workhouses.org.uk/>

4.1.2 Knatchbull Act and the Workhouse Test

Compared to the 1601 Elizabethan Poor Act, the attitude towards the poor was harsher towards the end of 17th century. Himmelfarb connects this phenomenon to the prevailing mercantilism in that time: “To the mercantilist the idle poor represented a drain upon the nation; unproductive in themselves, they used up precious resources in the form of poor relief and charity.”¹³ This mercantilist attitude was also stimulated by the increasing poor rate, which rose from £665,000 in 1685 to £900,000 in 1701, and in the course of the next decade reached £2,000,000.¹⁴ The unproductive poor were regarded as a negative factor in the statistics of national prosperity rather than as unfortunate fellow citizens that needed help. Reinforcing this economic concern was a moral one. In the late 17th century, there developed a strong current of moral criticism against the poor. The problem of poverty was attributed to the moral defects of paupers. Wage labourers were thought by many economists, merchants and ministers to be slothful, unreliable, and lacking the interest to improve their own living. Many commentators believed that stronger measures should be taken, such as confining labourers in “schools of

¹³ Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age*, p. 26.

¹⁴ *Ibid.*

industry” in which they can be taught industry.¹⁵ To set the labourers to work became a moral task as well. A direct consequence of this current was the increased emphasis of the moral dimensions in workhouses.

These mercantilist attitudes were clearly represented in John Locke’s pamphlet *A Report of the Board of Trade to the Lords Justices respecting the Relief and Employment of the Poor* written in 1697. Locke accepted the common opinion that the cause of increasing poverty was “nothing else but the relaxation of discipline and corruption of manners; Virtue and Industry being as constant companions on the one side as Vice and Idleness are no the other.”¹⁶ To cope with this moral problem and make the poor industrious, Locke proposed the establishment of “working schools in each parish” in which children beyond 3 years old were taught and put to work as well. Generally Locke’s attitude to the poor was rather harsh, as he maintained that they should be corrected through hard labour, whipping and even torture.¹⁷ Several Bills similar to Locke’s proposal were introduced to the Parliament, but were dismissed as invading the rights of local government.¹⁸ It showed the reluctance of central government to impose unified policies. But on the local level the influence of the new ideology was inevitable and its direct result was the appearance of deterrent workhouses.

The earliest pioneer of the idea and practice of deterrent workhouse was Matthew Marriott, a country gentleman of Olney in Buckinghamshire. The key principle of Marriott’s institution is that a long-term pauper can obtain no relief except by entering a workhouse. What made this principle distinct was that it abandoned all long term out-relief, which was a common measure in English tradition. While traditional relief had been based on public benevolence, Marriott’s principle was rather a system of exchange. Poor relief was no longer a one-dimensional giving and receiving but a mutual exchange. The poor could not obtain relief unconditionally, but at the expense of labour and part of their freedom. In this condition the government no longer needed to set the standard of real poverty as the labourers could be left to make the decision automatically, based on their self-interest. By discouraging the people who were not in great need of help from applying for relief, the public interest could be protected while everyone acted

¹⁵ See E. J. Hundert, "The Making of Homo Faber: John Locke between Ideology and History," *Journal of the History of Ideas* 33, no. 1 (1972).

¹⁶ Cited from *Ibid.*: p. 5.

¹⁷ *Ibid.*

¹⁸ Longmate, *The Workhouse*, p. 25.

from the consideration of his own interest. Marriott's success derived from this connection between self-interest and public-interest rather than the profit of the labour conducted in workhouses, and he was clear of this point, arguing that "the advantage of the workhouse to the parish does not arise from what the poor people can do towards their own substance, but from the apprehension the poor have of it."¹⁹

The effect of Marriott's model was immediate, the workhouses he managed in Olney and many other places reported substantial saving on poor expenditure. Soon this system, named as the "workhouse test," expanded to surrounding counties.²⁰ Marriott's success also impressed the Parliament. In 1723, an Act proposed by Edward Knatchbull -*For Amending the Laws relating to the Settlement, Employment and Relief of the Poor* - was passed based on Marriott's model. It enacted that the poor who refused to enter the workhouses were not eligible for poor relief. Here the Act did not distinguish the impotent from able-bodied poor: it rather combined the traditional poorhouse and workhouse into one single institution. In this respect, the Knatchbull Act anticipated the later 1834 reform. To some extent, it was a good representation of the early 18th century mercantilist attitude towards the poor. By turning the basic principle of poor relief from benevolent compassion to the exchange of interest, the workhouse test paved the way for a stricter management of poor inside workhouses as it was part of the price paid for public assistance. Together with this transformation was the new understanding of the concept of workhouse, it was no longer simply a synonym for workshop but the name of a disciplined institution with compulsory regulations.

The 1723 Act greatly promoted the construction of workhouses. According to Longmate, within a few years one hundred and fifty parish workhouses had been opened,²¹ while Morrison records that 300 parish workhouses were set up between 1723 and 1732, and another 300 by 1750.²²

¹⁹ Cited from *Ibid.*, p. 24.

²⁰ Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 14.

²¹ Longmate, *The Workhouse*, p. 24.

²² Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 14.

4.1.3 Gillbert Act and the Speenhamland Scheme

Although the Knatchbull Act suggested the establishment of workhouses as the sole means of poor relief, it did not have compulsory power, and individual local governments could decide whether to follow it or not. Another Parliamentary Act related to poor relief was the Gillbert's Act passed in 1782. Similar to the Knatchbull Act, it also proposed the erection of houses for poor; but its basic principle was the traditional philanthropism rather than mercantilism. It showed the complexity of different ideologies of poor relief in England. In some sense the Gillbert's Act can be seen as a criticism of the Knatchbull Act. It recorded that many workhouses erected under the 1723 Act did not bring real relief, noting that "the Poor, in many Places, instead of finding Protection and Relief, have been much oppressed thereby."²³ It placed the blame for this result on the exploitative attitude to the poor and to the contract management system.

To reorganize poor relief, the Gillbert's Act proposed the formation of unions comprised of neighbouring parishes which, under the control of a board of guardians, could build union poorhouses. The name of poorhouse indicated that it was solely dedicated to the impotent poor. As stated in the Act: "no Person shall be sent to such Poor House or Houses, except such as are become indigent by old Age, Sickness, or Infirmities, and are unable to acquire a Maintenance by their Labour."²⁴ Regarding the unemployed able-bodied poor, the Act proposed to employ them outside poorhouses rather than sending them into workhouses. On the other hand, by requiring the guardian to maintain the living of the unemployed able-bodied, the Act also opened the door to out-relief. In both aspects, the Gillbert's Act was closer to the old tradition rather than the Knatchbull Act. Under the Act, about seventy Gillbert Unions were formed and many survived until 1869, when all remaining Gillbert Unions were abolished.

The appearance of Gillbert's Act showed the persistent life of the traditional view of poor relief, which regarded it a natural right of the poor to receive aid. The Gillbert Union poorhouses were a critical response to the deterrent workhouses built under the Knatchbull Act, which

²³ 22 Geo. III Cap. 83, § I

²⁴ 22 Geo. III Cap. 83, §XXIX

intended to place all poor including impotent and able-bodied under the workhouse test. The other aspect of the Knatchbull Act - the abolition of out-relief - also faced opposition. A new measure, the Speenhamland scheme, or Berkshire Bread Act, helped to make out-relief a legal right of the poor and promoted out-relief on an extremely large scale.

Facing the problem of bad harvests and high food prices, the Berkshire magistrates made the decision in 1795 to set a “minimum standard” according to the price of bread and the size of the poor’s family, and supplement the difference between the poor’s income and this standard from the poor rate. By extending the allowance even to wage-earners, the Speenhamland scheme greatly expanded the scale of out-relief. The policy of making allowances-in-aid-of-wages was soon imitated by neighbouring counties. In the next year, Parliament ratified this scheme. The system became quite popular, especially in southern England.

Contrary to the Knatchbull Act which intended to abolish out-relief, the Speenhamland system made out-relief so common that it was widely recognized as an undeniable right of the poor. A comprehensive survey conducted in 1802-3 revealed that out of 725,566 parishes, only 83,468 reported that poor were relieved in workhouses, which means most parishes adopted out-relief.²⁵ Unsurprisingly, the overall poor rate increased quite rapidly from £2 million in 1783 to £4 million in 1803 and reached £8 million in 1817.²⁶ The high expense aroused increasing criticism of the Speenhamland system and finally led to the comprehensive reform in 1834, for which the blueprint had already been drawn by Bentham at nearly the same time as the Speenhamland system had been introduced.

4.2 Bentham’s Scheme of Poor Relief

In the 1790s Bentham was working hard on his Panopticon prison scheme. His main writings on poor law reform were also completed in this period. Similar to his prison scheme, the system he designed for poor relief was also based architecturally on the panoptical form. Although no Panopticon workhouses were ever built according to his model, the general principles he elucidated were nevertheless accepted as the guiding rule of the new poor law system, which came into being two years after his death.

²⁵ Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 29.

²⁶ Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age*, p. 134.

Bentham's interest in poor relief was aroused by William Pitt's poor law bill, which failed to become an Act finally.²⁷ Early in 1796, one adviser of Pitt, William Wilberforce, who was a friend and admirer of Bentham and a faithful supporter of the Panopticon scheme, sent a draft of Pitt's bill to Bentham for comments. Besides critiquing Pitt's bill, Bentham undertook to devise his own system of poor relief. In 1796 and 1797 he wrote several essays stating his basic concepts and principles. His initial intention was to finish a comprehensive work entitled "Penetocomia, or Principles of Legislation and Management relative to the subject matter of the Poor Laws."²⁸ Later he abandoned the idea of "Penetocomia" and reorganized his ideas in another project "Pauper Management Improved" which was also to remain uncompleted. In July 1797, Bentham was invited by Sir John Sinclair, President of the Board of Agriculture, to publish something on poor law. This brought the "Outline of a Work entitled Pauper Management Improved" published in *Annals of Agriculture*. This major work, together with two tables Bentham produced to gather relevant information, constitute Bentham's only writings on poor relief published in his lifetime.

4.2.1 Bentham's Principles for Poor Relief

Bentham's writing on poor relief is comprised of two parts: the basic principles and the practical proposals. The first part includes several essays he wrote between February 1796 and February 1797, the second part was mainly embodied in the published "Outline of a Work entitled Pauper Management Improved."

The first part of Bentham's poor law writings was only published quite recently in *Writings on The Poor Laws*, Vol. 1, edited by Michael Quinn. It consists of three parts: "Essays on the subject of the poor laws," "Pauper systems compared" and "Observations on the poor bill." The most important is the *Essays*, which covers most of Bentham's theoretical propositions on the issue of poor law. Similar to his other writings, Bentham starts from the clarification of basic concepts. In the first section of the "Essays," which is given the name "Definition and Distinctions," Bentham clearly defines who should be relieved.

²⁷ For the history of Bentham's writing on poor law see Jeremy Bentham, *The Panopticon Writings, Wo Es War* (New York; London: Verso, 1995), pp. xi-xvi.

²⁸ *Ibid.*, p. xi.

Bentham writes: “The proper object of the system of laws, known in this country by the name of the *Poor Laws*, is to make provision for the relief not of *poverty*, but of *indigence*.”²⁹ He then proceeds to define poverty as “the state of everyone who, in order to obtain subsistence, is forced to have recourse to labour,” and indigence as “the state of him who, being destitute of property (or at least destitute of the species of property necessary to the immediate satisfaction of the particular want by which he happens to be pressed), is at the same time either unable to labour, or unable, even for labour, to procure the supply of which he happens thus to be in want.”³⁰ The distinction was subsequently popularized by Patrick Colquhoun, who borrowed Bentham’s idea in his *The State of Indigence, and the Situation of the Casual Poor in the Metropolis Explained* published in 1799.

This distinction between common labourer and real poor to be relieved was directly targeted at the prevalent confusion of the two categories. As Himmelfarb points out, before the 19th century, “most of the laboring population (with the exception of artisans) were regarded as ‘poor.’ They were poor in the traditional sense in which those who depended on their labour for their livelihood were poor; these were Mandeville’s poor, ‘forced to get their daily bread by their daily labour.’ They were also poor in the sense that their earnings were insufficient (because too irregular or too meager) for subsistence, so that most of them, at one time or another, to one degree or another, in old age if not earlier, were dependent upon private charity or public relief.”³¹ Against this confusion Bentham argues that “poverty as above defined is the natural, the primitive, the general, and the unchangeable, lot of man.” Meanwhile labour is the source of wealth, “if *labour* is liable to cease, so is *property* to be *destroyed* or *spent*.” Hence, it is repugnant or even disastrous to relieve people only because they live on labouring. Here Bentham roughly sets the high limit of poor relief, which is the life standard of a common labourer. He writes, relief “can never be said to extend beyond the absolute necessities of life. For generally speaking the ability of those who are maintained by their own labour, does little more than pass this limit: and beyond it there are no bounds.”³²

Bentham’s definition of indigence adopts an economic rather than moral standard: whoever

²⁹ Jeremy Bentham and Michael Quinn, *Writings on the Poor Laws. Vol. 1, The Collected Works of Jeremy Bentham* (Oxford: Clarendon, 2001), p. 3.

³⁰ *Ibid.*

³¹ Himmelfarb, *The Idea of Poverty: England in the Early Industrial Age*, p. 28.

³² Bentham and Quinn, *Writings on the Poor Laws. Vol. 1*, p. 6.

cannot maintain his own life or his family is indigent. Such standard indigence includes both disabled and able-bodied as, he argues, the cause of indigence may be “personal to a man, or exterior to him: it may be within or without him. A man may be able to do work if he had it, but he may be unable to obtain it, or (to come to the point at once) unable to procure what he stands in need of in return for it.”³³ In a note, Bentham further explains that even a property owner can be regarded as indigent if he is starving. The importance of this standard only became manifest later, when more and more people insisted that the able-bodied should not be relieved. By setting the basis of poor relief on an economic foundation, Bentham was able to build a whole system under the principle of interest exchange rather than morality.

Having decided the scope of poor relief, Bentham continues to lay down the general principles of relief giving. These form the main body of his second essay “Foundational positions in regard to the making provision for the indigent poor.” Bentham sets out altogether 60 positions upon which poor relief should be based. Observations and reasons are included to justify these claims. First, Bentham explains the “necessity of relief.” He provides two reasons: common humanity and public security. These reasons prove that poor relief is an issue relevant to all members of society, rich and poor together. He concludes: “In this point of view, and as against, or rather to avoid falling into, the track of anarchy, as towards the legislature, the title of the indigent to their subsistence, seems to stand upon as strong ground at least as that of any man of property to his estate – as that of the most opulent to his opulence.”³⁴ Of special importance in this section is Bentham’s argument that only the public purse is capable of meeting the demand of poor relief. He opposes both the view that poor relief should be left to voluntary contributions and also the proposal that there should be a fixed expenditure assigned to this purpose. Since the demand for relief may fluctuate, Bentham insists that only a unified public administration with the power to manage the relief fund can efficiently meet this demand. Interestingly, he cites an example from the writings of Sir John Dalrymple, that Scotland, with voluntary contribution as the main source of poor relief, failed to cope with the problem of famine in the reign of King William, causing the death of 80,000 persons in one year.³⁵ Bentham reiterated here the principle of legal provision prescribed by the Elizabethan Poor Law. It was also accepted in the 1834 reform.

³³ Ibid.

³⁴ Ibid., p. 21.

³⁵ Ibid., p. 16.

With regard to the material form of poor relief, Bentham lists three options:

1. Out-allowances – administering the relief whether in money or in kind at each man’s home.
2. Maintenance in Parish Work-houses: that is in Establishments of very uncertain and unequal magnitude, but in most instances comparatively inconsiderable.
3. Maintenance in Houses of Industry: that is in Establishments of considerable and tolerable uniform magnitude, formed by junction affected to this purpose amongst a number of Parishes.³⁶

Bentham supported the third option, which was adopted by the new poor law as its fundamental measure. In various ways he defended this kind of institution against criticisms on such grounds as it is too expensive, too little work is done, too aggressive, and too authoritarian. Bentham’s response to these criticisms is that all these objections are not sustainable and can be solved by the good management of the Houses of Industry. Of greatest importance is his response to the objection that the House of Industry is an “injury to liberty [of the inmates] – inhuman to deprive them of their liberty – to confine them within walls – within a walled space – still worse if within the four walls of a house – to shut them up &c;” and also “injury to liberty in another shape – banishment – banishment from their native soil – from their native parishes – banishment from their friends - from the friends of their youth – from their dearest relatives.”³⁷ Bentham accepts that the House of Industry does place restraints upon liberty, but he insists that these are not real objections because “so are they against government, not against corrupt and tyrannical government only, but against government in the best and purest form of it, whatever that form may be, and not only against government, but against society itself, against every condition of life you can name.”³⁸ As described earlier in the section on prison reform, Bentham did not believe in unconditional natural rights. Every right must be secondary to the calculation of pleasure and pain. It is the same in the case of the restraint of liberty. As, he argues, restraint upon liberty is common in many other places such as the army, long distance of navigation and commerce, and manufacture. In short, it exists in “every species of domestic service.”³⁹ But this is not a full justification; as Bentham explains further, the lost of liberty is not a punishment but the price paid by the poor for relief. He asks: “But what becomes of the hardship when the

³⁶ Ibid., p. 29.

³⁷ Ibid., p. 35.

³⁸ Ibid., p. 36.

³⁹ Ibid.

obligation is never imposed but with consent, and in the way [of] a condition annexed to a favour by which part of the community is saved from perishing by the labour, and at the expense of, another.”⁴⁰ All the hardships raised by the objectors against the House of Industry can be defended by the calculation of gain and loss: “to be confined to any scene of industry, not to be provided for unless a man will submit to be provided for at a certain place, is a hardship: but it is no hardship to be starved. Not to be able to see his friends, all of them at all times, is a hardship – but it is no hardship to be starved. Every thing in short is a hardship but a lingering death, the panacea by which all these grievances are to be cured.”⁴¹

This part represents Bentham’s Utilitarian foundation of poor relief. He does not accept poor relief as a natural right, but justifies it by its benefit. He does mention human compassion, but in most parts he is discussing the various consequences which can be judged according to the criteria of pleasure or pain. Correspondingly, the poor are not regarded as the natural receivers of unconditional allowance, but rather as member of the exchange of interest in which relief is obtained at the expense of liberty and labour. In the Utilitarian system, Bentham suggests, the poor are neither passive receivers nor misdoers forced into confinement. Instead, they are active agents who can make the decision to enter the House of Industry or not by calculating their own interests. Hence the whole system is constructed on the unified basis of interest rather than natural right. What is left for Bentham is to design a system that can enhance general interest to a maximum while supporting the pursuit of individual self-interest. In the remaining section of the second essay Bentham elucidates the principles by which such a result might be achieved.

One of the most influential principles Bentham left for his disciples is “the less eligible principle,” as was called in the 1834 reform. In the 19th position of the second essay Bentham writes: “Nor, in the instance of any species of article, to be more expensive in quality, than the least expensive of those in use amongst persons maintained at their own charge.”⁴² In another place Bentham argues that in the House of Industry, “the condition of a pauper, in reality or appearance,” should be “less eligible than that of a self-maintaining hand: and thence of deterring men from the act of investing themselves with this condition.”⁴³ The less eligible principle is the key element of Bentham’s construction of a balance between the self-interest of

⁴⁰ Ibid., p. 37.

⁴¹ Ibid.

⁴² Ibid., p. 40.

⁴³ Ibid., p. 285.

paupers and the public interest embodied in the expenditure of poor relief, a balance to be driven by the calculation of the paupers themselves.

It has been pointed out before that the point of intersection between individual and public interest is one of the most significant organizing principles of Bentham's scheme. It is the same in this case, he argued: "the connection thus established between public and personal interest should extend, and that as equally as may be, to every branch of the management."⁴⁴ This is achieved in the House of Industry by the principle that no relief ought to be administered except when the pauper has performed certain amount of work according to his ability, "Nothing ought to be given for nothing" in Bentham's words.⁴⁵ One characteristic of Bentham's scheme is the wide extension of work. Not only able-bodied must work, so must those disabled who have not lost all their ability to work. Bentham also sees it as reasonable to have children brought up and educated in the House of Industry continue to work even after they have become adult. He regarded it as an apprenticeship relationship, with the public having the right of taking surplus profit from the youth, just as the master has the right to benefit from the work of apprentice.⁴⁶ This is another example of Bentham's transformation of poor relief into an economic exchange.

Having established the functional guidelines of the House of Industry as an institution of poor relief, Bentham describes the "Collateral uses derivable from a system of industry houses" in the third essay, also the last part of the "Essays." In this part, Bentham presents the important idea of creating "a regular system of Industry Houses, spread over the face of the Country with tolerable regularity, in form of a piece of net-work."⁴⁷ This concept of a regular network was quite distinct from the traditional workhouses which were almost independent in each parish, corporation or union. Most of the collateral uses Bentham envisages are based on the uniformity and cooperation inside the network, and to achieve such a goal Bentham suggests the establishment of a "central office, situated of course in the Metropolis, to and from which, communications of all kinds shall be made, from and to the several Industry Houses all over the Kingdom."⁴⁸ This office - Bentham called it *General Inspection* - has the function of publishing abstracts or reports of the situation of every House of Industry periodically, so that the

⁴⁴ Ibid., p. 188.

⁴⁵ Ibid., p. 57.

⁴⁶ Ibid., p. 53.

⁴⁷ Ibid., p. 66.

⁴⁸ Ibid., p. 67.

government and the public could supervise the running of the whole system. These ideas of uniformity and of a central organization were also adopted by the new poor law and constituted the most distinct feature of the new poor relief system regulated by a central bureaucratic body. They formed a sharp contrast to all previous poor relief systems, which allowed considerable independence to local government in this sphere. This change of management system was also the basis of the change of workhouse architectures, which will be discussed later.

After describing the main ideas of his own poor relief system in the “Essays,” Bentham compared various systems in an essay entitled “Pauper systems compared, or a comparative view of the several systems establishable as well as established in relation to the poor” to justify his own scheme as the best choice. More important in this part are his ideas of abolishing out-relief and building large Houses of Industry. He argues that the out-allowance system has the “disadvantages of being pregnant with moral mischief and injustice: mischief to the moral habit of those to whom the relief is thus administered, injustice to those at whose expense it is administered.”⁴⁹ It was not new to criticize out-relief as encouraging idleness, but it was not usual to criticize it as injustice. Here Bentham is driven by his Utilitarian belief that neither natural right nor unselfish contribution can be regarded as a just foundation of poor relief. Only self-interest can be used as the cornerstone of the whole system. So the benevolent out relief must be replaced by economic exchange of interest. To receive relief the poor must work for it.

Bentham’s defense of large-scale Houses of Industry is mainly based on economic concerns. Not only can the average cost per person be decreased, but large Houses of Industry also have the advantage of implementing Adam Smith’s principle of the division of labour, based on its large volume of inmates. Another reason for large Houses of Industry is the “conspicuousness of the theatre of action.” The bigger the House of Industry, the greater its effect on the mind of common people.⁵⁰ This rationale of the symbolic association of Houses of Industry architecture was also accepted in the new workhouses erected after 1834.

General speaking, Bentham’s plan is not entirely dissimilar to the workhouse system proposed by the Knatchbull Act. The difference is that Bentham provided a Utilitarian rationale for it and turned it into a unified system throughout England and Wales. It was the second

⁴⁹ Ibid., p. 171.

⁵⁰ Ibid., p. 189.

feature, the nationwide bureaucratic organization imposing a regulative system on local poor relief practice that formed the most important innovation of Bentham's scheme. It was also the most important characteristic of the new poor law system.

4.2.2 Bentham's Practical Proposals

Bentham materialized his poor relief principles in *Outline of a Work entitled Pauper Management Improvement*. Bentham suggests that 250 House of Industry should be built in England and Wales, initially to accommodate 500,000 poor. As children were kept for long-term apprenticeships, the number of all inmates in the Houses of Industry would increase and reach its summit in 21 years, when altogether one million people would be kept in 500 House of Industry, each contained 2,000 people. On this scale, Bentham's House of Industry scheme was much larger than contemporary workhouses. In Eden's investigation, the largest workhouse at that time was the Liverpool workhouse, which had 982 inmates,⁵¹ only about half of the capacity of Bentham's house.

Bentham develops his idea of a uniform system of workhouses coordinated by a central authority. The new idea in this part was that the authority should be a joint-stock company named by Bentham as the National Charity Company. This company, clearly a huge organization, would be "instituted on mercantile principles" on the model of the East India Company. A Board of Directors situated in the metropolis would be elected. It would receive reports from the Houses of Industry either weekly or daily, and would monitor the work of the governor of each house.⁵² Before Bentham it was not unusual to contract or farm the poor out to someone who was responsible for maintaining them and also could use their labour. As shown before, the Gilbert Act was against such measures, since some contractors were too harsh to the poor. Similar attitudes also appeared in prison reform, with many Howardian reformers opposing contract management, including Bentham's, in the prisons. In this case, Bentham's idea was quite radical. Consistent with his faith in market exchange, Bentham intended to structure the

⁵¹ Frederick Morton Sir Bart Eden, *The State of the Poor; or, an History of the Labouring Classes in England, from the Conquest to the Present Period. With a Large Appendix Containing A. Table of the Prices of Labour. An Account of the Poor in Scotland, Etc.*, vol. 2 (3 vol. London, 1797), p. 336.

⁵² Jeremy Bentham and John Bowring, *The Works of Jeremy Bentham Vol.Viii* (Edinburgh;London: W. Tait; Simkin, Marshall, & Co., 1843), p. 386.

whole system on business principles to guarantee the largest profit. And against the possible abuse of power, he still insisted that keeping the overall information transparent and visible to the public would effectively preclude any despotism. Nevertheless, this idea was never accepted, and the 1834 poor law adopted the idea of central authority but discarded the idea of a national company.

It is not surprising that Bentham's Houses of Industry are based on the Panopticon model. But the Panopticon workhouses differ from the Panopticon prisons in many aspects. In contrast to the circular prison plan, the workhouse plan is a twelve-sided polygon. The rooms in the House of Industry are much bigger than those in prisons. As Himmelfarb calculates, a room can contain 24 adults or 16 married couples and thirty-six children,⁵³ so fewer rooms are needed in workhouses than prisons. Another reason of choosing a polygonal plan is for the sake of segregation. Bentham wrote: "Divisions eleven out of the twelve: the twelfth being reserved for the officers, three multiplied by eleven, gives thirty-three uncommunicating apartments. Three and thirty classes may thus be kept in a state of perfect and constant separation from each other, yet all of them constantly present to the officers in the lodge."⁵⁴ This emphasis of classification and segregation is absent in Bentham's prison scheme. As discussed before, the absence of complete segregation constitutes the most distinct character of Bentham's prison compared to Howardian prisons.

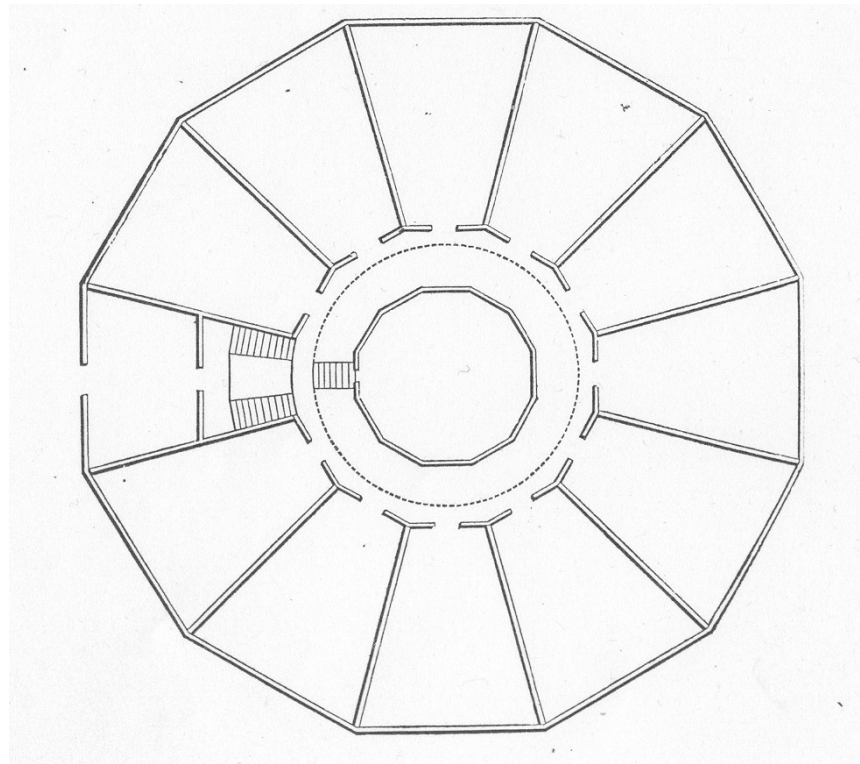
But in the plan of the House of Industry Bentham fully accepted the necessity for segregation. He lists eight reasons for this: "1. Preservation of health from infection. 2. Preservation of morals from corruption. 3. Preservation of decency. 4. Prevention of unclassifiable desires. 5. securing (reciprocal) against annoyance, by bad smells, bad sights, noise, quarrels, scolding, &c. 6. Concealment (occasional) of the governed from the censorial eye of the governing class. 7. Security (particularly to the governing class) as against personal injury from the evil-disposed among the governed. 8. Distinctness in point of education, for moral purposes, and for the purposes of experiment, as between the indigenous, quasi-indigenous, extraneous, and coming-and-going stock of the non-adult class."⁵⁵ By providing as many as 33 divisions for different groups Bentham fully embraces the idea of

⁵³ Getrube Himmelfarb, "Bentham's Utopia: The National Charity Company," *The Journal of British Studies* 10, no. 1 (1970): p. 95.

⁵⁴ Bentham and Bowring, *The Works of Jeremy Bentham Vol. Viii*, p. 378.

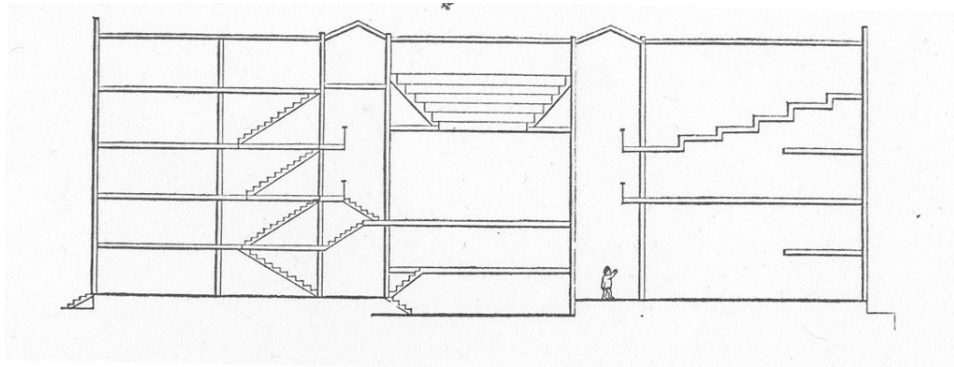
⁵⁵ *Ibid.*, p. 372.

segregation. This is partly due to the complex composition of the inmates in the House of Industry, and on the other hand it is related to the weakening of surveillance. In the *Outlines* Bentham does not emphasize the principle of invisible inspection as he did in earlier Panopticon writings. The architectural drawings and relevant explanations also do not represent this aspect. On the contrary, he points out that surveillance could be obstructed in some cases. The surrounding rooms could be “withdrawn from inspection at any time, for comfort, decency, &c., by circumferential screens, parallel to the outer front of the division, and up the height to which it reaches, closing the inner front.”⁵⁶ This provision forms a sharp contrast to the universal surveillance in the Panopticon prison. It shows that Bentham is not an unconditional supporter of surveillance. He is fully aware of its oppressive character and would like to circumscribe it when appropriate.



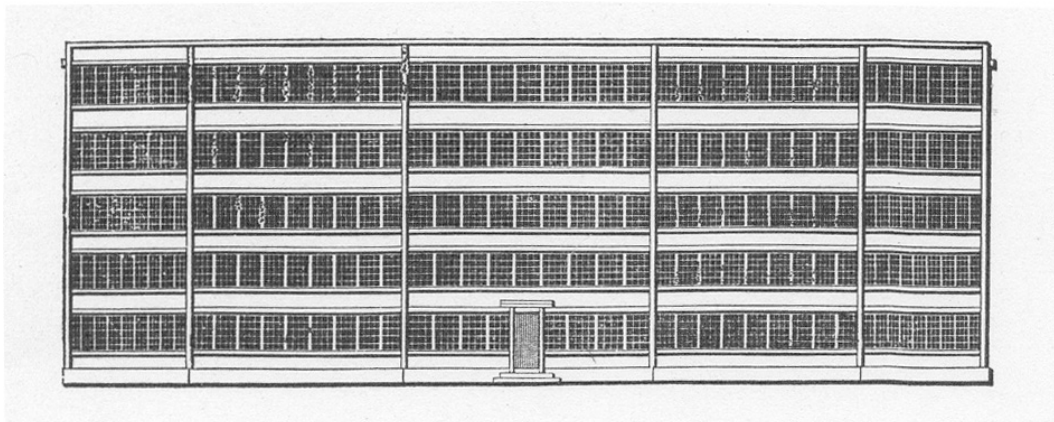
Plan of Panopticon House of Industry
Source: Jeremy Bentham, John Bowring, *The Works of Jeremy Bentham*, Vol.8

⁵⁶ Ibid., p. 357.



Section of Panopticon House of Industry

Source: Jeremy Bentham, John Bowring, *The Works of Jeremy Bentham*, Vol.8



Elevation of Panopticon House of Industry

Source: Jeremy Bentham, John Bowring, *The Works of Jeremy Bentham*, Vol.8

The architectural drawings in the *Outlines* were provided by Bentham's brother, Samuel Bentham, who at that time had been appointed as the Inspector-General of Naval Works. As a talented engineer, Samuel had supplied a new version of the Panopticon building very different from the Panopticon prison drawn by a London architect Willey Reveley. The traditional aspects in the Panopticon prison, such as thick and massive wall, decorative arches on the façade, and pitched roofs were all abandoned in the House of Industry. What is represented in the illustrations is a characteristic factory building dominated by the continuous horizontal windows, a feature that only became prevalent in modern architecture two hundred years later. The disappearance of massive walls indicates that Samuel may have conceived it as an iron-frame structure. Samuel was a strong supporter of cast iron structures, and designed the first iron-built bridge over the Thames, the cast-iron, nine-arch Vauxhall Bridge. Completed in 1796, Samuel Bentham introduced an advanced technical development here similar to the Crystal Palace,

which came into being more than fifty years later. The functional appearance of the House of Industry totally discards the deterrent character of the Panopticon prison. In this sense it is also alien to later workhouse buildings, many of which were designed to be intentionally oppressive. This image of the House of Industry is consistent with Bentham's scheme. Since he grounds poor relief on the basis of economic exchange, the workhouse does not need to create a deterrent pressure on the mind of the poor; the consideration of self-interest is enough. On the other hand, Bentham believes the large-scale workhouse would be profitable, so there is no need to make it unattractive to the poor.

The section of the workhouse is quite strange. Bentham does not explain why the first and third floor in the right part should be lower. The gallery on the top floor is probably provided for the use of children education, which was a crucial part of Bentham's whole scheme of poor relief. As usual, Bentham has strong interest in detail. Designs of sleeping platforms called "bed stages" are also provided. In day time these beds can be raised to give space for working. Alternatively, they can be turned upside down and used as desks. Similar to the Panopticon design, Bentham insists "the same room for all purposes – work, meal and sleep," so no specific workrooms are needed.

FIG. IV.—BED-STAGES for Single Persons.

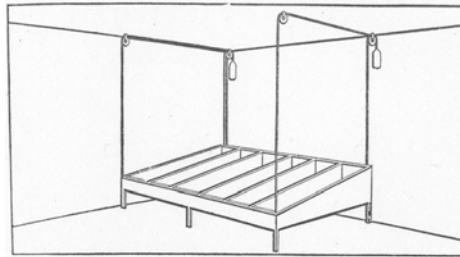


FIG. V.—BED-STAGES for Married Couples; alternating with sets of Cribs for Children, four in a set.

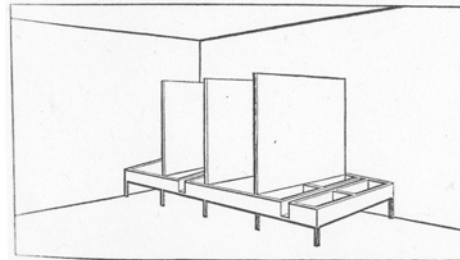
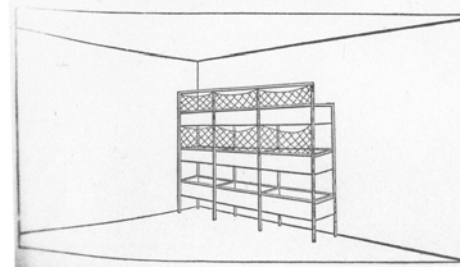


FIG. VI.—CRIBS for Infants.



Bed stage of Panopticon House of Industry

Source: Jeremy Bentham, John Bowring, *The Works of Jeremy Bentham*, Vol.8

The management regulations in the House of Industry focus upon the exchange relationship between work and relief. The poor cannot leave the workhouse until “the value of their labour has balanced the expense of relief.”⁵⁷ But for children the rule was stricter, they had to stay and work till twenty-one or twenty-three for males and twenty-one or nineteen for females before being allowed to leave. Furthermore, Bentham requires that the House of Industry be given the coercive power “for apprehending all persons, able-bodied or otherwise, having neither visible or assignable property, nor honest and sufficient means of livelihood, and detaining and employing them till some responsible person will engage for a certain time to find them in employment, and, upon their quitting it, either to resurrender them, or give timely notice; and so *toties quoties*.”⁵⁸ This power is mainly used against beggars and depredators. In Bentham’s plan, they can be legally confined in the House of Industry and become potential members of the

⁵⁷ Ibid., p. 369.

⁵⁸ Ibid., p. 370.

longer-staying class. Here Bentham blurs the boundary between a House of Industry aiming at poor relief and a correction house aiming at punishment and reformation. In fact he does regard correction as a function of the House of Industry, as he writes “the whole establishment applied to the several different purposes of a poor house - an hospital - a house of correction-a prison-a pawn broking establishment-a bank for the poor-an inn for the poor, &c. &c., without prejudice to any, and much to the advantage of many, of the objects in view.”⁵⁹ But this amalgamation of relief and punishment in one institution was quite alien to common understanding. It was never accepted in practice.

Generally, the *Outlines* is not dissimilar to the scheme outlined in Bentham’s earlier essays. The real importance of this writing is in its practical part. Adopting the Panopticon model, Bentham suggests a radical break with the architectural tradition of workhouse design. For the first time prison design was introduced into workhouse design and architectural ideas became a constituent of the disciplinary system. Although no real workhouse followed Bentham’s Panopticon model, his emphasis of central surveillance and segregation did anticipated later developments. It was in this time that a new generation of workhouse architecture started.

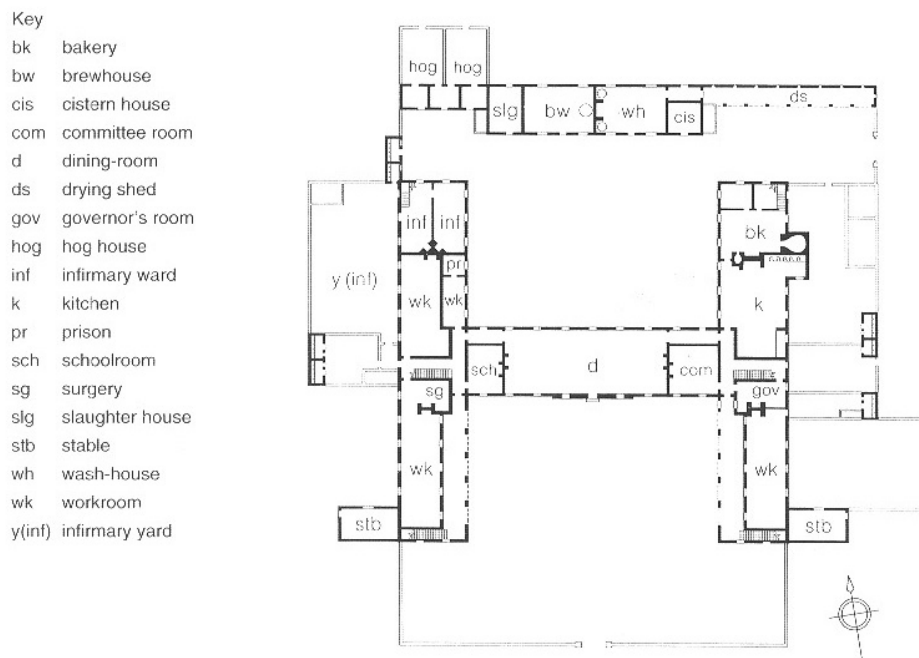
4.2.3 The New Idea of Disciplined Workhouse

Bentham’s design for the House of Industry symbolized the emergence of highly disciplined workhouses in which architectural design was especially adjusted to serve the strict regulations. This current largely changed the formation of workhouse buildings. Previously, the plan of workhouse buildings did not show any specific characteristics with regard to the management of the institution. After Bentham’s intervention, characteristics borrowed from prison design became more and more prominent, and led to several model designs especially tailored to the administration of a highly disciplined workhouse. Similar to the prison models, the most important factors in these institutional designs were central surveillance and segregation.

A good example illustrating this transformation is the Oxford House of Industry recorded by

⁵⁹ Ibid., p. 385.

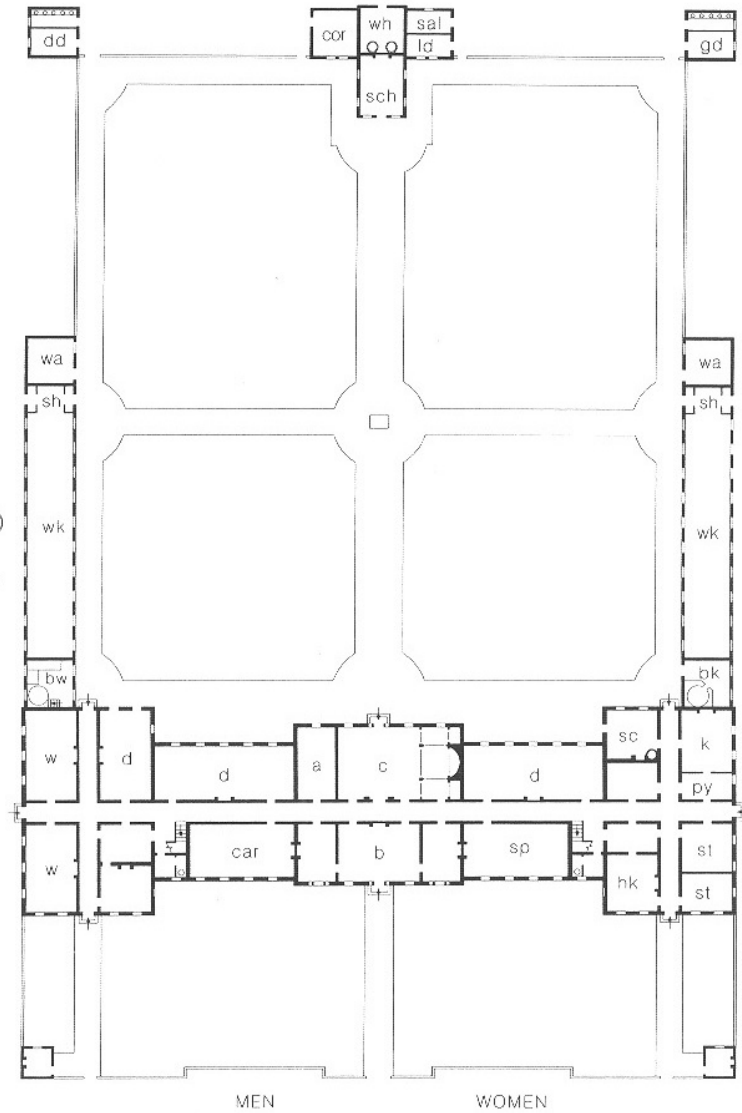
Eden in *The State of the Poor*. Built in 1772-75 the building was a typical urban workhouse in the second half of 18th century. It had the usual H-shaped plan with a big, undivided courtyard. Morrison argues that “throughout the 18th century it had been usual for master’s rooms to occupy a peripheral position” in the workhouse.⁶⁰ In this case the housekeeper’s room, marked as “hk,” is situated at the left corner of the right wing, and since it is at the far side of the wing, no direct view can be obtained from the room to the yard. A similar situation can be found in the Heckingham House of Industry, built in 1765. The governor’s room is in the middle of the right wing without any direct view to the back yard. In the Easebourne Workhouse, the governor’s room does occupy a central position but it has no function of surveillance at all.



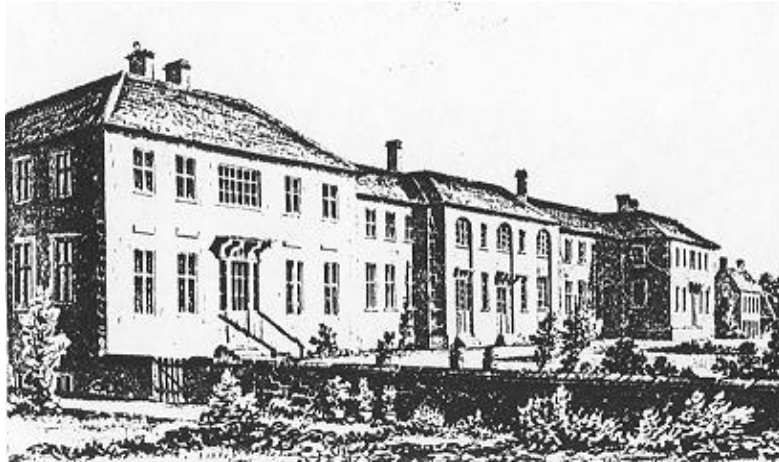
Heckingham House of Industry
Source: Kathryn Morrison *The Workhouses*

⁶⁰ Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 34.

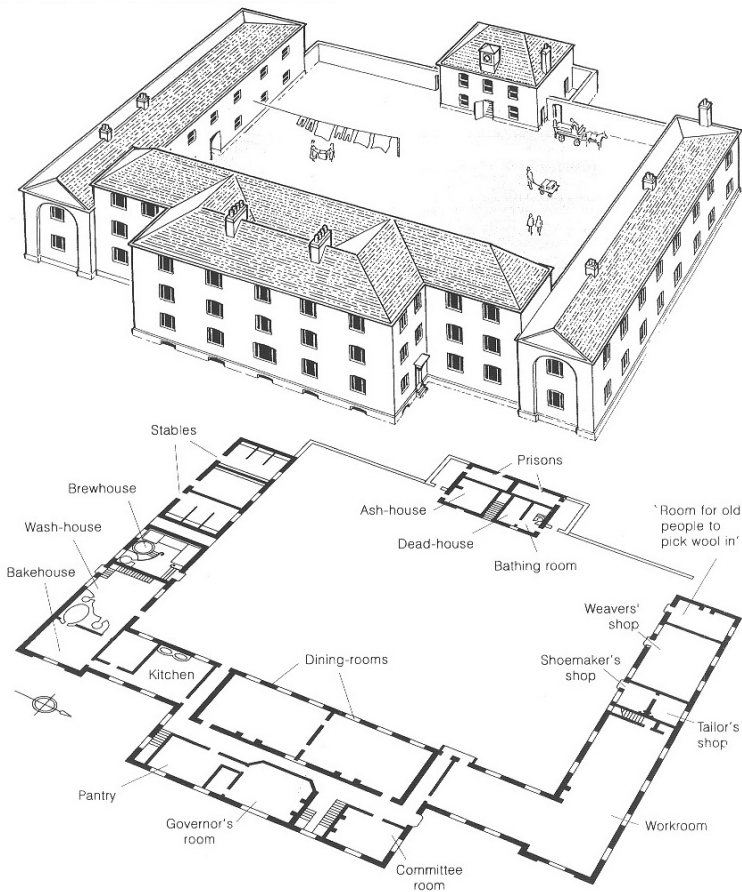
- Key
- a apothecary's room
 - b boardroom
 - bk bakehouse
 - bw brewhouse
 - c chapel
 - car carding-room
 - cor correction room
 - d dining-room
 - dd dead-house
 - gd gardener's room
 - hk housekeeper's room
 - k kitchen
 - ld larder
 - py pantry
 - sal salting-room
 - sc scullery
 - sch schoolhouse
 - sh foreman's (or mistress's) shop
 - sp women's spinning-room
 - st storeroom
 - wa warehouse
 - w ward
 - wh wash-house
 - wk workshop



Plan of Oxford House of Industry
 Source: Kathryn Morrison *The Workhouses*



Oxford House of Industry
 Source: <http://www.workhouses.org.uk/>



Easebourne workhouse
 Source: Kathryn Morrison *The Workhouses*



Easebourne workhouse

Source: Peter Higginbotham, <http://www.workhouses.org.uk/>

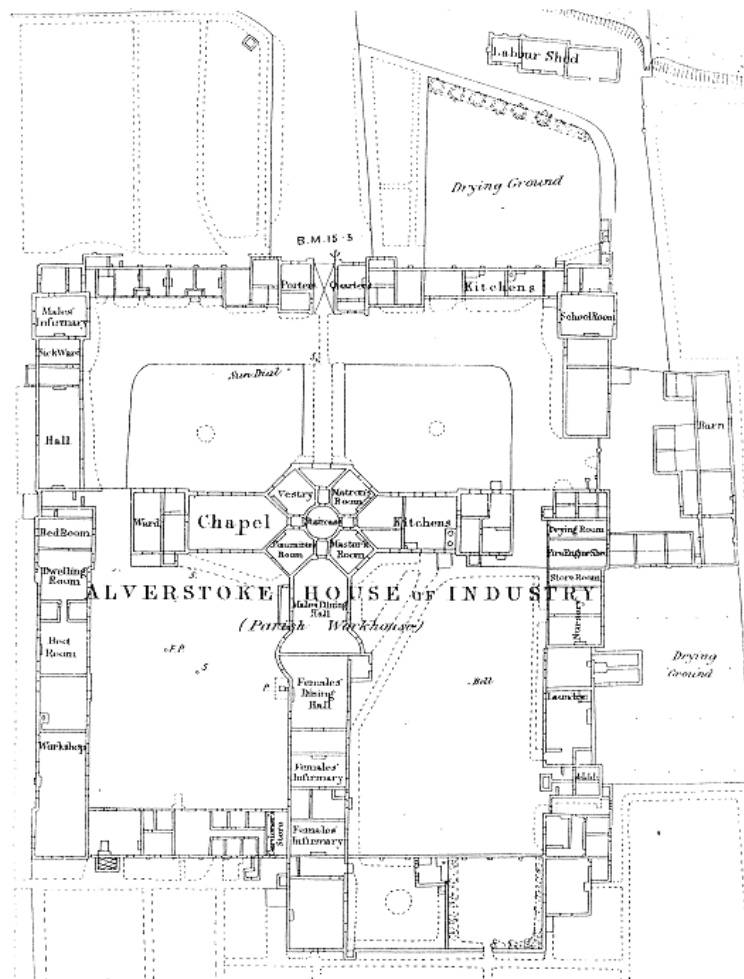
In Eden's investigation of English workhouses, the Oxford House of Industry was reported defective in both aspects of segregation and surveillance. The Guardian's account complained that there were "no regular wards appropriated to the sick, aged, or infirm; no nurseries for the children; the sexes strangely intermixed in their eating and sitting room, and also in their shops and exercise grounds; nor any separation between their wards and sleeping rooms." On the other hand, "they found too, a considerable manufacture carried on without a supervision ...the master's and matron's apartments [were] situated in one corner of one of the wing of the building, at a distance from, and out of the sight and hearing of every part of the house, where their attention was more particularly demanded."⁶¹ In response to this criticism new rules and regulations were imposed on the House, and the master and matron's apartments were "brought into the center of the building, in view of the entrances in front, and at the same time commanding the yard and offices backward. The sexes have been separated, as far as the circumstances of the house, and the nature of their employment, will at present admit of; a set of wards have been appropriated fro the sick, infirm, and aged; and a nursery and nurses provided for the children."⁶² The changes introduced to the Oxford House of Industry clearly show the contemporary awareness of the significance of segregation and surveillance in workhouse discipline.

A further step was taken by the Alverstoke House of Industry erected in 1788-1801.

⁶¹ Eden, *The State of the Poor; or, an History of the Labouring Classes in England, from the Conquest to the Present Period. With a Large Appendix Containing A. Table of the Prices of Labour. An Account of the Poor in Scotland, Etc.*, pp. 594,95.

⁶² *Ibid.*, p. 595.

Designed by the London architect Francis Carter, this was the first workhouse based on the idea of central surveillance.⁶³ An 1865 plan shows that a T-shaped block is situated in the center and separated the courtyard into three parts. The most prominent part is the central hub of the T-shaped block. It is comprised of 4 rooms surrounding a circular hall. Located at the center, with windows directly facing the courtyards, these rooms provide not only quick access to the three wings but also good surveillance of the grounds. As the spatial center of the whole building complex, this area is also the power center of the institution, and the four rooms are used as master's room, matron's room, vestry room and committee room. Other service facilities that are spread across the peripheral areas, and the main entrance, open to north, are controlled by a porter.

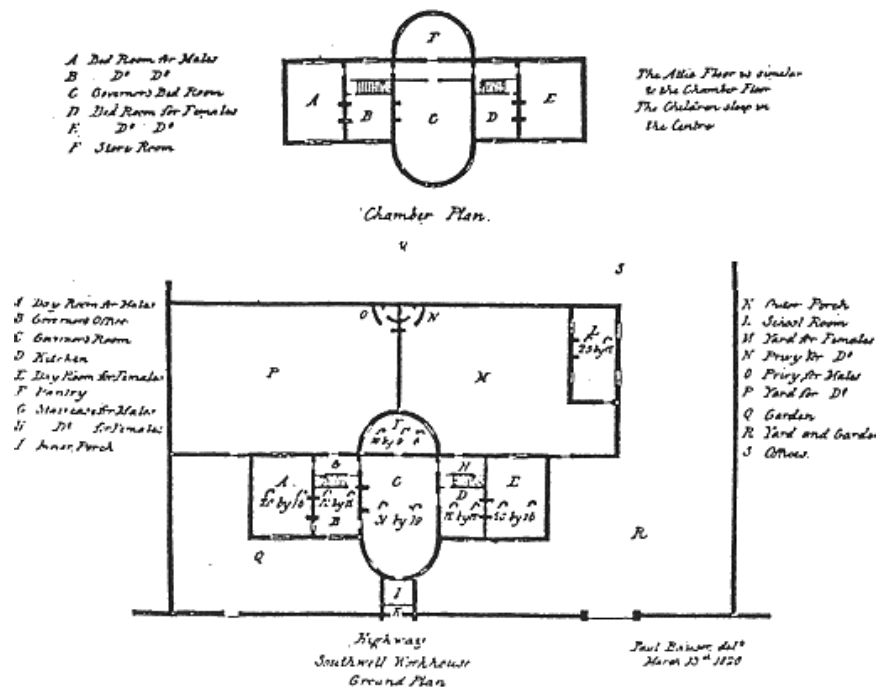


Alverstone House of Industry
Source: <http://www.workhouses.org.uk/>

⁶³ Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 35.

The radial model is clearly a transplanted of contemporary prison design. At Alverstock the architect incorporated the radial model with the traditional workhouse layout. It conserved the rectangular courtyard surrounded by various rooms for auxiliary functions, a layout frequently used in contemporary workhouses such as those in Oxford and Liverpool. By reducing one arm of the classic radial model it also kept a long façade facing the main entrance and created a more impressive appearance similar to traditional H-shaped workhouses. This amalgamation of new ideas of central surveillance and old building form later proved very successful, and many workhouses built after 1834 adopted a layout similar to that of the Alverstock House of Industry.

Another early example of a workhouse building with central surveillance design was the Southwell Parish Workhouse built in 1808. A small building, it was designed by Reverend John Thomas Becher, who included the plan in his book *The Anti-pauper System* published in 1828. In the center is the governor's bedroom and office, which are quite spacious compared to the rooms of the poor. Segregation was also strictly imposed. Male and female poor were accommodated separately on two sides, and a dedicated back courtyard was provided for each group. But the real importance of Southwell Workhouse was its combination of the architectural idea with a strict workhouse policy. A former captain, George Nicholls, was appointed as overseer of the poor in 1821. He introduced strict rules to the workhouse and abolished all out-relief to the able-bodied. In this sense the Southwell Workhouse was quite close to Bentham's plan and anticipated later post-1834 Poor Law workhouses in both its architecture and management. Largely due to his success in Southwell, Nicholls was later appointed as a Poor Law Commissioner in 1834.



Southwell Parish Workhouse built in 1808
 Source: Revd John Thomas Becher *The Anti-pauper System*

Other workhouses adopting central hub design include the Caistor workhouse built between 1800-2, the Thurgarton Incorporation workhouse built in 1820, the Ongar workhouse built in 1830 and the Stoke-upon-Trent workhouse built in 1832. These examples proved the diffusion of the idea of central surveillance in workhouse design, but they were still sporadic experiments lacking uniformity. It was the 1834 Poor Law that really established the ideas as most basic to the character of the workhouse and imposed a strong regularity upon the new workhouses built throughout England. Only from this time on, did workhouse architecture begin to display common characteristics that distinguished them as a unique building type.

4.3 New Poor Law and its Workhouses

The turning point in English poor law history was the passing of Poor Law Amendment Act in 1834. The new poor law terminated the life of the old poor law, and replaced it with a uniform system on a national scale. A central authority was established to enforce the implementation of the workhouse system, which largely resembled the scheme that Bentham had laid out thirty

years earlier. Hundreds of new workhouses were then built around England and Wales. Different from old poorhouses, these new establishments share some distinct characteristics as new institutional buildings. The institutions created a new building type, which shaped a significant social characteristic of Victorian Britain.

4.3.1 1834 Report and the New Poor Law

After 1815, the problem of poor relief became more intense. Reaching its peak in 1818 the poor rate remained at a high level. In 1830 it accounted for one-fifth of the whole national expenditure.⁶⁴ But this cost did not bring fundamental change to agricultural depression. Rural riots in 1830 confirmed the failure of traditional poor relief policy. Meanwhile the prevalence of Malthus's pessimistic view, that poverty is almost inevitable due to the disproportionate increase of population compared to substance, also stimulated a strong call for the total abolition of poor relief system, as it only helped to increase the population without promoting the nation's wealth. As a consequence, a Royal Commission on the Poor Laws was appointed in 1832 to make an "inquiry into the practical operation of the Laws for the Relief of the Poor in England and Wales, and into the manner in which those laws are administered," and to report "whether any and what alterations, amendments, or improvements may be beneficially made in the said laws, or in the manner of administering them, and how the same may be best carried into effect."⁶⁵

The idea of setting up a royal commission came from Thomas Hyde Villiers, a friend of John Stuart Mill. He suggested two persons as commissioners, James Mill and the Oxford professor of political economy, Nassau Senior. James Mill was not appointed but Senior became the most important figure in the Commission. Following his suggestion, another Benthamite, Walter Coulson — newspaperman, barrister, and amanuensis to Jeremy Bentham — was appointed as one of the seven commissioners. Senior later helped to promote Edwin Chadwick, one of the most characteristic Benthamites, as a commissioner.⁶⁶ The two - Senior and Chadwick - formed the strongest alliance in the commission and became the dominant force in the organization. It was under their influence that the poor law reform was led along the

⁶⁴ David Englander, *Poverty and Poor Law Reform in Britain: From Chadwick to Booth, 1834-1914, Seminar Studies in History* (London: Longman, 1998), p. 3.

⁶⁵ Royal Commission on the Poor Laws, *Poor Law Commissioners' Report 1834* (London: Printed for his Majesty's stationery office, 1905), p. 1.

⁶⁶ Anthony Brundage, *The Making of the New Poor Law: The Politics of Inquiry, Enactment and Implementation, 1832-39* (London: Hutchinson, 1978), pp. 19,20.

Utilitarian route.

In contrast to Malthus's pessimism, Senior held a more optimistic view about economic progress. He believed that the tendency that the growth of population would always supersede any increase of subsistence could be controlled by institutional means. He regarded poor relief reform as a chance to establish "wise institutions" to promote labour productivity and thus prevent poverty. In this sense, Senior shared the Benthamite belief that special institutional design can fundamentally solve social problems.

While Senior was only a friend of Utilitarianism, Chadwick was a wholehearted Benthamite. Besides his commitment to Utilitarian thought, he resembled his master, Jeremy Bentham, in many aspects such as an extraordinary capability in dealing with practical issues, and inexhaustible working energy. These capabilities made him one of the most important architects of several important social projects in 19th century Britain, such as poor law reform and sanitary legislation.

Chadwick was trained in law. At the age of eighteen he entered a solicitor's office in which he worked as an apprentice clerk for five years.⁶⁷ He then decided to quit this career and retrained as a barrister, which meant another seven years of apprenticeship. In 1823 he was formally admitted into the Middle Temple, and took up his quarters at Lyon's Inn.

A crucial turning point of his intellectual life was his acquaintance with the circle of young Benthamites. As a fully fledged Benthamite and a close friend of John Stuart Mill, he published an essay in 1828 entitled *The Means of Insurance against Accidents, etc*, in which he argues that life expectancy might well be improved by appropriate measures of hygiene and sanitation.⁶⁸ This essay anticipated his later involvement in urban sanitary reform, and won him not only approval in Utilitarian circles, but also the attention of Nassau Senior and Richard Whateley, who invited Chadwick to contribute articles to the *London Review*. In 1829, his essay "Preventive Police" appeared in this magazine. As a typical Benthamite writing on the subject of the police, it received high recognition among Utilitarians, and more important, Bentham

⁶⁷ The information of Chadwick's career is based on S. E. Finer, *The Life and Times of Sir Edwin Chadwick* (London: Methuen, 1952).

⁶⁸ *Ibid.*, p. 29.

himself liked this essay. Within a few weeks, he engaged Chadwick as a secretary to help him on the writing of the parts of the *Constitution Code* relating to the police and to public health.⁶⁹ Hence Chadwick became one of the closest disciples of Bentham in his last years. In 1831 Bentham even persuaded Chadwick to leave Lyon's Inn and move into his residence in Queen's Square. There, Chadwick helped to organize Bentham's manuscript of the *Constitutional Code*. They developed a relationship grounded on mutual friendship and admiration, which continued until the last day of Bentham's life. Chadwick was with him when the master of Utilitarianism died. Bentham left him a ring containing his effigy and a lock of his hair, many law books and a small legacy.⁷⁰ As an inheritor of Bentham's intellectual legacy he soon began to put his master's principles into practice. It was through him that Benthamism achieved its most tangible realization in 19th century governmental reform.

Soon after the formation of the Royal Commission on Poor Laws in February 1832, Senior approached Chadwick and had him appointed as an assistant commissioner in charge of the inquiry in North and East London. Chadwick held the same anti-Malthus view as Senior, that poverty could be avoided by increasing labour productivity; and the old poor law was an obstacle to this improvement because it destroyed the labour market by disconnecting the income of the labourer from his work. To solve this problem Chadwick suggested a scheme similar to Bentham's, a national system of poor relief, with the workhouse as the sole relief means, controlled by a central authority.

At the end of 1832, the Royal Commission was asked by Brougham to publish some preliminary data to prepare public opinion for the next development. The result was *Extracts of Evidence* which appeared in 1833. While other Assistant Commissioners only provided some general observations, Chadwick grasped the chance and contributed a long report, which constituted one third of the entire volume. The real importance of Chadwick's report was that it included a sketch plan for the wholesale reform of the poor relief system. Chadwick formulated it in six points:

The old poor law is "destructive of the industry, forethought and honesty of the labourers," or in short, it is evil.

⁶⁹ Ibid., p. 31.

⁷⁰ Ibid., p. 37.

The evil “might be diminished by the combination of workhouses and by substituting a rigid administration and contract management for the existing scene of neglect, extravagance, jobbing and fraud.”

The law of settlement should be abolished, so that “the labourers might be distributed according to the demand for labour.”

“If no relief were allowed to be given to the able-bodied or to their families except in return for adequate labour, or in a well-regulated workhouse the worst of the existing sources of evil, the allowance system, would immediately disappear.” Hence the problem of poor relief could be fundamentally solved.

“The proposed change would tend powerfully to promote providence and forethought, not only in the daily concerns of life but in the most important of all points – marriage.”

“The administration of the Poor Laws should be entrusted as to their general superintendence, to one central authority with extensive powers and as to their details to paid officers acting under the consciousness of constant superintendence and strict responsibility...”⁷¹

The similarity between Chadwick’s sketch and Bentham’s scheme that had appeared over 30 years ago is apparent. The report immediately impressed the Commission. Chadwick was asked to draw up a “draft outline of the measure proposed to be embodied in the General Report.” It was at this time that he was promoted as a commissioner under the support of Senior.

The final report of the Royal Commission was written by Senior and Chadwick. Senior finished the first part of the report in which the current poor relief system is analyzed; Chadwick finished the second part which describes the new poor law system. The *Report* illustrates in detail the multiple problems created by the allowance system, such as demoralizing relieved labourers, depressing wages, relief fraud, disturbing the labour market, impairing family relationships, encouraging early marriage, and causing riots. For each accusation the *Report*

⁷¹ Conclusions to Edwin Chadwick’s report in *The Extracts*, 1833, 338-9, cited from *Ibid.*, pp. 47,48.

provides plenty of examples and witnesses to justify its argument. These materials make the *Report* the most complete and powerful critique of the old Poor Law system ever made. The *Report* also points out the problems of existing workhouses such as “the absence of classification, discipline, and employment, and the extravagance of allowances,” arguing that these problems can all be avoided in a well-disciplined workhouse such as the one in Southwell.

The influence of Bentham’s writings on the proposals contained in the *Report* is very profound. In the beginning, the report repeats Bentham’s distinction between the poor labourer and the indigent. Then it stresses Bentham’s principle of less eligible that the living standard of the normal labourer should be used as the highest limit of relief. The *Report* also supports Bentham’s idea that the workhouse should be used as the sole relief method, and out-relief should be abolished. It recommends “Herein after stated, all relief whatever to able-bodied persons or to their families, otherwise than in well-regulated workhouses (i.e., places where they may be set to work according to the spirit and intention of the 43rd of Elizabeth) shall be declared unlawful, and shall cease, in manner and at periods hereafter specified.”⁷² Following Bentham, it also suggests a central authority to administer the whole system: “We recommend, therefore, the appointment of a central board to control the administration of the poor laws, with such assistant commissioners as may be found requisite.”⁷³ Bentham’s idea of big workhouses was also accepted, the *Report* suggests the establishment of incorporations to build larger workhouses.

Most of the recommendations of the Report were adopted by the Poor Law Amendment Bill. It met no serious challenge in Parliament and was quickly approved. On 14th August 1834, the Poor Law Amendment Act received royal assent. Legally, it terminated the life of the old Poor Law, and established a new hierarchical bureaucratic system, which replaced hundreds of independent local authorities and became the sole administrator of poor relief. As Booth points out: “This revolutionary legislation not only gave a dogmatically uniform direction to English poor law policy, but also incidentally transformed the system of Local Government which had endured for over three centuries, and established, for the first time (if we leave out of account the forgotten experiment of the Stuart administrative hierarchy), the principle of centralised

⁷² Laws, *Poor Law Commissioners' Report 1834*, p. 13.

⁷³ *Ibid.*

executive control of local administration.”⁷⁴ As a paradigm the poor law reform represented the transformation from local autonomy to central control, a characteristic tendency in Victorian governmental reform.

4.3.2 Model Plans of the Poor Law Commission

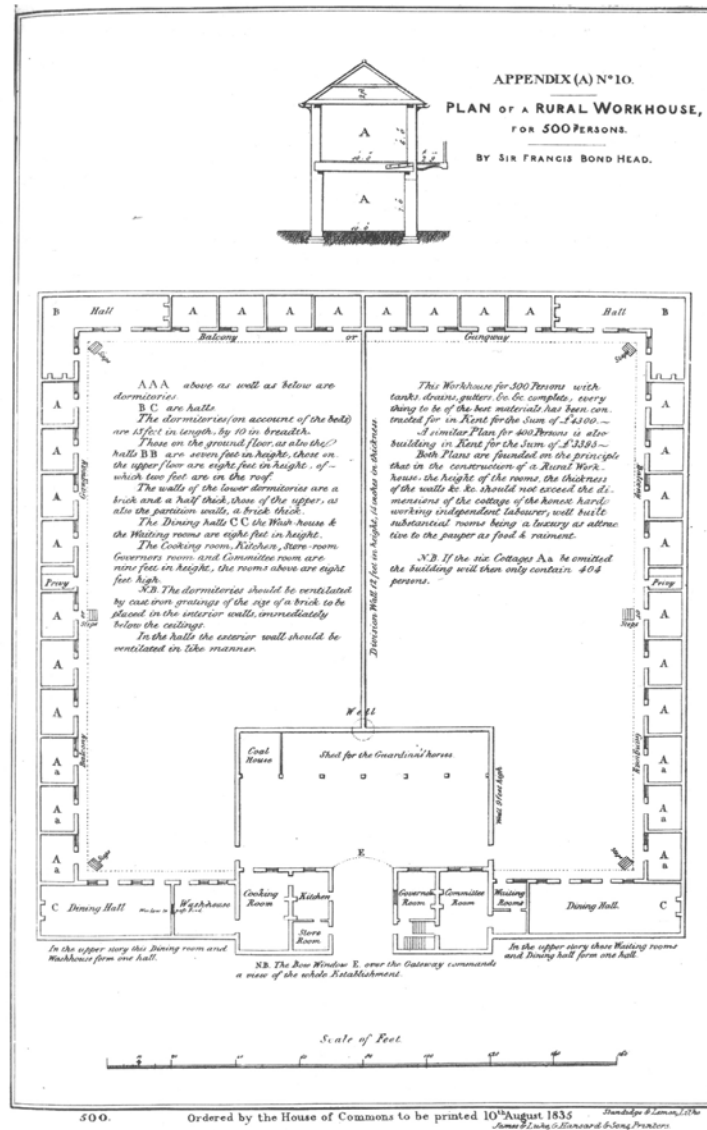
Following the 1834 Poor Law Amendment Act, a Poor Law Commission was appointed to implement the Act. The act gave the Commission monopoly control over the establishment of the new poor relief system around the country. The three members of the Royal Commission were Shaw Lefevre, Frankland Lewis and George Nicholls. Chadwick had been expected to be a candidate as a commissioner, and his failure to be appointed disappointed him deeply, and he made his mind to quit the whole issue. But Lord Althorp persuaded him to accept the position of the Secretary of the Commission. Thus the energetic Benthamite stayed at the centre of the poor law authority and promoted the rapid progress of the new poor law system.

The Act empowered the Commission to combine several parishes into a union. By the end of the Poor Law Commission’s reorganization in 1839, 95% of parishes in England and Wales had been incorporated into 583 unions. In pace with this large-scale formation of new unions was a huge development of new workhouses. Just as the new unions were formed under the direction of the central Commission rather than local parishes, the formation of new workhouses was also dominated by the model designs provided by the Commission. This led to the broad similarity of most new workhouses, a characteristic that distinguished them from poorhouses or workhouse built prior to 1834.

In its first *Annual Report*, published in 1835, the Commission provided several model designs of workhouse for the Poor Law Unions. One of the model plans for a rural workhouse of 500 persons came from Francis Bond Head, an Assistant Commissioner of the 1832 Royal Commission on Poor Laws. He was later appointed as an Assistant Commissioner of the new poor law authority, taking charge of the formation of poor law unions in Kent. Head’s idea of

⁷⁴ Charles Booth et al., *Poverty and the Poor Law*, vol. 5, *The Palgrave Macmillan Archive Edition of Poverty and the Poor Law* (Basingstoke: Palgrave Macmillan, 2003), p. 1.

workhouse architecture is based on the traditional residence of poor men – cottages. He explained: “my principle for a poorhouse is this, build poor men’s cottages; but, instead of having one long street, bend it into a quadrangle, which forms also a prison, having within itself an area of ground in which the board can introduce any system it may choose.”⁷⁵ Hence the small rooms resembling those in poor men’s cottage became the most basic unit of Head’s workhouse design.



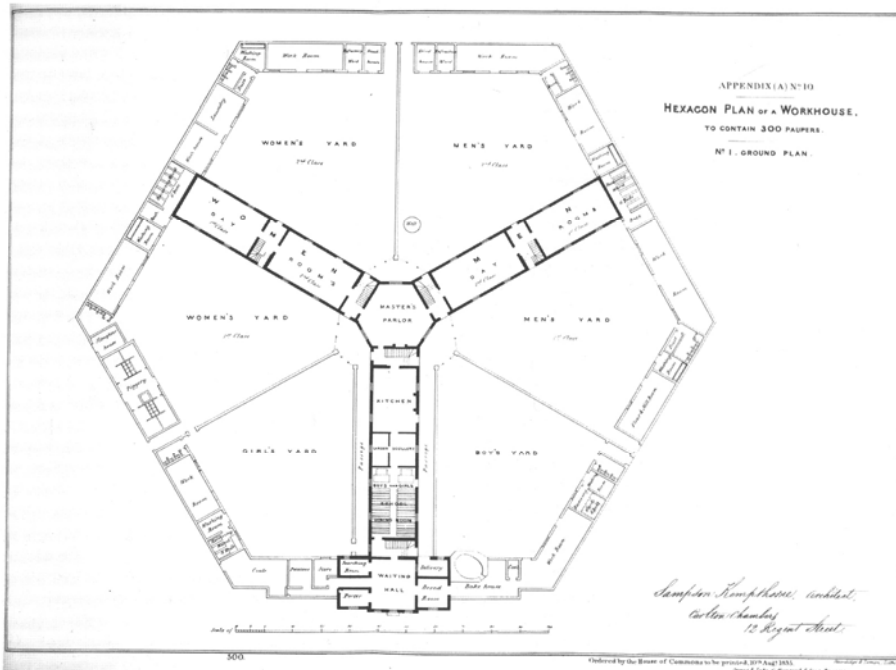
Head's model plan of a workhouse
Source: *Annual Report of Poor Law Commission 1835*

⁷⁵ Cited from Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 56.

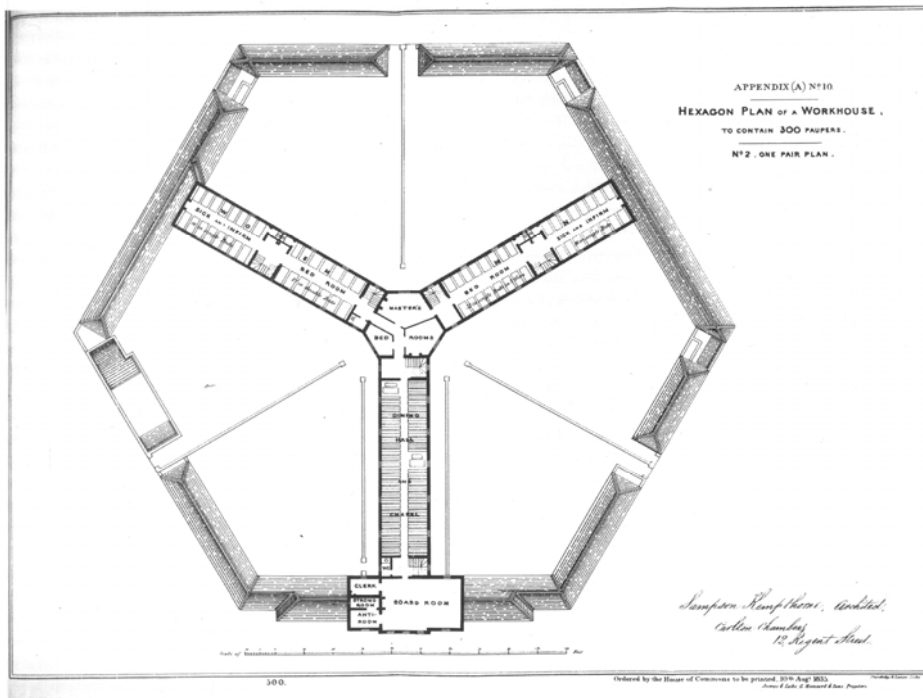
Head only provided the ground plan of his design in the *Annual Report*. It is a two-storey building with a quadrangular plan. Three ranges are occupied by small dormitories for the poor, with 48 rooms in total. To house five hundred inmates in the workhouse, each room needs to accommodate around 9 persons. Head's dormitories are 15 feet in length, by 10 feet in breadth. With only one window on the wall facing the courtyard and no windows on the outer wall, the rooms cannot be cross-ventilated. By cutting the direct contact to the outside, Head's purpose is to increase the deterrent effect of the workhouse. In this respect, Head's design is directly contrary to Bentham's House of Industry in which windows occupy more than half of surface of the outer wall and each room had plenty of light and a view of the world outside.

The fourth range of the building is occupied by offices and service rooms. The main entrance is in the middle; on its left side are the committee room and governor's room, on its right side are the kitchen and store room. The first floor of the central block is probably used as the governor's apartment. A bow window over the gateway, marked by "E" in the plan, enables the master to overlook most parts of the courtyard. Opposite to the central block are a coal room and a shed for the guardian's horses. This part, mainly for management functions, forms an isolated courtyard in the whole building. But the existence of the shed and coal room also obstructs part of the surveillance of the whole yard. In the middle of the establishment a wall divides the area for the poor into two parts, each for one sex. Each part has its own dining room and halls, probably for working. It indicates that there are only two separate groups in the workhouse. Clearly it does not qualify the *Report's* requirement of at least four classes. This is one reason for the limited utilization of this model.

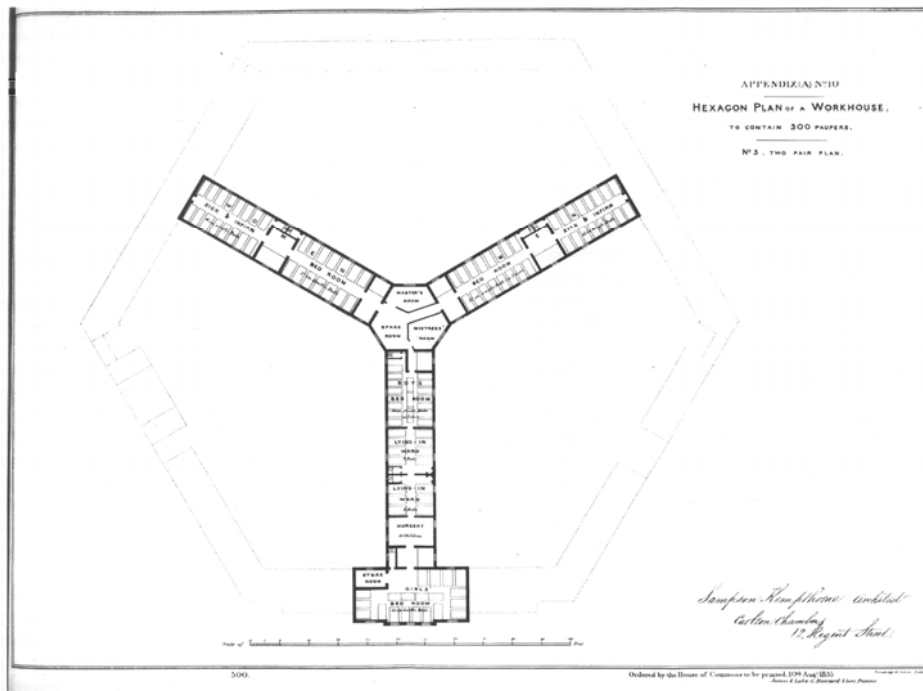
The other two model designs published in the first *Annual Report* came from a London architect, Sampson Kempthorne. In 1835 he was only 26 and just began his practice in Carlton Chambers on Regent Street in London. As an inexperienced architect he was appointed as the official architect to the Poor Law Commission. This appointment must be attributed to the friendship between his father and Commissioner Nicholls.



Ground floor of the Hexagon Plan design
 Source: *Annual Report of Poor Law Commission 1835*



First floor of the Hexagon Plan design
 Source: *Annual Report of Poor Law Commission 1835*



Second floor of the Hexagon Plan design
 Source: *Annual Report of Poor Law Commission 1835*

One of the two designs made by Kempthorne is the “Hexagon Plan of a Workhouse to Contain 300 Paupers.” A single-storey building forms a hexagon-shaped circle with each side about a hundred feet long. In the courtyard a Y-shaped building divides the courtyard into three separate parts. Although serving fewer people, the Hexagon Plan is much more complicated than Head’s design. As an architect, Kempthorne had a deeper understanding of the various functions that workhouse architecture must meet; his plan provides many more facilities and service rooms than Head’s design. The entrance block is attached to the end of the central arm of the Y-shaped building. As the establishment was designed to house large numbers of the poor of various classes, the discipline inside new workhouses was much stricter than before. A direct representation of this tighter regulation is the strong control at the entrance. In the Hexagon Plan, a porter’s room is set beside the entrance; near it is a searching room in which the poor must be checked on entering or leaving, to make sure that nothing prohibited is taken in or out. Kempthorne’s plan already indicates the necessity for a specific entrance block, in later time, as more functions were introduced to the entrance control, the entrance block became more complicated and in some cases was turned into an independent structure.

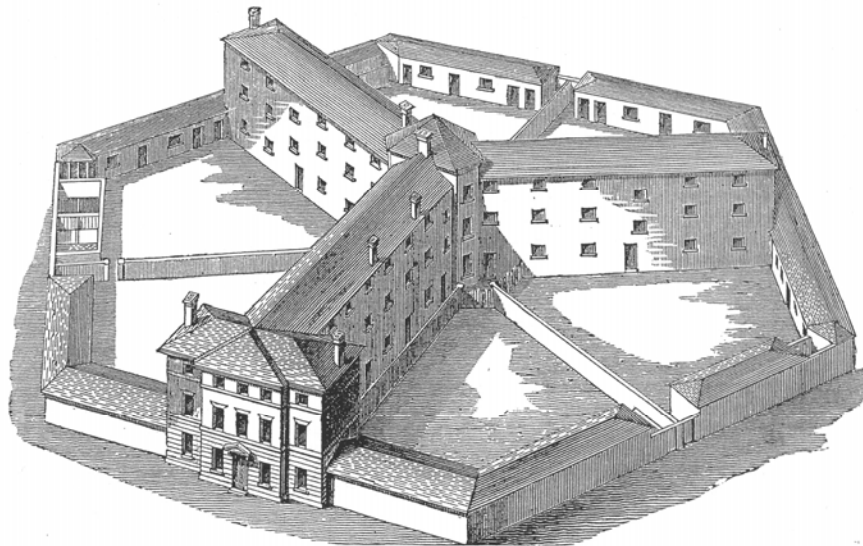
Generally, the three arms of the central Y-shaped building serve three classes in the workhouse. The left arm is for women, the right for men and the middle one for boys and girls. As stressed by the *Report*, nearly all new workhouses rigidly enforced the principle of separation – men from women, adults from children. When a poor family enters the workhouse, husband, wife and the children are all separated, and before moving out of the institution they would have few chances to see each other. In this respect the regulation of new workhouses was similar to Bentham's regime for the House of Industry. In both institutions children are taken away from their parents to be raised and educated in a collective life.

Since the number of children is always smaller than that of adults, part of the middle arm is used for public functions. Its ground floor is mainly comprised of kitchen and dining rooms, and a schoolroom of the children; the first floor houses a big hall used as chapel and the dining hall of all adult poor; the second floor accommodates children's bedrooms, two lying-in rooms and a nursery room. The last two are absent in Head's plan, but are commonly provided in most big workhouses. The other two arms are for men and women respectively. In each floor, one arm is separated into two big rooms. On the ground floor, the two rooms are day rooms for 1st and 2nd class inmates, by which Kempthorne distinguishes aged from able-bodied. Both the second and third floor are given over to bedrooms, with one room allocated to the sick and infirm, and the other to healthy adults. Unlike Head's cottage dormitories, paupers in Kempthorne's design all live collectively in big rooms shared by 16 to 27 persons. While Head only allows one window on the internal walls, Kempthorne provides windows on the opposite walls in nearly all the large bedrooms to facilitate cross ventilation.

The most important part of the building is naturally the hub of the Y-shaped structure. At the geometrical center of the whole establishment, the hub has easiest access to all three arms. From it the governor can easily exercise surveillance over the surrounding courtyards. In Kempthorne's plan this part becomes the governor's house. The ground floor is the master's parlour; the first floor is divided into three bedrooms for the master; the second floor provides two office rooms for master and mistress. On each floor, three large windows open onto three courtyards. As mentioned before, in his early design of the Panopticon Bentham had developed the idea to use the central hub as the house of governor. But he later changed his mind and moved the governor's house into the circular part. In his plan of the Industrial House, the

governor's apartment is located as one edge of the 12-sided polygon. Here Kempthorne's design revived Bentham's original idea, with the governor's daily presence at the centre of the hub enhancing surveillance

In the courtyards, three walls divide the space into six separated sections used by six classes: boys, girls, able-bodied male, able-bodied female, aged male and aged female. In each of the smaller courtyards, the rooms on the hexagon edge house facilities for each group, such as workrooms, wash rooms, toilet and other service rooms particular to the specific group. One part of the edge is marked as morgue. As many aged and infirm poor were accepted in the workhouse, facilities of this kind were essential.



PERSPECTIVE VIEW OF A WORKHOUSE FOR 300 PAUPERS. (E.)

SAMPSON KEMPTHORNE, Architect,

CARLTON CHAMBERS, 12, REGENT STREET.

Perspective of the Hexagon Plan design
Source: *Annual Report of Poor Law Commission 1835*

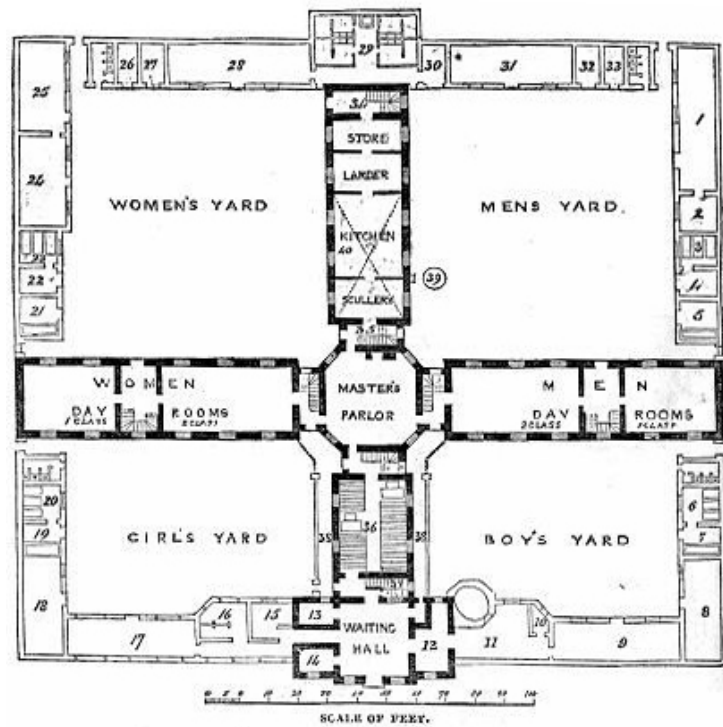
Kempthorne also provided a perspective drawing for the Hexagon Plan. The workhouse is represented as a plain building with only modest classical elements on the façade of the entrance block. As public buildings, it was not unusual for workhouses to use simple classical motifs, and Kempthorne made an intentional contrast between the classic façade on the entrance front and the plain surface of the main building. As the New Poor Law linked workhouses into a national system, the status of workhouse buildings was enhanced. In later designs the decoration

of these buildings became more and more complicated, and various styles were gradually introduced. With regard to architectural language these amply decorated workhouse buildings were more remote from Bentham's House of Industry design than their plain and undecorated predecessors.

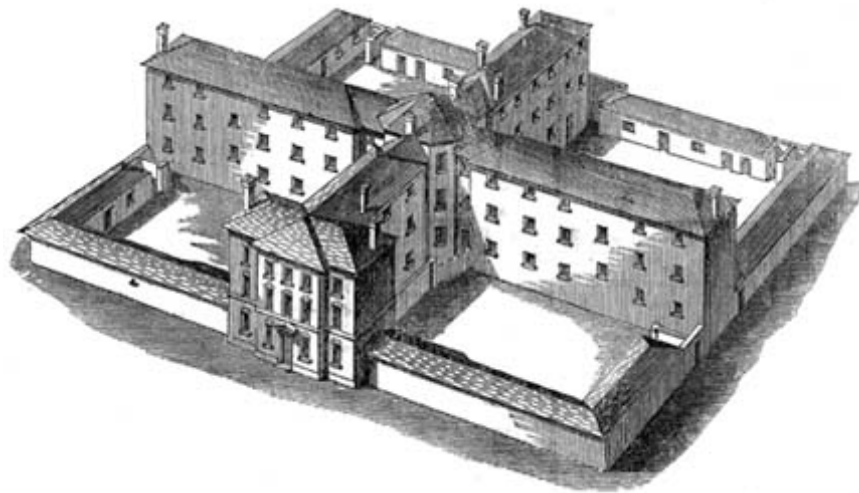
The relationship between Kempthorne's Hexagon Plan and contemporary prison design is quite clear. The origin of the polygon plan is the Maison de Force at Ghent,⁷⁶ which was praised by Howard and inspired English prison designers. Not only the general shape and radial arms are similar, the windowless external walls are the same in the Ghent prison and in Kempthorne's design. In reality, few prisons adopted the polygon shape, but the radial layout became the dominant layout of new prisons such as Hereford County Gaol, Bury St Edmunds County Gaol and the most important of all, the Pentonville Model Prison in North London.⁷⁷ Although the inmates of workhouses and prisons are different, the New Poor Law, by its principle of less eligibility, had rendered the paupers in the workhouse an inferior class compared to the independent labourers outside. The workhouses were not only relief institutions, but also reform institutions to turn the dependant poor into independent labourers by introducing strict discipline and unattractive living conditions. In this sense, it is natural to adopt the management measures employed in prisons for use in workhouses in order to cultivate the character of the inmates. Kempthorne successfully grasped the spirit of new poor law. His introduction of prison design for workhouses was a widely-accepted standard and his model plans became the reference point for nearly all new workhouses.

⁷⁶ See page 92.

⁷⁷ See Evans, *The Fabrication of Virtue: English Prison Architecture, 1750-1840*; Hereford County Gaol p.151, Bury St Edmunds County Gaol p.240, Pentonville Model Prison p.350.



Ground floor of Kempthorne's Square Plan design
 Source: *Annual Report of Poor Law Commission 1835*



Perspective of Kempthorne's Square Plan design
 Source: *Annual Report of Poor Law Commission 1835*

The other plan by Kempthorne that was published in the first *Annual Report* is based on similar principles to the Hexagon Plan. The main difference is that the general shape is rectangular and there are four arms in the center separating the courtyard into four smaller parts.

The establishment is also designed for 300 paupers. Its facilities and various functions are generally similar to the Hexagon Plan. The entrance block is nearly the same, directly attaching to the children's section. As there are now four arms, some of the public spaces such as kitchen and chapel are moved to the new north arm. One advantage of the square plan is that the governor gets more space in the hub. His rooms are now bigger and have a more regular shape, four windows are placed at four corners to provide a complete view of the four courtyards serving boys, girls, men and women, respectively. The expansion also makes the central hub more prominent in the whole architectural scheme. Its octagonal shape becomes an important formal character of the whole building. As the essential feature of this building type, it is not surprising that the central hub became a significant inspiration for workhouse architecture and heavily influenced the architectural forms of some later workhouses.

Kempthorne's model plans were highly praised by contemporary critics. One article of *Loudon's Architectural Magazine* comments that "these plans appear to us, from a cursory inspection, excellently arranged; and it is most gratifying to see the attention that has been paid by the architect to the principles of separation and classification, to cleanliness, to ventilation, and to general convenience." While recognizing the influence of prison design on these plans, the author of this article believed the original idea of the design had come from Bentham's Panopticon, as he wrote: "all the designs are arranged more or less on the Panopticon principle, the master's house being in the centre, or in the focus of whatever may be the form of the plan."⁷⁸ As we have seen, it was the radial prison that stood closer to Kempthorne's design rather than the Panopticon, but clearly Bentham's design was more famous than any other prison design in early 19th century. Consequently the Panopticon was regarded as the symbol of central surveillance despite the fact that no real Panopticon was ever built in Britain.

⁷⁸ John Claudius Loudon, ed., *Architectural Magazine: And Journal of Improvement in Architecture, Building, and Furnishing, and in the Various Arts and Trades Connected Therewith*, vol. 2 (London: Longman, Rees, Orme, Brown, Green & Longman, 1835), p. 511.

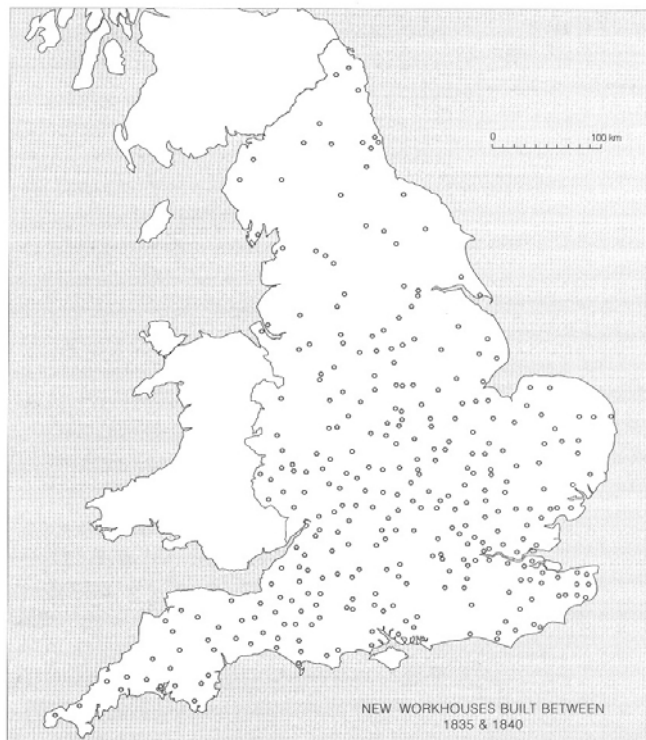


Ground of floor of Kempthorne's design of a workhouse for 200 paupers
Source: Annual Report of Poor Law Commission 1836

In the second *Annual Report* of the Poor Law Commission, Kempthorne provided a design of a smaller workhouse housing 200 paupers. It is a modification of the Square Plan with fewer inmates and consequent decreases in the size of the building and the number of peripheral service rooms. The general layout is nearly the same with three arms for men, women, and children, respectively. The largest difference is at the center. Although the governor's rooms are still placed in the central area, the precise center of the radial building is occupied by a stair, with the result that there is no longer a separate hub from which the governor can see all four exercising yards. Nevertheless, the central position of the master's room still allows the governor to supervise one of the courtyards.

Brought about by the New Poor Law, these model plans, with special emphasis on segregation and supervision, directly embodied the new spirit of English poor relief reform. Workhouses were not just benevolent organizations but also disciplined institutions with reformatory functions, by which the dependent poor could be stimulated to seek independent existences outside workhouses as industrious labourers. The uniform national system also required regularity in its establishments. The model plans met these requirements in a timely

fashion, and were soon accepted as the cornerstones of the hundreds of new workhouses built after 1834. For the first time, poor relief buildings, a provision dating back at least to the reign of Queen Elizabeth I, were given a regular pattern. Of the model plans, it was Kempthorne's Square Plan that gained the widest acceptance. A large number of workhouses were based on this model although various alternations were introduced. As large-scale civic institutions, new poor law workhouses constituted the largest proportion of public commissions in the five years after the 1834 Act and were constructed throughout England and Wales.



Distribution of new workhouses built between 1835 and 1840
Source: Kathryn Morrison, *The Workhouses*

4.3.3 New Workhouse Built Between 1835 and 1840

During the five years between 1835 and 1840 about 320 new workhouses were erected as a

consequence of the new poor law.⁷⁹ Thanks to Kathryn Morrison's study *The Workhouse*, and the information collected by Peter Stinger on the website: www.workhouses.org.uk,⁸⁰ our knowledge of the workhouse buildings in this period has increased considerably in recent years; the examples discussed in this section are based principally on their scrupulous work.

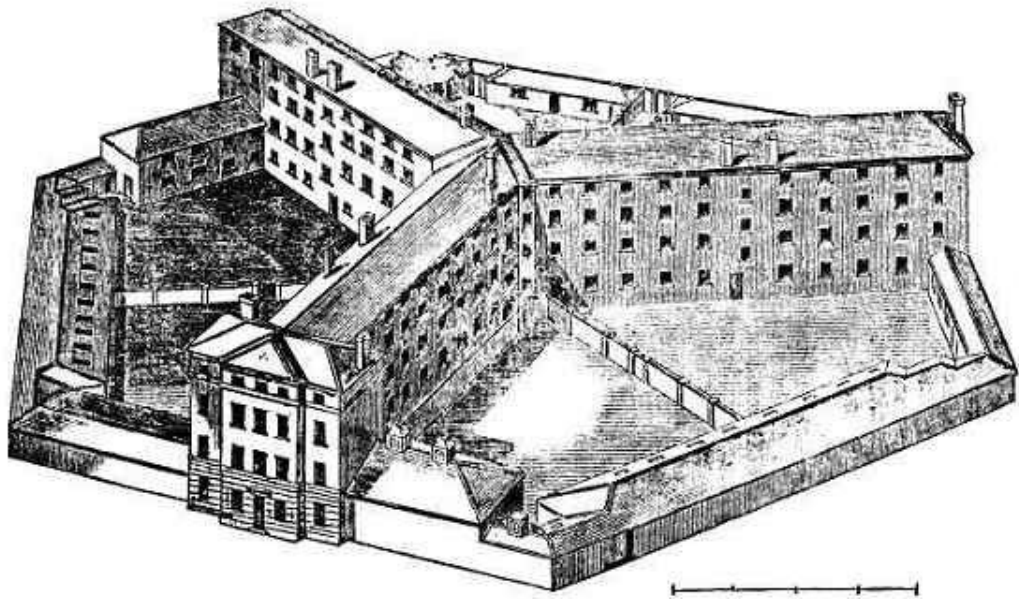
Most of the new workhouses were built on the pattern of one of the model designs introduced by the Poor Law Commission. The principle of segregation and supervision was commonly followed, but the participation of various architects also brought variations. Their work enriched the diversity of this building type and created some high quality structures whose merits extended beyond the simple Utilitarian purpose of these poor law institutions.

Kempthorne, the designer of the most popular model plan, was himself one of the most important workhouse architects. The publication of the model plans established him as the leading expert in this area, and numerous Unions came to him asking for designs or opinions. Eventually he fully or partly designed almost 40 workhouses before he left England and moved to New Zealand in 1841.

If the number of designs could be used as a proof, Kempthorne's favourite design would be the Hexagon Plan. He used it in the designs of 16 workhouses - 6 more than the square plan and 4 more than the 200 paupers plan. For example, the workhouse of the very first Union formed under the new poor law, the Abingdon Workhouse, was designed by Kempthorne strictly following his Hexagon model. It was a rather large workhouse designed to accommodate 500 paupers. To meet this demand, Kempthorne raised the Y-shaped building to 4 storeys. This change did not affect the general layout and appearance of the building. A perspective view shows the close similarity between the Abingdon Workhouse and the original Hexagon Plan, which made the establishment one of the most honest imitations of the model design.

⁷⁹ Morrison, *The Workhouse: A Study of Poor Law Buildings in England*, p. 53.

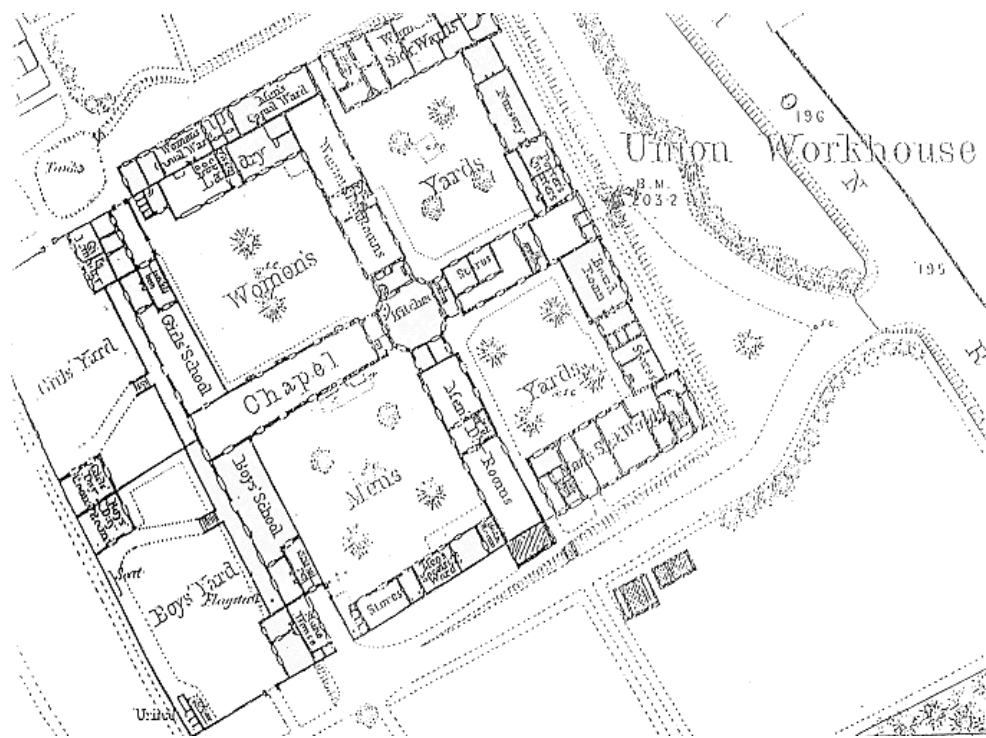
⁸⁰ Peter Higginbotham, *The Workhouse*, <http://www.workhouses.org.uk/> (accessed 13th December, 2008)



Abingdon Workhouse.

Abingdon Workhouse

Source: <http://www.workhouses.org.uk>



Ground plan of Andover Workhouse, 1870

Source: <http://www.workhouse.org>



Front view of Andover Workhouse
Source: Peter Higginbotham, <http://www.workhouse.org>

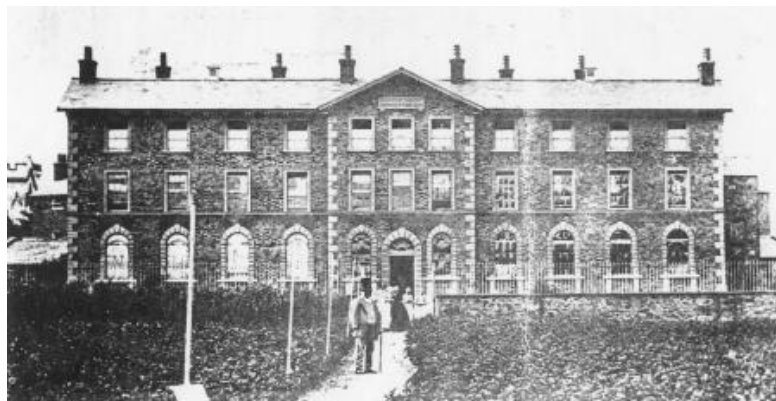
Another scheme by Kempthorne, the Andover Workhouse, was based on his square plan. Designed in 1836, this workhouse marked some important departures from Kempthorne's model design. First, the entrance block was elongated to provide more space for management purposes. The proportions of the entrance block were also changed: it was no longer a narrow, vertical block giving an oppressive impression, but rather an expansive, horizontal building with moderate classic decoration, which increased its civic character. As the focus of the front façade, the appearance of the entrance block resembled the old, benevolent poorhouses rather than the disciplined new poor law workhouses. Secondly, Kempthorne moved the sick wards for men and women out of the main build where healthy adults were housed, and set two separated blocks at the two front corners to accommodate the sick adults. To avoid contagion, this new arrangement was clearly an improvement. Kempthorne also added more windows for the two sick blocks to enhance ventilation. As the two blocks, with several large windows, formed an important part of the front façade, the general appearance of the workhouse departed considerably from the deterrent effect of the model designs. With the large-scale sick blocks on the two sides, the workhouse recalls memories of the old urban workhouses, which always were H-shaped with two wings on the two ends of the central block. Thirdly, the section of the boys and girls was moved to the rear part of the building. It increased their space but also reduced the efficiency of the surveillance from the governor's hub.

Although still based on the same principles, the appearance of the Andover Workhouse

formed a contrast to the prison-like appearance of the model designs of Head and Kempthorne. The architect's formal parameters were no longer confined by the pursuit of a formidable impression, and workhouse architecture no longer needed to be simple and plain. Starting from the model plan, there was still scope for variations and formal characteristics that different architects might think fit for workhouses in different local conditions. But this formal change did not mean any change of discipline. Contrary to its civilized appearance, the Andover Workhouse was one of the most strictly managed workhouses. The less eligible principle was pushed to such an extreme that the poor inmates were so hungry that they even ate the tiny scraps of marrow and gristle attached to the old bones they were required to crush to make fertilizer. This situation was disclosed and was named the "Andover Scandal," which directly led to the reorganization of the Poor Law Commission.⁸¹



Entrance block of Eton Workhouse
Source: Peter Higginbotham, <http://www.workhouse.org>



Entrance block of Tauton Workhouse
Source: Peter Higginbotham, <http://www.workhouse.org>

⁸¹ See *Finer, The Life and Times of Sir Edwin Chadwick*, pp. 257-91.

Similar characteristics such as wider entrance block and plenty of windows on periphery wall also appeared in Kempthorne's other workhouse such as those of Eton and Taunton Union. Kempthorne adhered to a moderate classic design in almost all his workhouse designs. Brick was his favourite material. This caused some trouble for him as some unions preferred other styles or other materials more in keeping with their local tradition. A typical case was the Witney Workhouse at Oxfordshire. Kempthorne was invited to give a design, but his idea of building in brick was rejected by the guardians because local buildings were built almost entirely of Cotswold stone. As a consequence, a local architect, George Wilkinson, replaced Kempthorne as the architect of the workhouse.



Witney Workhouse

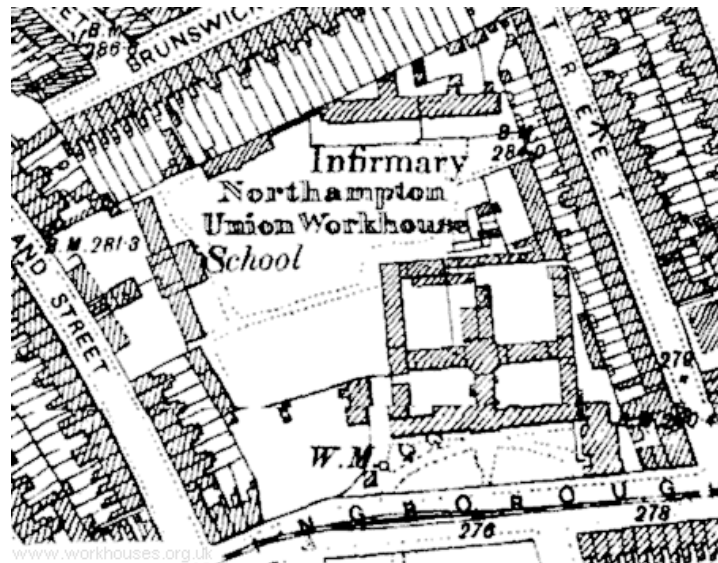
Source: Peter Higginbotham, <http://www.workhouses.org>

In this project Wilkinson introduced an alternation of the Square Plan. He rotated the central radial building by 45 degrees to form a St. Andrew cross rather than a cruciform. As two smaller arms in the middle were kept, Wilkinson's design increased the space in the radial arms. Wilkinson used this layout in two other projects, the Chipping Norton and the Wolverhampton Workhouses. In both Witney and Chipping Norton, Wilkinson adopted Kempthorne's simple classic design. But in some other cases he used popular local styles. One example was the Abergavenny Workhouse, for which the architect chose the Elizabethan style for the entrance block, a style commonly used in the college buildings of Oxford, where Wilkinson was based.⁸² One special feature of this building is the central part of the ground floor with canted windows.

⁸² Peter Higginbotham, Abergavenny Workhouse in *The Workhouse*, <http://www.workhouses.org.uk/> (accessed 3rd March 2007)

Other innovators of workhouse design were George Gilbert Scott and William Bonython Moffatt. They became partners in early summer 1836, aiming at the boom in commissions for workhouse designs. During the eight years of their partnership, Scott and Moffatt entered at least sixty competitions and designed more than forty workhouses, which made them one of the most prolific designers of workhouses.⁸³

Scott and Moffatt brought quite important changes to the model design and established their own characteristic pattern, which became quite influential. But in the beginning Scott mainly followed Kempthorne's square design. He began his own practice in the Spring of 1835 and at that time he had been installed in an office next to Kempthorne's in Carlton Chambers for several weeks. Morrison argues that he probably assisted in the preparation of Kempthorne's model plans.⁸⁴ Most of the workhouses designed by Scott himself or in collaboration with Moffatt between 1835 and 1836 followed Kempthorne's square plan rather strictly. A typical example is the Northampton Workhouse built in 1836. Not only was the plan based on Kempthorne's cruciform plan, but the shape of the entrance block and its simple classic detailing all suggest Kempthorne's influence.



Plan of the Northampton Workhouse
Source: <http://www.workhouses.org>

⁸³ Kathryn A. Morrison, "The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt," *Architectural History* 40 (1997).

⁸⁴ *Ibid.*: p. 184.



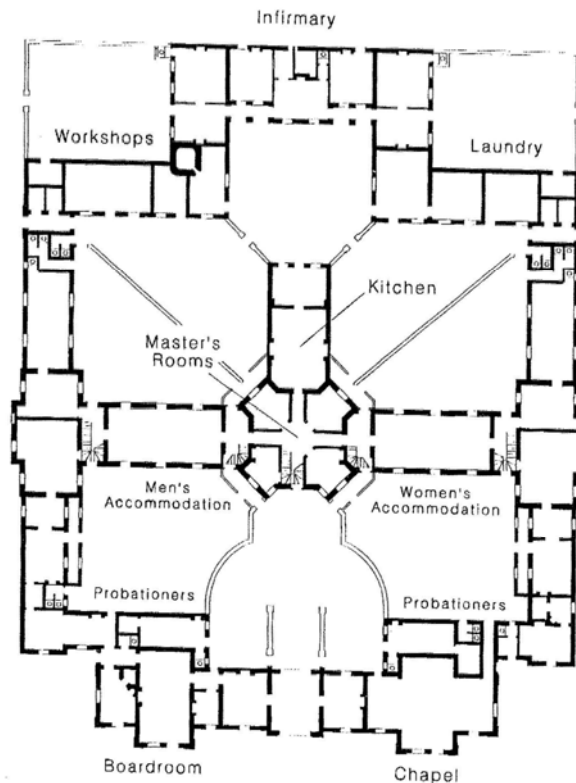
Entrance block of Northampton Workhouse
Source: Peter Higginbotham, <http://www.workhouse.org>

Nevertheless, in this early stage, Scott and Moffatt had already begun to introduce some new features to Kempthorne's model design. At Winslow, although the general plan was not different, the shape of the entrance block was changed. A canted bay with windows on its three sides occupied the central position. It is very probable that the architects were representing the shape of the central hub on the very front façade of the whole establishment to emphasize the specific nature of the institution. If this was indeed Scott's intention, this feature could be seen as a forerunner of his later development of using functional features as characteristic formal elements on the façades of the main building of workhouses.

During this period, Scott and Moffatt accumulated plenty of experience of workhouse design and management. This helped them to adjust designs according to new requirements. As many new workhouses had begun operation, it was found that more segregation was needed. It was suggested that it would be better to segregate vagrants, to isolate contagious diseases, and to separate the children's school and the "receiving wards" from the main body of the workhouse. The request for more segregation finally led to the specification in the *Workhouse Rules Order*, published by the Commission in 1842. It required that at least seven classes: aged and infirm men, able-bodied men over fifteen years of age, boys between seven and fifteen, aged and infirm women, able-bodied women over fifteen, girls between seven and fifteen, and children under seven should be separated. Besides these basic requirements, the commission also encouraged local Guardians to segregate sick and fever cases, lying-in women, vagrants and (in later years) the chronically insane.⁸⁵ Scott and Moffatt had already detected this direction as early as 1836, and soon developed their own model design, which was used in nearly all of their workhouse

⁸⁵ Peter Wood, *Poverty and the Workhouse in Victorian Britain* (Stroud: Alan Sutton, 1991), p. 64.

projects after 1836.



Ground plan of Williton Union Workhouse, drawn by Morrison
Source: Morrison, "The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt"

One of the earliest appearances of Scott's model was the Williton Workhouse, built in 1836. Its rectangular shape indicates the influence of Kempthorne's square plan. While the general composition of a main building erected inside a courtyard is not different, various differences have been introduced. First, the entrance block is more complicated with new functions added. At Williton, the entrance block has only one storey. At the centre is the main gate, the porter's room and waiting room. The boardroom used for Guardians' meeting is placed at the left side, and a chapel occupies a symmetrical position on the right. In Kempthorne's design the main dining hall was also used as chapel. Morrison argues that Scott and Moffatt were unsatisfied by this arrangement since men and women were mixed in the dining hall. To solve this problem they provided separated dining rooms for the two sexes in their respective sections. Hence the chapel was allocated to a specific room much smaller than Kempthorne's dining hall.⁸⁶ Another

⁸⁶ Morrison, "The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt," p. 192.

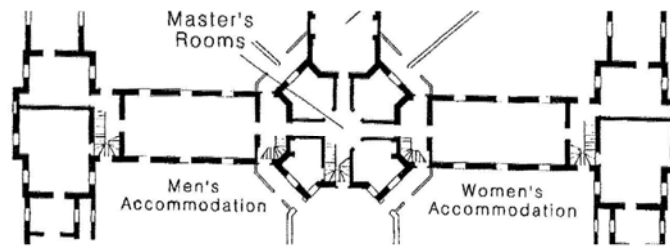
new feature of the entrance is the probationers' rooms. In the new workhouses, a person was required to submit all his belongings when he entered the institution. These goods were kept until he left the house. The new inmates were also required to be carefully washed and dressed in workhouse uniforms before joining others. In Kempthorne's plan no specific rooms are provided for this process. But in Scott and Moffatt's plan, the probationers' rooms incorporated in the entrance block serve this function very well, as this part is separated from the main building.

Secondly, the main building in the middle of the whole establishment is considerably changed. The arm connecting the hub and the entrance block is reduced. Opposite to it, the back arm is also reduced to one storey accommodating the kitchen. By contrast the two arms on the two sides are enlarged. A new block is added at each end of the two arms and make the main building H-shaped. These areas are still used as accommodations for adults and children of both sexes. Modifications are also introduced into the central hub. Different from Kempthorne's plan that uses the whole central hub as the master's room, Scott and Moffatt divided it into four smaller rooms separated by connecting corridors and stair. One advantage of this arrangement is that it enhances the internal communication of the main building. But on the other hand it also affects the central surveillance since the master can no longer supervise all four exercising yards from his room directly.

Thirdly, Scott and Moffatt separated the infirmary part from the main building. It is now placed to the rear of the whole establishment with its own yard. This is clearly an indication of current views on separating the sick from the healthy.

These variations in plan were also accompanied by variations in the architectural form. As architects rather than poor law reformers, Scott and Moffatt were less interested in the deterrent function of workhouses and preferred to emphasize the benevolent character of the institution. This attitude is clearly represented in the appearance of their workhouses. As the entrance part was reduced to one storey, Scott and Moffatt's design made it more congenial than Kempthorne's three-storey block in the model design. In most cases the gate was signified by an imposing classical arch with pediment on the top. On its two sides the boardroom and the chapel were accommodated in cottage-size rooms covered by pitched roofs. Both the small size and the formal features of this part helped to create an impression of intimacy and formed a strong contrast to the refusing appearance of the entrance blocks in both Head and Kempthorne's model

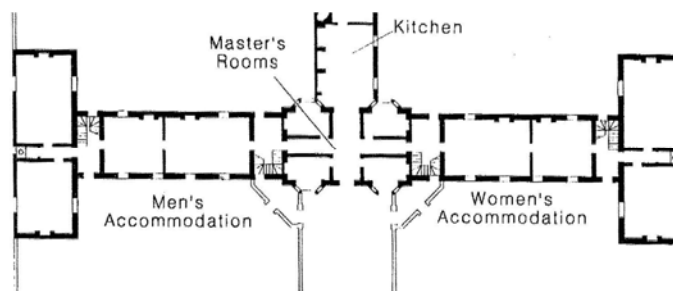
designs.



The first type of central hub in Scott and Moffatt's designs and the photo of Witham Workhouse.

Source: Plan from Morrison, *The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt*, photo from Peter Higginbotham, <http://www.workhouse.org>

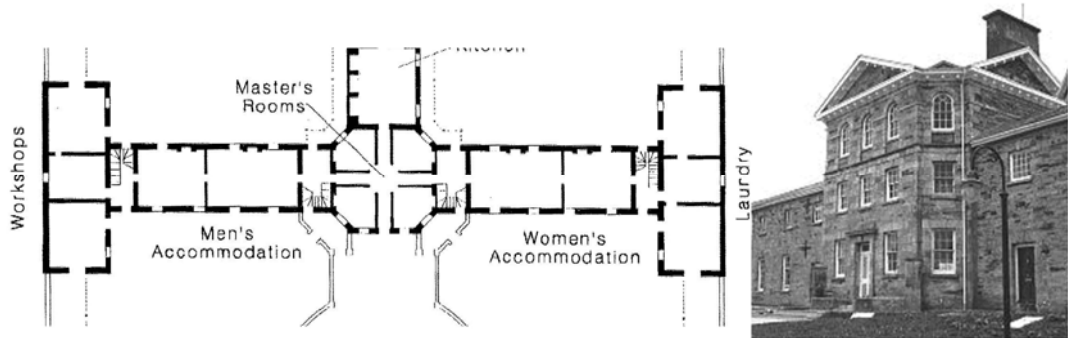
The reduction of the front arm creates a grand façade for the main building that was lacking in Kempthorne's radial design. The most prominent part of this façade is the central hub. No longer covered by a radial arm, the hub appears as a commanding element in the composition with its large volume and unique corner windows. Scott and Moffatt mainly used three types of central hub designs. In the first type, four windows protrude at the four corners. Totally exposed, the two front windows form two angular blocks in the main façade. This is the most frequently used type in Scott and Moffatt's designs, the two unusual corner blocks appearing symmetrically besides the main entrance constitute an innovative formal element. More than any other factors it directly indicated the function of this kind of institution. This type of design appeared in Bedminster, Bideford, Guildford, Tavistock, Williton, Witham Workhouses.



The second type of central hub in Scott and Moffatt's designs and the photo of Belper workhouse

Source: Plan from Morrison, "The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt," photo from Peter Higginbotham, <http://www.workhouse.org>

In the second type, the protruding windows are replaced by four normal bay windows. The two windows on the front facade, as elements commonly used in private architecture, largely soften the appearance of the main building and move it closer to domestic buildings. This type was used in Amersham, Belper, Chesterfield, Dunmow and Wycombe Workhouses.



The third type of central hub in Scott and Moffatt's designs and the photo of St Columb Major Workhouse
 Source: Plan from Morrison, "The New-Poor-Law Workhouses of George Gilbert Scott and William Bonython Moffatt," photo from Peter Higginbotham, <http://www.workhouse.org>

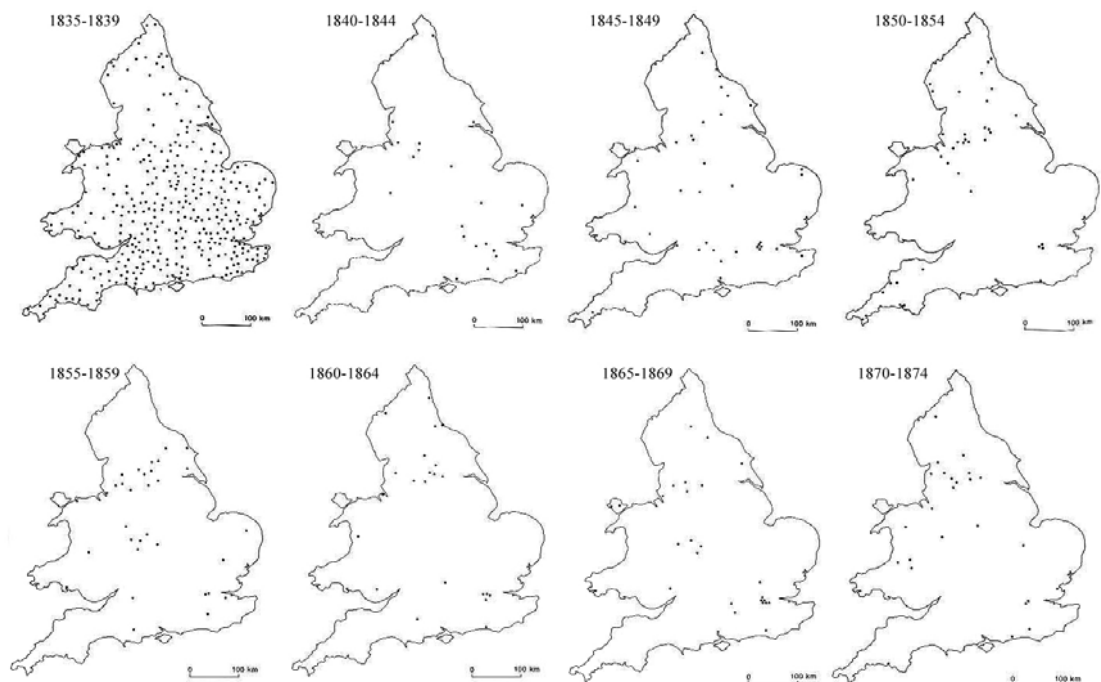
The third type was much simpler, the shape of the central hub is an octagon similar to Kempthorne's original design. It appears in the façade as a simple block. Compared to the other two, this type failed to create an attractive focus at the center of the main building. Probably this is why it was least favoured by Scott and Moffatt. One example of its utilization is the St Columb Major Workhouse.

In each of the three types, the functional layout serving central surveillance is clearly represented on the front façade. This "functionalism" constituted a particular character of Scott and Moffatt's workhouse designs. The combination of Utilitarian purpose and formal consideration was welcomed by many later architects as a middle way between the radical reform scheme, which demanded only the plainest architectural appearance, and mainstream architectural practice, in which formal design was of high importance. Scott and Moffatt's way found a bridge connecting the new institution and architectural tradition. Their designs enriched the architectural language of the workhouse and in this way rejected the principle of a deterrent appearance of workhouses insisted on by some New Poor Law reformers. Their strategy also represented the traditional understanding of poor relief as compassionate benevolence rather

than only interest exchange or corrective reformation. Scott and Moffatt’s practice perfectly showed that even though the spirit of New Poor Law still dominated the design of new workhouses, with classification and surveillance as its main concerns, local architects could introduce various architectural languages to represent poor relief in different terms. This is why the English workhouse designs could be introduced to Scotland where a different poor relief system was in place.

4.3.4 The Effects of the New Poor Law

The large-scale construction of workhouses during the five years after the passing of the Poor Law Amendment Act represented the rapid implementation of New Poor Law policy in England and Wales. The governmental strategy, directed by Chadwick and transmitted by Assistant Commissioners at local level, was to replace the former dispersed local management of poor relief with a nation-wide uniform administrative system, which could achieve the goal of “the complete adoption of the workhouse system and the extinction of all out-door relief to the able-bodied” as described in the first *Annual Report*.



Construction of new workhouses in different period
Source: Driver, Power and Pauperism

The progress to the first part of the goal - construction of workhouses – was rather rapid. As shown in Driver’s diagram, most new workhouses were erected before 1839. In the subsequent years the construction of new workhouses concentrated in Northern England and in the London area, where the full adoption of new poor law had been rather slow.

Compared to the rapid establishment of workhouse systems, the route to the second goal – the abolition of out-relief to all able-bodied – was full of difficulties and obstacles. As out-relief had long been used as a main method of poor relief, especially in industrial northern England, the government was afraid that a sudden complete abolition might bring serious disturbance. With great caution, it required that any “General Order” regarding out-relief, applicable to all unions, must be laid before the House. As a consequence the Commission could only stop out-relief by issuing a “Special Order” covering one or two Unions at one time.⁸⁷ In 1842 the Commission issued the *Out Labour Test Order* to several Unions. It allowed relief to be offered to the able-bodied in return for manual labour. Although many officials in the Commission regarded it as a betrayal of the principles of 1834 as it blurred the boundary between paupers and independent labourers,⁸⁸ this order was nevertheless extended to more Unions thereafter. In 1844 the Commission issued the *Outdoor Relief Prohibitory Order*, which covered most of the Unions. The order prohibited out-relief to the able-bodied except in some special cases such as “cases of sudden or urgent necessity” and cases of “sickness, accident, or bodily or mental infirmity.” But the vague wording of “sudden or urgent necessity” left plenty space for varying interpretation. In most cases, it depended on local Guardians to decide under what specific conditions out-relief could be given. The 1852 *General Outdoor Relief Regulation Order* also allowed a “labour test,” which prohibited relief from being given to “any able-bodied male person while he is employed for wages or other hire or remuneration by any person.” In this sense the new poor law only abolished the wage-allowance measure, but it never fully stopped other kinds of out-relief to the able-bodied. Although the essence of the new poor law was precisely the elimination of all other forms of relief except for the workhouse, this principle was largely compromised at the local level. On the one hand it can be seen as a distortion of the New Poor Law policy, but on the other hand it functioned as a lubricant to adjust the central

⁸⁷ Longmate, *The Workhouse*, p. 77.

⁸⁸ Felix Driver, *Power and Pauperism: The Workhouse System, 1834-1884*, *Cambridge Studies in Historical Geography*; 19 (Cambridge: Cambridge University Press, 1993), p. 49.

regulations to various local conditions. In this sense it in fact served to stabilize the new poor relief system.

Although the New Poor Law did not reach the target of abolishing all out-relief, it did achieve another goal: the reduction of the poor rate. In the first *Annual Report* the Commission claimed that the poor rate was cut by a third in the most pauperized areas and in the country as a whole the rate was reduced by a sixth.⁸⁹ During the decade 1834-44, the national cost in poor relief was kept between £4.5 and £5 million per year, and in the subsequent twenty years the amount fluctuated between £5 million and £6 million per year.⁹⁰ This statistic becomes more noteworthy if we consider the fact that this period saw the fastest increasing of population in Britain. Although earlier historians such as E.P.Thompson were inclined to emphasize the miserable conditions of the worker's life during the Industrial Revolution – appalling pollution, crowding, infection, economic exploitation, social injustice and inequality –, recent researchers confirm that the real wage of English workers did increase consistently after 1820,⁹¹ and the most rapid advance occurred in the period 1860-1900.⁹² This historical condition clearly alleviated the pressure on poor relief. But on the other hand, as the living standard of workers' and the general economy both improved greatly, the strict New Poor Law policy stressing the deterrent function appeared unnecessarily harsh in the later half of 19th century. As time went on, other relief institutions serving some specific groups such as the aged and the children took over from the poor law institutions part of the task of providing public assistance, and the relief system gradually moved to the welfare system until the official termination of the Poor Law on 1st April 1930. After the Second World War, many of the functions of former poor law institutions were transferred to the new National Health Service, together with hundreds of workhouse buildings. Many workhouses were turned into hospitals and some are still serving this purpose in modern Britain.

Besides poor relief, the new poor law produced significant effects in two other areas. The one was public education and the other was urban sanitary reform. In the mind of poor law

⁸⁹ Longmate, *The Workhouse*, p. 76.

⁹⁰ Englander, *Poverty and Poor Law Reform in Britain: From Chadwick to Booth, 1834-1914*, p. 15.

⁹¹ See T. S. Ashton, "The Standard of Life of the Workers in England. 1790-1830," *The Journal of Economic History* 9 (1949). Also, Peter H. Lindert and Jeffrey G. Williamson, "English Workers' Living Standards During the Industrial Revolution: A New Look," *The Economic History Review* 36, no. 1 (1983).

⁹² Wood, *Poverty and the Workhouse in Victorian Britain*.

reformers, education had long been a crucial element in the final solution of poverty. The 1834 Report ended with the words: “as soon as a good administration of the Poor-Laws shall have rendered further improvement possible, the most important duty of the Legislature is to take measures to promote the religious and moral education of the labouring classes.”⁹³ In practice, the “less eligible principles” espoused by Bentham made the poor law institution itself an educational instrument, which led the poor into the route of independent labourers. Inside workhouses, most inmates were required to pursue works aimed at forming an industrious character. Under the 1834 Act, poor law Unions were required to provide at least three hours teaching everyday for workhouse children, and the subjects taught included reading, writing, arithmetic and religion. A school room was often provided in workhouses and, as the separation of different classes was more advanced, dedicated buildings for workhouse schools appeared in many Unions.

It should be noted that the education system in poor law institutions was financed entirely from governmental funds and was controlled by the poor law authority. This formed a sharp contrast to the common education system for non-pauper children outside workhouses. Paradoxically, it was in the workhouses that a uniform education system managed by civil government rather than voluntary organizations started, and its coverage of all children in England only came after the 1870 Education Act.

As a typical Benthamite, Chadwick had a strong interest in the issue of education. In the Commission, his work helped to increase the significance of education in the whole poor relief system. In this area he was strongly supported by two Assistant Commissioners, E. C. Tufnell and James Kay. In 1835 Chadwick asked Kay to report on the apprenticeship system in East Anglia. This work diverted the interest of Kay from public health to public education.⁹⁴ After that, a series of enquiries was instigated to investigate the appropriate way of training pauper children. As the members of the Commission most enthusiastic about education, Tufnell and Kay paid special attention to teacher training. They admired the Scottish achievement in this respect, especially that of the Edinburgh Sessional School, and introduced several Scottish teachers to workhouse schools. As this was only a makeshift solution, they cooperated in

⁹³ Laws, *Poor Law Commissioners' Report 1834*, p. 362.

⁹⁴ Alexander M. Ross, "Kay-Shuttleworth and the Training of Teachers for Pauper Schools," *British Journal of Educational Studies* 15, no. 3 (1967): p. 276.

establishing a teacher-training school in Kay's own home at Battersea. This was the earliest teacher training institution in England. In 1839 Kay was appointed as the secretary of the newly established Committee of Council on Education. In that post he promoted the pupil-teacher system he had developed at Battersea School as a national system and largely influenced the development of elementary education and also the appropriate models of educational building.

A comparison of the system of poor relief and the system of public elementary education that appeared later reveals strong similarities. In fact many administrative features of the new poor law such as its bureaucratic structure, inspectorate mechanism and publication of model designs were inherited by the national educational system. In this sense, the new poor law established a paradigm for other nation-wide institutional systems developed under the control of a powerful central authority.

In the other aspect - urban sanitary reform - it was again Chadwick and Kay who played the most important role in the early stage. As a part-time journalist during his apprenticeship years, Chadwick had already paid special attention to the conditions of the urban slums in South London. His concern with this issue was clearly represented in his essay *The Means of Insurance against Accidents, etc.* In this article he expressed his belief that administrative arrangements could improve the quality of public life by removing the causes of poverty, dissipation, crime, and disease. This belief in administrative measures was close to the Benthamite stress on governmental intervention as an efficient instrument for social reform. After joining the Benthamite circle, Chadwick became acquainted with two other Utilitarians, Dr. Neil Arnott and Dr. Southwood Smith, both of whom became significant advisors to him.

As a doctor, Kay was involved deeply in the urban sanitary problem in his early career. After graduation from Edinburgh, he was appointed as physician to the Ardwick and Ancoats Dispensary at Manchester. In this typical city of the Industrial Revolution, Kay witnessed the bad living conditions of the urban working classes. When the city was hit by cholera in 1832, Kay was appointed the secretary of the board of health to co-ordinate the work of 14 district boards. Based on his investigation of these areas, Kay published an influential pamphlet entitled *The Moral and Physical Condition of the Working Classes Employed in the Cotton Manufacture in Manchester* which became a classic of its type and strongly influenced Friedrich Engels' more famous work *The Condition of the Working Class in England*, which appeared 12 years later.

The cooperation of the Chadwick and Kay started in the Poor Law Commission. As the secretary of the Commission, Chadwick received a large number of reports from local Guardians about the diseases that prevailed in the workhouse and the unsanitary conditions that were regarded as direct links to these diseases. Although Chadwick had a strong desire to enhance the powers of the poor law system on the issues of sanitation, this cause was not supported by the Commissioners. The factor that caused a change of heart was the 1838 typhus epidemic in London. Altogether 13,972 cases were reported, of which 1,281 were fatal.⁹⁵ In such circumstances, the poor law Commission could no longer remain indifferent to the problem. Under Chadwick's promotion, an enquiry was launched to investigate the relationship between disease and urban sanitary conditions. Three persons were appointed for this task, Drs. Neil Arnott, Southwood Smith and Kay. They produced two reports: Kay and Arnott co-authored *On the prevalence of certain physical causes of fever in the Metropolis which might be prevented by proper sanitary measures*, and Smith wrote *On some of the physical causes of sickness and mortality to which the poor are particularly exposed and which are capable of removal by Sanitary Regulations, exemplified in the present condition of Bethnal Green and Whitechapel Districts, as ascertained on a personal inspection*. They concluded that some epidemics could be avoided by the provision of a comprehensive sewer system, a plentiful water supply, strict building regulations, and rules against overcrowding and noxious trades. They also suggested that the Poor Law Guardians should be given the power to cleanse ditches and pools, to inspect lodging-houses, to indict nuisances and so on. In short they should function as local public health authority in addition to being in charge of poor relief.⁹⁶ These reports soon aroused widespread shock in the middle- and upper-classes. The horrors they disclosed of the living conditions of working classes were so astonishing that the government established a major inquiry into the sanitary conditions of the labouring classes. It was the first large-scale governmental investigation on this issue.

The inquiry started in 1839 and was not finished until 1842 due to insufficient funds and inadequate governmental support. Assistant Poor Law Commissioners and Union medical officers provided local materials from all over the country, and it was Chadwick who

⁹⁵ Richard Albert Lewis, *Edwin Chadwick and the Public Health Movement 1832-1854* (New York: Longmans, Green, 1952), p. 34.

⁹⁶ *Ibid.*, p. 36.

supplemented these materials with his own observations, analysis and suggestions, and personally finished the final report. Just like the 1832 *Poor Law Report*, Chadwick's *Report on the Sanitary Conditions of the Labouring Population* for the first time provided a comprehensive account of the serious sanitary problem. Meanwhile, the *Sanitary Report* resembled the *Poor Law Report* in providing plenty of suggestions, including practical measures and administrative establishment, to cope with the problem. The two reports were even similar in winning immediate public approval. The impact was so huge that the government had no choice but to take a further step by setting up the Health of Town Commission to re-examine Chadwick's recommendations. Drawing a parallel of the two reports, Finer rightly stresses Chadwick's contributions, as he writes, "in both cases, Chadwick's individual Report outlined the plan that was later adopted by the Royal Commission. In both Chadwick played the dominant part in the Royal commission's deliberations and drafted most of their Report. In both, the operative portions of the plan were his own."⁹⁷

From then on, the route to a comprehensive urban sanitary legislation was already laid down. After the dissolution of the first Poor Law Commission in 1847, Chadwick was appointed as a Commissioner of the Metropolitan Commission of Sewers, founded in 1848. Clearly he had become the leader of the sanitary movement, which finally led to the 1848 Public Health Act. According to the Act, a central authority, the General Board of Health, was formed and Chadwick was appointed as a commissioner. Aiming at the improvement of urban sanitation, the General Board in fact assumed the responsibility for regulating the urban environment as a whole. It was empowered to deal with various issues including sewerage, refuse collection, removal of anything likely to cause epidemics, inspection of slaughter house, inspection of lodging houses to ensure that basic standards were met, paving and maintaining of roads, public gardens, water supply and burial of the dead. It can be seen that in some aspects the Board of Health performed the functions that are generally in the charge of a modern urban planning authority. It was in this sense that Benevolo called the sanitary legislation "the direct forerunner of modern town-planning legislation."⁹⁸

Chadwick worked at the Board of Health till its dissolution in 1854, when he retired with a

⁹⁷ Finer, *The Life and Times of Sir Edwin Chadwick*, p. 232.

⁹⁸ Leonardo Benevolo, *The Origins of Modern Town Planning*, MIT Press paperback ed. (Cambridge, Mass.: Massachusetts Institute of Technology, 1971), p. 89.

pension. His public career had started from the formation of New Poor Law system and ended in the sanitary reform, which subjected British cities to the uniform regulation of a national authority. In both cases Chadwick played a key role and put into practice the Benthamite idea of using governmental intervention as the most efficient instrument for enhancing social utility. It was through him that the Benthamites' influence on the transformation of governmental administration in 19th century Britain was most clearly represented. Even today, this Utilitarian legacy - its emphasis of strict legislation and powerful administration - is still present in modern welfare and city planning systems.

5 Transformation of Poor Relief in Scotland and Edinburgh Workhouses

Like England, Scotland has a long history of poor relief. Despite the close relationship between the policies of the two countries, the Scottish philosophy on poor relief differed from that of England in some respects such as collection of poor rate and allowance given to the able-bodied. These differences determined the route of Scottish poor relief in which English influence and local traditions were intertwined to cultivate the unique character of Scottish poor law policy and its architecture.

5.1 Old Poor Law in Scotland

In Scotland, the earliest parliamentary act relating to poor relief appeared in 1424. An act passed in that year made a distinction between the able-bodied beggars and those who were not able to earn their own livelihood. It ordered that no able-bodied person between the ages of fourteen and seventy years was allowed to beg, they must find employment or they would be branded on the cheek and banished.¹ The other group, those who could not work to earn a living, was given the privilege to beg with an official badge. Hence from the earliest stage a line between able-bodied and indigent had already been drawn; while the first group was punished and repressed the second group was recognised as having the right to be relieved.²

Two years later a statute ordered sheriffs to arrest all able-bodied beggars, who were required to find employment within 40 days after release or face imprisonment. Similar acts

¹ R. A. Cage, *The Scottish Poor Law, 1745-1845* (Edinburgh: Scottish Academic Press, 1981), p. 2.

² Scottish Record Office, *Poor Relief in Scotland: Historical Background, Document Extracts and Copies, History at Source* (Edinburgh: Scottish Record Office, 1995), p. 5.

against the “sturdy beggars” were passed in 1449, 1455, 1457, and 1477.³ It shows the consistently harsh attitude to the able-bodied poor in Scottish law as well as the poor execution of these acts, a characteristic of Scottish society in early times, since similar acts were continuously reintroduced.

A 1503 act further defined the concept of the “legal poor” who were officially allowed to beg. This group of people included crippled, blind, impotent, and weak folk. In 1535 an act restricted their privilege to beg only in their parish of birth.⁴ Apparently the intention of these early acts was repressing vagrancy rather than poor relief. Able-bodied beggars were regarded as a degenerated group who did not deserve sympathy and should be forced to work for their own living rather than appeal to relief. On the other hand the provision for the impotent poor was rather weak, as begging was their only recourse and no positive support was given directly by the government.

A major change came in 1579, when an act entitled “For the Punishment of the Strong and Idle Beggars and Provisions for Sustentation of the Poor and Impotent” was passed. Just as the English Poor Law system was founded by several acts passed in this period, the 1579 Act established the basis of Scottish Old Poor Law and determined its formation till 1845. In contrast to previous acts, which were generally brief and incomplete, the 1579 Act described a comprehensive system of poor relief. It defined the crippled, sick, impotent, weak folk, and those under fourteen and over seventy as legal poor to be relieved. In each town or parish a list of the legal poor was to be made, specifying their personal information. To support these people, the 1579 Act took an important step by allowing provosts, bailies and judges “to tax and stent the whole inhabitants within the parish according to the estimation of their substance, without exception of persons, to such weekly charge and contribution as shall be thought expedient and sufficient to sustain the said poor people.”⁵ This provision of public fund was the earliest confirmation of direct governmental intervention of poor relief, and was very close to English policy of poor rate collection.

To implement this policy, overseers or collectors were to be appointed in every burgh, town and parish to collect money and deliver it to the poor. The Act also stated that “the aged and impotent poor people should have lodging and abiding places throughout the realm to settle themselves into,” ordaining, therefore, that hospitals should be maintained to

³ Cage, *The Scottish Poor Law, 1745-1845*, p. 2.

⁴ *Ibid.*, p. 35.

⁵ Cited from George Nicholls, *A History of the Scotch Poor Law*, Repr. ed. (New York: A.M. Kelley, 1967), p. 20.

provide accommodation to these people.⁶ Despite these developments, the 1579 Act also left a loophole that in cases where the poor fund was insufficient, the poor could be relieved by giving them licenses to beg. Contrary to the improvement in positive poor relief, the 1579 Act was even harsher to the able-bodied vagabond and beggar. The distinction between able-bodied and indigent was even more clearly demarcated.

According to George Nicholls, the sudden change of Scottish Poor Law is attributable to the influence of English poor law. The 1579 Act was largely identical with the 14th Elizabeth Act passed in 1572 and further consolidated by the 43rd Elizabeth as the basis of English old poor law. But Nicholls also noted a significant distinction between the two Acts. While the Scottish Act used deterrent punishment to force the able-bodied to earn their own subsistence the English Act was milder to them. It allowed the overseers to use surplus money to “place and settle to work the rogues and vagabonds that shall be able, there to be holden to work by the oversight of the overseers, to get their livings and to live and be sustained only upon their labour and travail.”⁷ This clause in fact blurred the boundary between punishment and provision, as overseers needed to provide work for the able-bodied in such cases. For Nicholls this policy planted the root of the evils of English old poor law, caused by relieving the able-bodied. The Scottish Act, in his eyes, successfully avoided this danger due to its uncompromisingly repressive stance towards the able-bodied.⁸ Nicholls was quite right in pointing out one of the biggest difference between English and Scottish poor relief system. In England aid given to unemployed able-bodied was confirmed in poor laws and became the central issue of poor law reform as seen before. But in Scotland this group was legally denied official assistance although in practice the law was not always followed.

Through the Act of 1579, provision for the poor was officially established as a responsibility of the nation. It ordained “assessment”, a kin of tax, as the source of a public fund for poor relief and assigned a specific administration body for the implementation of the poor laws. Compared to previous acts, it was a huge step towards a comprehensive poor relief system positively supported by government.

A 1661 Act reconfirmed the 1579 Act, clarified the concept of the poor, and separated them into two groups: the regular or disabled, and the casual or able-bodied. Because the able-bodied could become temporarily sick or disabled, they were allowed to be relieved so

⁶ Ibid., p. 19.

⁷ Cited from Ibid., p. 25.

⁸ Ibid., p. 26.

that they would not degenerate into permanent poor. But it was clearly defined that only the first group was entitled for the official poor fund, and the second group should be helped by voluntary contributions such as church collection. In the group of casual poor, unemployment was not regarded as a justified reason for relief. Hence healthy adults were excluded from the public relief no matter how difficult their economic condition was. This aspect shows the strong moral criterion in the philosophy of Scottish poor relief. Public assistance was regarded as a benevolent help to weak people; healthy adults had the moral responsibility to support themselves. To relieve them could only lead to the moral degeneration of the able-bodied. Similar thoughts also existed in English poor law, but in Scotland this current was stronger and was more consistently followed in practice.

Assessment in Scottish poor law was similar to the poor rate in English poor law; it ensured tax as a reliable source of relief funding. While in England this policy was widely accepted, in Scotland most rural parishes and small towns did not take it and relied mainly on voluntary donations. Poor relief was not regarded as a burden forced upon individual by law, but a gift of goodwill given to “pure people” who were physically unable to earn their own living. Meanwhile, to turn poor relief into a legal obligation would lead the poor to forget their gratitude to the people who helped them and ignore their responsibility for their own life. This moral attitude can be gauged from the extent of assessment. According to the 1839 report of the *Committee of the General Assembly on the Management of the Poor in Scotland*, out of nearly 850 rural parishes only 21 imposed permanent assessment before 1750; and before 1800 the number was 87.⁹ For this reason, poor law expense was kept at a low level in Scotland compared to England. Another reason for the comparatively low cost in Scotland was the principle that any grant of money in relief of poverty should be set at a lower rate than the earnings of the lowest paid worker.¹⁰ The poor were supposed to be helped by the charity of family, friends or neighbours. Official relief was regarded only as a supplementary measure. Like the “less eligible” principle supported by Bentham and adopted by English new poor law, this principle in Scottish poor law was designed to avoid the full dependence of poor on public relief.

To set the poor to work was a consistent theme of Scottish poor law. The Act of 1574 ordained that even the aged and impotent poor should be assigned work, if they still had partial capability. The Act also allowed persons with heritable property to take any beggar’s

⁹ *Report by a Committee of The General Assembly on the Management of the Poor in Scotland*, Parliamentary Papers, 1839 [177].

¹⁰ Office, *Poor Relief in Scotland: Historical Background, Document Extracts and Copies*, p. 15.

children between five and fourteen into his service; girls had to remain until 18 years old, and boys until they were 24.¹¹ A 1672 law ordered magistrates to erect correction houses (workhouses) to house the vagabonds and put them to work. But there is little evidence that any correction house or workhouse was erected as ordered before the earliest establishments built for this purpose appeared in 17th century Edinburgh. More poorhouses or workhouses came into being in the 18th and 19th centuries and prior to the passing of the Act of 1845 there were thirteen of them operating in Scotland.¹²

Unlike England, the administration of poor relief in Scotland was largely in the hands of the Church. The 1597 Act allocated the power of administering relief in rural parishes to the Session of the Kirk; and in the towns it was administered by the magistrates, hence the dichotomy of the rural-urban system in Scottish poor relief. But prior to 1750 most burghs handed over their administrative responsibilities to the Church, the difference between town and rural area was quite small.¹³ Only from mid 18th century, when the cities had become bigger and were heavily influenced by the industry revolution, did poor relief in the larger cities such as Glasgow and Edinburgh take a route different from that in rural parishes.

5.2 Old Edinburgh Poor Houses

R. A. Cage argues that the real separation of urban and rural sub-systems of poor relief in Scotland only came into being in 1731 when the Town's Hospital in Glasgow was established.¹⁴ Aberdeen followed in 1739 and Edinburgh in 1743. Several other hospitals were set up at Paisley in 1752, Dumfries in 1753, St. Cuthbert's (Edinburgh) in 1759, and Canongate (Edinburgh) in 1762.¹⁵ Hospitals in that time were institutions to accommodate the aged, the young, the disabled and, sometimes, the sick. It was more like a poorhouse than an infirmary. While outdoor allowance was the dominant form of poor relief prior to 1750, the appearance of these institutions managed by the city government signified the beginning of the different system of urban poor relief, which used indoor relief as another important measure to cope with large numbers of poor people. Cage is right in pointing out that the hospitals or poorhouses were unique to the big towns but he is not right about the timing. Despite the dominance of voluntary donation as the source of poor fund, governmental

¹¹ Ibid., p. 6.

¹² Thomas Ferguson, *The Dawn of Scottish Social Welfare: A Survey from Medieval Times to 1863* (London; New York: T. Nelson, 1948), p. 212.

¹³ Cage, *The Scottish Poor Law, 1745-1845*, p. iii.

¹⁴ Ibid., p. 46.

¹⁵ R. A. Cage, "The Making of the Old Scottish Poor Law," *Past and Present*, no. 69 (1975): p. 117.

involvement in poorhouse construction started much earlier than he suggests, at least in Edinburgh.

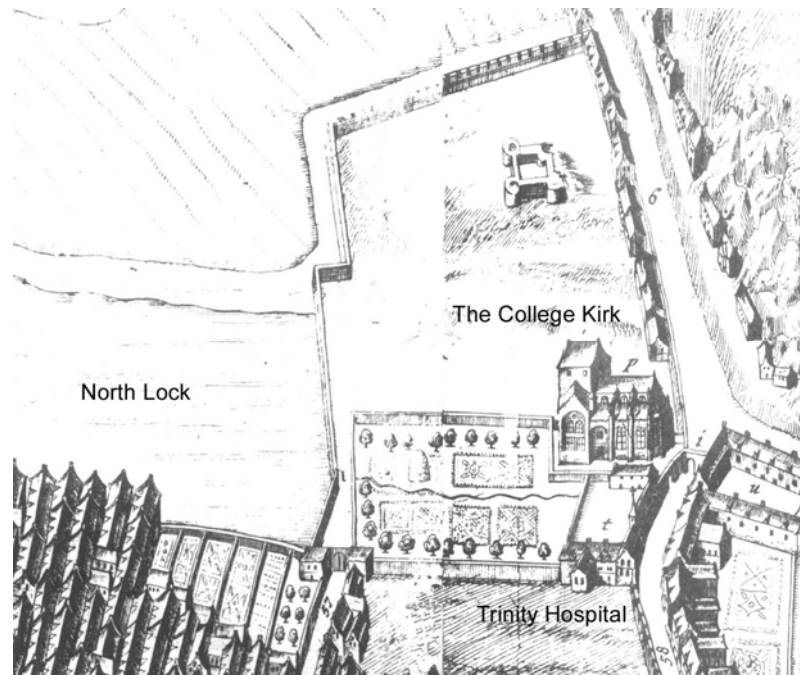
The earliest poorhouse recorded in Edinburgh was the Trinity Hospital. Its early history was recorded in Maitland's 1753 book *The History of Edinburgh from Its Foundation to the Present Time*. It records that, in 1461, Queen Mary financed the construction of the Trinity College at the end of Leith Wynd, which was at the eastern end of the North Loch. A poor house was built near the college and was named after the church. After the Reformation in 1567 the building was donated to the city for the purpose of poor relief. Probably in 1587 the Council demolished the old hospital located on the Eastern side of Leith Wynd and converted part of the original college building into a hospital for old people.¹⁶ It was probably the earliest direct governmental intervention in poorhouse-establishment in Edinburgh.

The hospital was managed by a Council of Governors consisting of twenty one members, including the Lord Provost, the Four Baillies, the Dean of Guild, and the Treasurer of the city.¹⁷ This confirms that the city council jointly managed the poorhouse. The running fund of this institution completely depended on voluntary donations. Normally it was able to accommodate around 50 inmates and in 1700 it housed 54 old people. The old poor were maintained very well in the hospital with single rooms and good food. These conditions made it probably one of the best poorhouses at that time. Howard in his *An Account of the Principal Lazarettos* praised it as a "neat, quite, and comfortable retreat for old man."¹⁸

¹⁶ William F. R. S. Maitland, *The History of Edinburgh, from Its Foundation to the Present Time, Containing A. Relation of the Publick Transactions of the Citizens. With the Several Accounts of the Parishes. Within the Suburbs. The Ancient and Present State of the Town of Leith, And. A Great Variety of Cuts of the Principal Buildings, Etc* (Edinburgh, 1753), p. 480.

¹⁷ Trinity Hospital of Edinburgh, *Statutes of the Trinity-Hospital of Edinburgh* (Edinburgh: Mr. James M'Euen and Company, 1720), p. 5.

¹⁸ John the Philanthropist Howard, *An Account of the Principal Lazarettos in Europe. Second Edition, with Additions* (pp. vi. 259. 32. J. Johnson, 1791), p. 77.



Trinity Hospital

Source: Gordon's 1647 map of Edinburgh



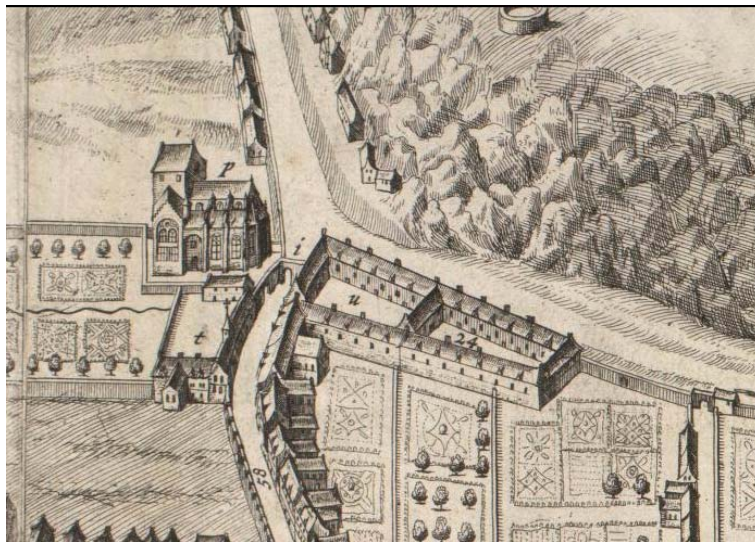
Trinity Hospital

Source: Gordon's 1647 map of Edinburgh

The buildings of the hospital and the church are clearly shown in a 1647 map made by Rev. James Gordon. As the building was not specifically designed but converted from the college building, the establishment lacked uniformity and regularity. The spire and the cross on the eastern range signified its original religious function. The internal arrangement was not clear. While men and women lived in separate parts, the segregation between the two groups was probably not strict; the statutes do not mention the separation and nor was the

courtyard divided. The institution kept its early form and function until 1845 when the Trinity Church, the Hospital and adjacent buildings were all demolished for the construction of the railway.

As an important poor relief institution, the Trinity Hospital defined the character of this area. Soon after other relief institutions were also erected around it. One of them was the earliest workhouse, the St. Paul's Work. According to Hugo Arnot's 1788 book, *History of Edinburgh*, it was originally a hospital donated by Thomas Spence, Bishop of Aberdeen, in 1479, and was named The Hospital of our Lady in Leith-Wynd. After the Reformation, the property was owned by the city Council, who decided to turn it into a workhouse in 1619 and renamed it as St. Paul's Work, a workhouse where the children of the indigent poor were instructed in the manufacture of woolen stuffs.¹⁹ In all this process, it was the Council that directed and financed the workhouse, as they paid salaries of the masters and provided funds for the subsistence of the poor children. But due to the unsuccessful economic outcome, the Council did not continued this institution for long, and in 1626 it converted the workhouse into a correction house to employ idle adults. No material can confirm the real function or regulations of the correction house.



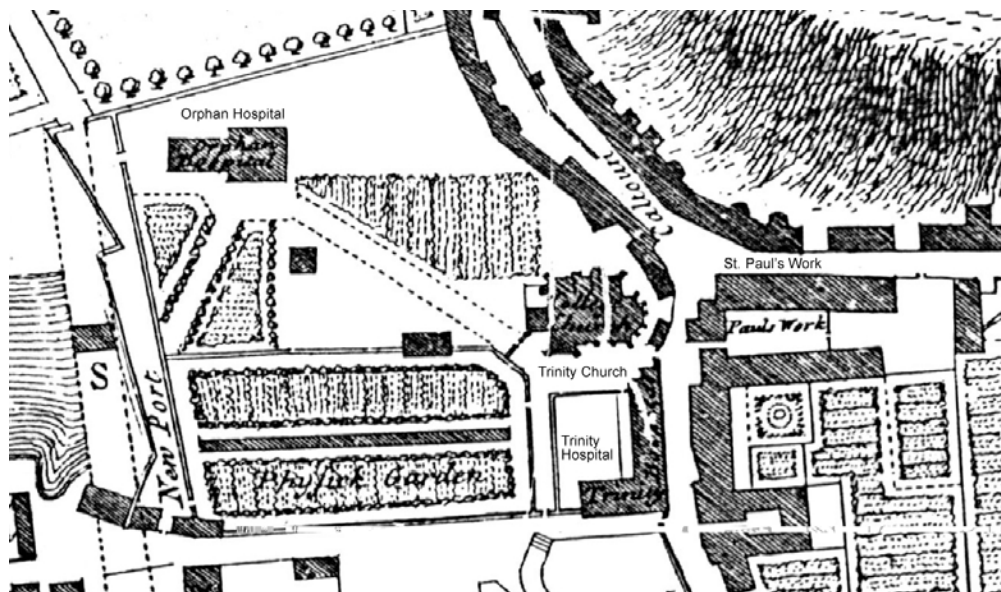
St. Paul's Work (marked as u) and The Correction House (marked as 24)
Source: Gordon's 1647 map of Edinburgh

The correction house is clearly represented in Gordon's 1647 map, where it appears at the eastern side of the Leith-Wynd, just opposite the Trinity's Hospital. The complex had

¹⁹ Hugo Arnot, *The History of Edinburgh, from the Earliest Accounts to the Present Time. By Hugo Arnot. To Which Is Added, an Appendix* (Edinburgh: printed for William Creech; and sold by Messrs Robinson & Co., London, 1788), p. 247.

two courtyards surrounded by two storey buildings. Arnot recorded that the city Council became weary of this institution. Consequently, the running of the correction house was stopped and the property was sold to private buyers.²⁰ Although it did not last for long, the St. Paul's Work does appear to have been the earliest workhouse and correction house in Edinburgh. Its short life also illustrates the character of Scottish poor law, which mainly confined relief to the aged and disabled and did not regard providing work for unemployed able bodied as an urgent task.

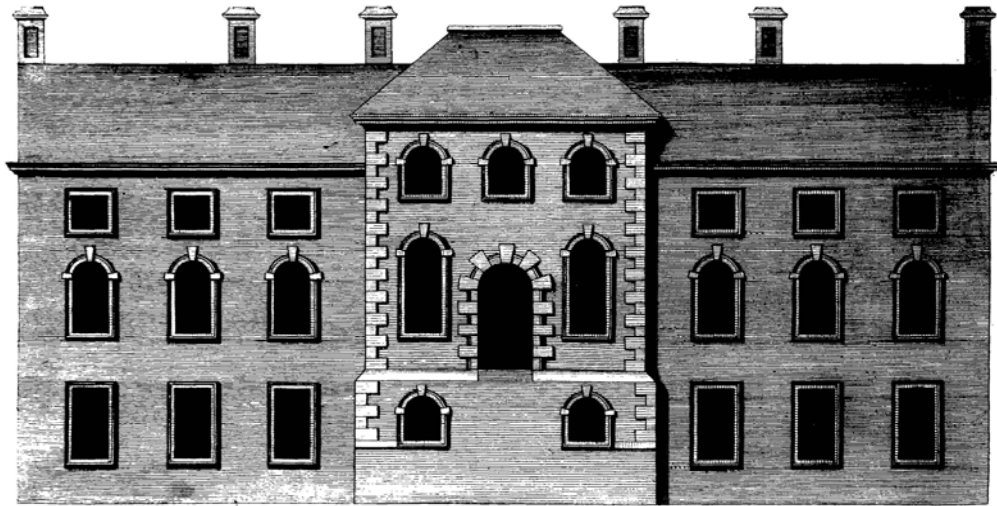
Neither the buildings of the Trinity Hospital or of St. Paul's Work had a specific architectural character, and there was little to distinguish them from common domestic buildings in the city. This situation was changed by the appearance of the Orphan's Hospital, whose architecture was specially designed to glorify the institution. The Orphan Hospital was built by the Society in Scotland for Propagating Christian Knowledge in 1733.²¹ Not much information survives about the design, but it is recorded that the hospital took the opinion of "Mr. Adam Architeck," which is probably a reference to William Adam.



Orphan Hospital, Trinity Hospital and St. Paul's Work
Source: William Edgar's 1742 map of Edinburgh

²⁰ Ibid., p. 248.

²¹ Orphan Hospital and Workhouse at Edinburgh., *Statutes of the Corporation of the Orphan Hospital and Workhouse at Edinburgh. To Which Is Prefixed an Account of the Said Hospital from Its Establishment in 1733* (Edinburgh: printed by James Donaldson, 1777), p. 5.



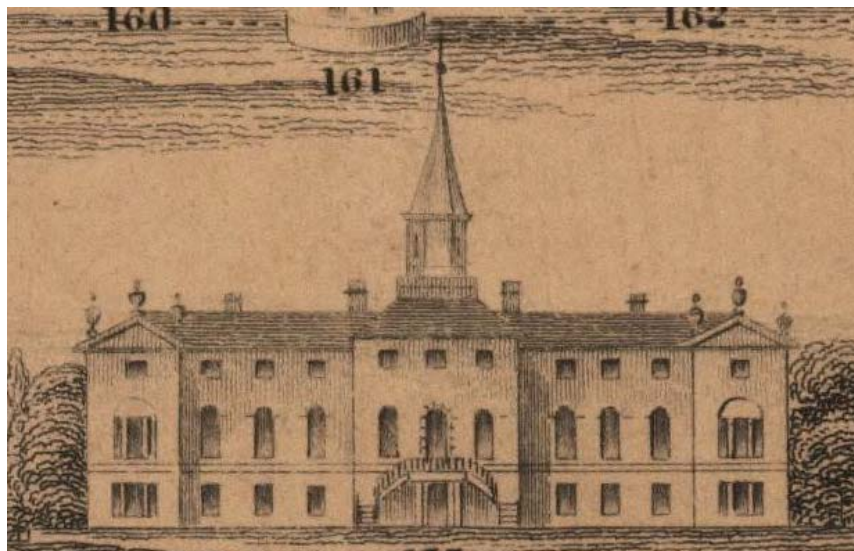
Orphan Hospital
Source: Maitland, *The History of Edinburgh* 1753

As insufficient funds were available, the building was not fully constructed according to the original design. Only the central block and west wing were built at first. Its early appearance can be roughly seen from Maitland's *The History of Edinburgh*. The building was symmetrical with only the minimal classical element of arched windows. Although without much decoration, with its symmetrical plan and the prominence of the central block the Orphan Hospital appeared as a more formal building than Trinity Hospital and St. Paul's Work. It clearly placed more emphasis of the formal effect of the building as propaganda for benevolence.

The building remained incomplete until 1781, when the other wing was finally added. At this time, a spire, indicating the religious background of the institution, was also added in the middle of the building. Stair, parapet wall, iron rail and other improvement were also introduced. It is not clear when the two extending blocks were added to the ends of the two wings. They appeared in Robert Kirkwood's 1819 "Plan & Elevation of the New Town of Edinburgh" and William Moffat's drawing of the elevations of Edinburgh buildings.



Elevation of Orphan Hospital, 1819
Source: Robert's 1819 map of Edinburgh



Elevation of Orphan Hospital, 1837
Source: William Moffat, Elevations of Edinburgh architecture, 1837

According to contemporary descriptions, the Orphan Hospital was a great success. The children were well supplied and trained as shoemakers, tailors, book-binders, milliners, mantua (loose gown of the 17th and 18th centuries) makers and so on. It was recorded “there is, perhaps, no house to be found where such a number of youth are more virtuously educated, employed and maintained at less expence, with more regularity and economy, than in the Orphan Hospital.”²² This was probably not an exaggeration. Howard also gave credit to it in his fourth edition of *State of the Prisons*. He wrote “the Orphan Hospital also deserves particular commendation, in which in 1782, there were about seventy boys and sixty girls,

²² T. Tod, *An Account of the Rise, Progress, Present State, and Intended Enlargements, of the Orphan Hospital.: To Which Is Added, Poetical Meditations on Various Subjects* (Edinburgh: Printed by James Donaldson, 1785), p. 4.

who appeared decently clothed, cheerful, clean and healthy... All are educated in the principle of virtue and religion, and formed to such habits as may tend to make them good servants and apprentices.”²³ Although the establishment of the Edinburgh Charity Workhouse in 1743 deprived the right of the Hospital to claim funds from church collections, causing the institution temporary difficulties, voluntary donations soon covered this gap and the hospital kept running until 1845, when it was demolished together with the Trinity Hospital.

The three institutions, Trinity Hospital, St. Paul’s Work and the Orphan Hospital, all sited around the Trinity Church, made this area the earliest poor relief center in the city. Their separate functions were quite compatible with the principle of different institutions for different groups, which Chadwick had developed in the 1830s. Mainly supported by voluntary contributions, these institutions could only focus their attention on a specific group. This separation became a strong characteristic of the poor relief system of Edinburgh until the establishment of a workhouse in 1865.



Plan of Heriot's Hospital
Source: Map of Edinburgh, 1853

The Orphan Hospital was not the earliest relief institution for children in Edinburgh. The

²³ John Howard, *The State of the Prisons in England and Wales with Preliminary Observations, and an Account of Some Foreign Prisons and Hospitals*, Fourth Edition ed. (London: 1792), p. 199.

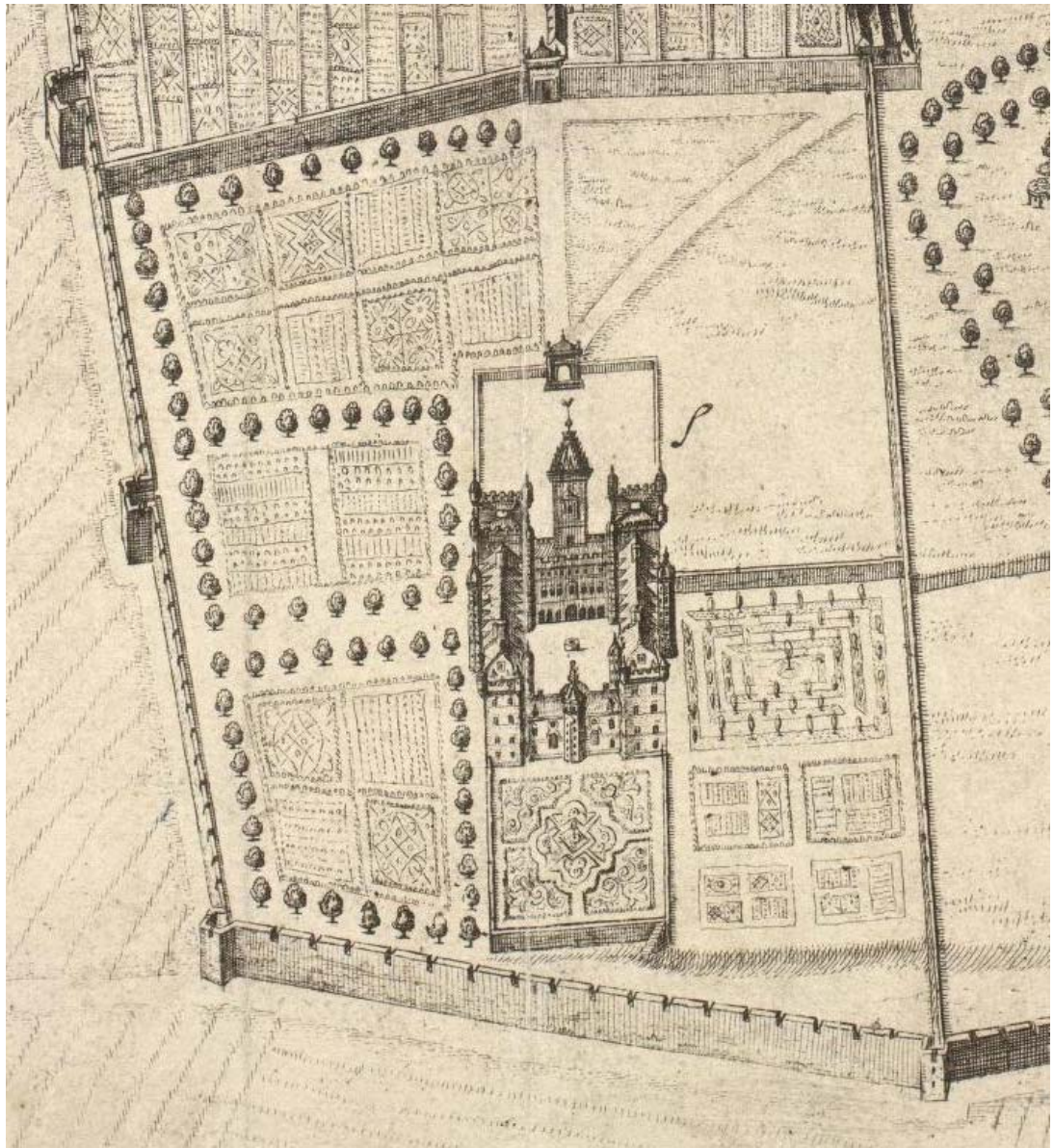
earliest one was probably George Heriot's Hospital. Unlike the institutions described above, however, Heriot's Hospital was sponsored by the huge private fund left by George Heriot. At his death he left the Magistrates of Edinburgh £23,625l. 10s "for the maintenance, relief, and bring up of so many poor and fatherless boys, freemen's sons of the town of Edinburgh."²⁴ The foundation stone of the hospital was laid in July 1628, but the construction process was interrupted by various difficulties. On 11th April 1659 the hospital finally started its operations by admitting 30 boys. The number of children increased and in 1763 it reached 140.

Unlike in the Orphan Hospital, children were not trained in manufacture here; instead they received education on reading, writing, arithmetic, and Latin. Hence the institution was more like a school than a poorhouse or workhouse. The educational character was even enhanced in the 19th century when the foundation established ten free schools in Edinburgh, providing primary education for thousands children. These schools were closed in 1885, but the original hospital survived as an educational institution and is still one of Scotland's leading independent schools to this day.



Linlithgow Palace and adjacent St Michael Church
Source: RCAHMS

²⁴ Cited from *A New Guide to the City of Edinburgh: Containing a Description of All the Public Buildings, and a Concise History of the City. Embellished with Elegant Engravings of the Principal Public Buildings*, The third edition, with considerable improvements. ed. (Edinburgh: printed for, and sold by T. Brown, 1797), p. 95.



The Heriot's Hospital
Source: Gordon's 1646 map of Edinburgh

Just as the property of the Heriot's Hospital was different from other poor relief institutions, its architecture more evidently represented its distinction. While other relief institutions mainly built simple and plain buildings designed by workaday architects, the architecture of Heriot's Hospital was designed by a distinguished man, the King's Master Mason, William Wallace, and from the start it was intended to be a grand and architecturally significant building. It is quadrangular in shape, with four towers decorated with turrets on four corners. This college-like arrangement was quite compatible with the educational character of the institution. With an impressive castle-like appearance, the architectural language of the building is a mixture of classicism, gothic and native Scottish elements. The

general shape was probably inspired by Linlithgow Palace, a representative Scottish palatial building with a strong medieval character.

Inside the building, two sides of the courtyard have internal corridors connected with the open yard by arches. Classical elements are also present in the decoration of a number of doors and windows. The chapel, which occupied nearly all the southern edge of the quadrangle, is in the Gothic style. Its central position on the axial plan enhances the collegiate character of the building. The dining hall occupied the ground floor of the west edge, and the ground floor of the southwest corner was used as the council room. These rooms consist the most important public rooms in the building. The connection of this building and the Linlithgow Palace, which William Wallace had researched, is also confirmed by the design of the tower. His original design of the tower, as it appears in Gordon's 1646 map, was quite similar to that of the St. Michael's Church adjacent to the palace. The Scottish crown spire was the most distinct characteristic in both structures. Wallace's death in 1631 left the project unfinished and the tower was not built until the end of 17th century. The executed design came from William Bruce, the forerunner of architectural classicism in Scotland. His design replaced the original medieval crown spire with a classic dome much smaller than the spire. This replacement increased the stylistic complexity of the building but also impaired the architectural consistency of its Scottish character. Compatible with the splendid architecture, the institution had broad gardens surrounding the building. As shown in early maps, the labyrinth on the eastern side was, if not the only one in Edinburgh, surely the largest in the city.

The particular financial circumstances and the huge funds behind Heriot's Hospital gave it its unique architectural character. Not only were its building and gardens far more luxurious than any other, its economic condition was also unthinkable in other places. As mentioned before, in its early stage the huge building accommodated no more than 100 children. In the mid 18th century, the hospital had around 130 children, who were catered for by a huge body of staff, which included "a Treasurer, Physician, Surgeon, Clerk, Steward, Schoolmaster, two Assistants, Writing-master, Cook, Taylor, Porter, a Nurse, and seven Women servants."²⁵ For 18th century commentators, this institution was too luxurious to be an ideal poor relief institution, and no later poor law institutions followed its example.

²⁵ Maitland, *The History of Edinburgh, from Its Foundation to the Present Time, Containing A. Relation of the Publick Transactions of the Citizens. With the Several Accounts of the Parishes. Within the Suburbs. The Ancient and Present State of the Town of Leith, And. A Great Variety of Cuts of the Principal Buildings, Etc.* p. 440.

Besides the Orphan Hospital and the Heriot's Hospital there were three other institutions for poor children operating in Edinburgh during 18th century. They were the Merchants Maiden-Hospital, the Trades Maiden-Hospital and the Watson's Hospital. It can be seen that in Edinburgh the relief of poor children and orphans received abundant attention. In all the hospitals mentioned above, children were given elementary courses and some of them were even supported by these institutions for college study. The various institutions also represented the strength of voluntary organizations. Although government was involved in the establishments of some hospitals, it never provided funds for the running of these institutions. It was only in the case of the Edinburgh Charity Workhouse that the government was more directly involved in the management of a poor relief institution.

In 1740 the Lord Provost of Edinburgh was James Colquhoun. He first developed the idea of establishing a large workhouse to cope with the problem of poor relief in Edinburgh. Normally in Scotland's rural parishes the poor were maintained in their own home by out-relief allowances. As the community was small, the Kirk Session was familiar with the condition of every resident; hence the distribution of allowances could be properly controlled. But in big cities such as Edinburgh and Glasgow such methods were impractical, as it was impossible to determine the precise condition of every applicant. On the other hand, the absolute number of poor was very high, as more and more immigrants came from the Highlands and from Ireland. Poorhouses built by voluntary organizations or individuals were clearly unable to cope with such considerable pressure. As a consequence, the government began to build large poorhouses or workhouses directly. Glasgow took the first step by building its Town's Hospital in 1730. The Edinburgh Charity Workhouse was its counterpart in Edinburgh.

On 23rd February 1740 the Lord Provost, Magistrate, Town Council, and the Ministers and Kirk Sessions of the City of Edinburgh signed a contract to establish the Charity Workhouse. In was written that "a large hospital or work-house should be built, for the more regular maintenance and employment of the whole poor of the said city, and for taking proper care of the orphans and foundlings."²⁶ More importantly, the contract specified the resources of the funds for the running of the workhouse. They included "the collections at the church-doors and at Episcopal meeting-houses, marriages not solemnized in church, one third of the dues of the dead or passing bell, burial-warrants, green turfs, poor's-box at

²⁶ "Contract of Agreement, the Lord Provost, Magistrates, and Town Council, and the Ministers and Kirk-Session, of the City of Edinburgh, for Building and Endowing the Charity Work-House, 1740," (A.Balfour and Co., 1829), p. 3.

Grayfriar's gate, mortified money, mortified houses and shops, two per cent of poor's rate, fornication-fines, legacies, and the sum of L.200 sterling annually, to be paid out of the revenue of the said city of Edinburgh."²⁷ Three points are worth noting. First, in traditional Scottish poor law only one half of the church collection was legally assigned as poor fund: the other half belonged to the church although in many cases it was also used for occasional poor. But in this case, all church collections were used for the Charity Workhouse. Secondly, the government provided L.200 sterling from the town's revenue for the Charity Workhouse. This was the first time that governmental funding was directed at the common operation of a poor relief institution. Thirdly, a legal assessment of two percent of the valued rents of the city was set up as the poor rate. This was the first time that assessment was officially established in Edinburgh, although it had long been suggested by Scottish poor law. The second and the third points defined the most important differences between the Charity Workhouse and other voluntary institutions. The utilization of governmental funds to support the workhouse was unprecedented in Edinburgh. From this time on, the city government took a larger responsibility for poor relief and gradually became the dominant agency in this area. This was another step that moved Scottish poor law closer to the English system.



The Charity Workhouse (in the middle of the map, right side of the rectangular Heriot's Hospital)

Source: William Edgar's 1765 map of Edinburgh

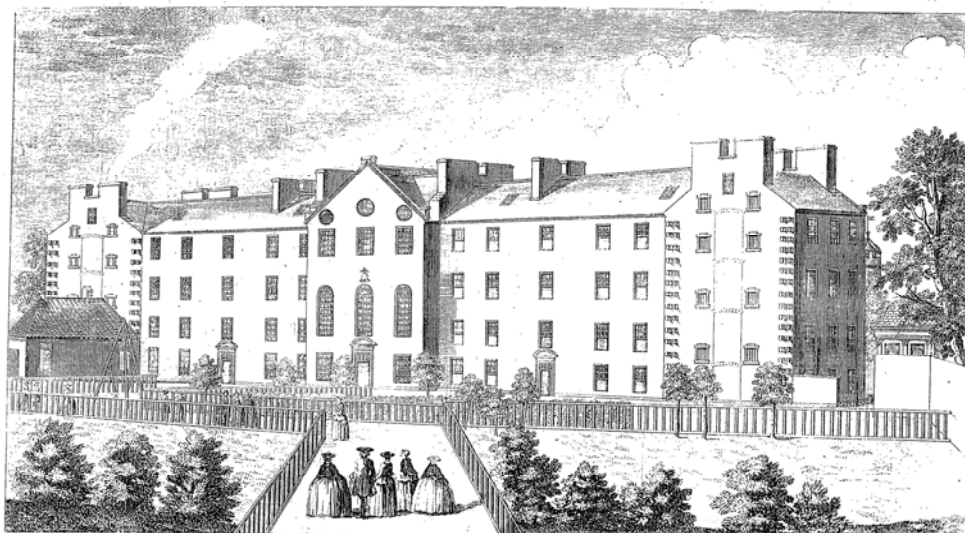
A new building was built by voluntary contributions at an empty site on the eastern side of Heriot's Hospital. In 1743 the Workhouse opened. A large council of 96 governors, including 18 members from the Town Council and 18 members from the Church Sessions, were in charge of the institution. Unlike the institutions discussed above, the Charity

²⁷ Ibid., p. 4.

Workhouse was intended, as a comprehensive institution, to accept all kinds of poor including the sick, aged, disabled, orphan and lunatics. The able bodied, however, were excluded.

Meanwhile the workhouse had the right to distribute out-relief to the poor maintained in their own homes. The contract set a limit of L.200 sterling per annum for this purpose, but in later years the amount of out-relief increased far beyond this. These measures - a large workhouse and out-relief - indicated the city government's intention to use the Charity Workhouse as the central body to deliver poor relief in the city. Through it the government could take fuller control of this provision and establish a more reliable instrument against the problem of poverty, which might potentially pose a threat to order in the city.

Even in its early years, the Charity Workhouse was quite large compared to other voluntary hospitals. In 1753 it housed about 596 persons,²⁸ and in 1787 it had about 700 inmates in the Workhouse and delivered out-relief to 300 pensioners and children. Another 100 persons received occasional supplies from the Weekly Committee.²⁹ The existence of a wide range out-relief shows the differences of the Edinburgh Charity Workhouse from English workhouses, where the "workhouse test" were strictly implemented.

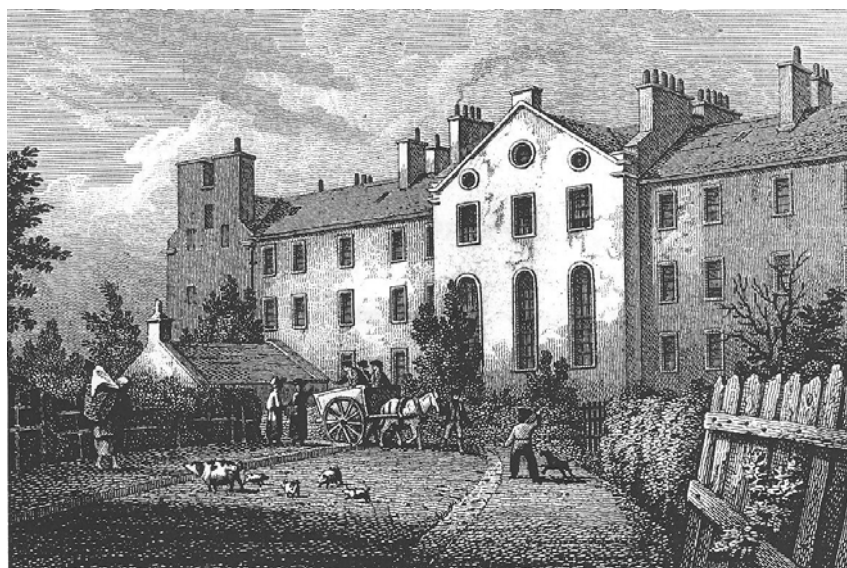


A Perspective View of the Poor House of Edinburgh as it now stands unfinished.

The main building of the Charity Workhouse
Source: Hugo Arnot, *The History of Edinburgh, 1788*

²⁸ Maitland, *The History of Edinburgh, from Its Foundation to the Present Time, Containing A. Relation of the Publick Transactions of the Citizens. With the Several Accounts of the Parishes. Within the Suburbs. The Ancient and Present State of the Town of Leith, And. A Great Variety of Cuts of the Principal Buildings, Etc.*, p. 430.

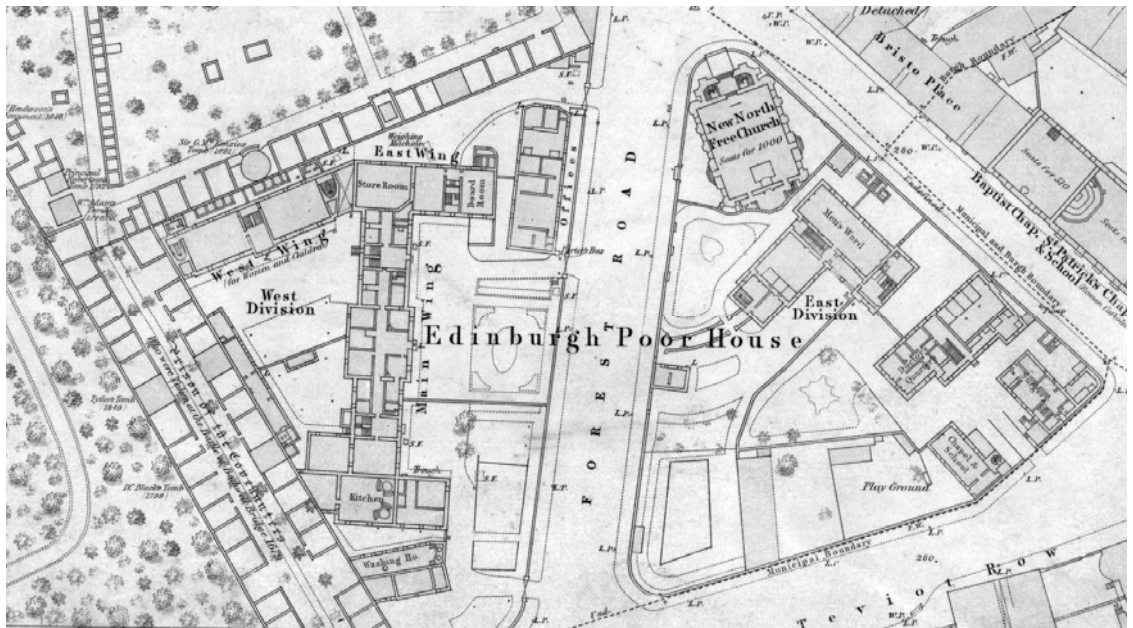
²⁹ Alexander Kincaid, *The History of Edinburgh, from the Earliest Accounts to the Present Time; by Way of Guide to the City and Suburbs. To Which Is Annexed, a Gazetteer of the County.* By Alexander Kincaid (Edinburgh: printed for the Author; and sold by N. R. Cheyne, 1787), p. 142.



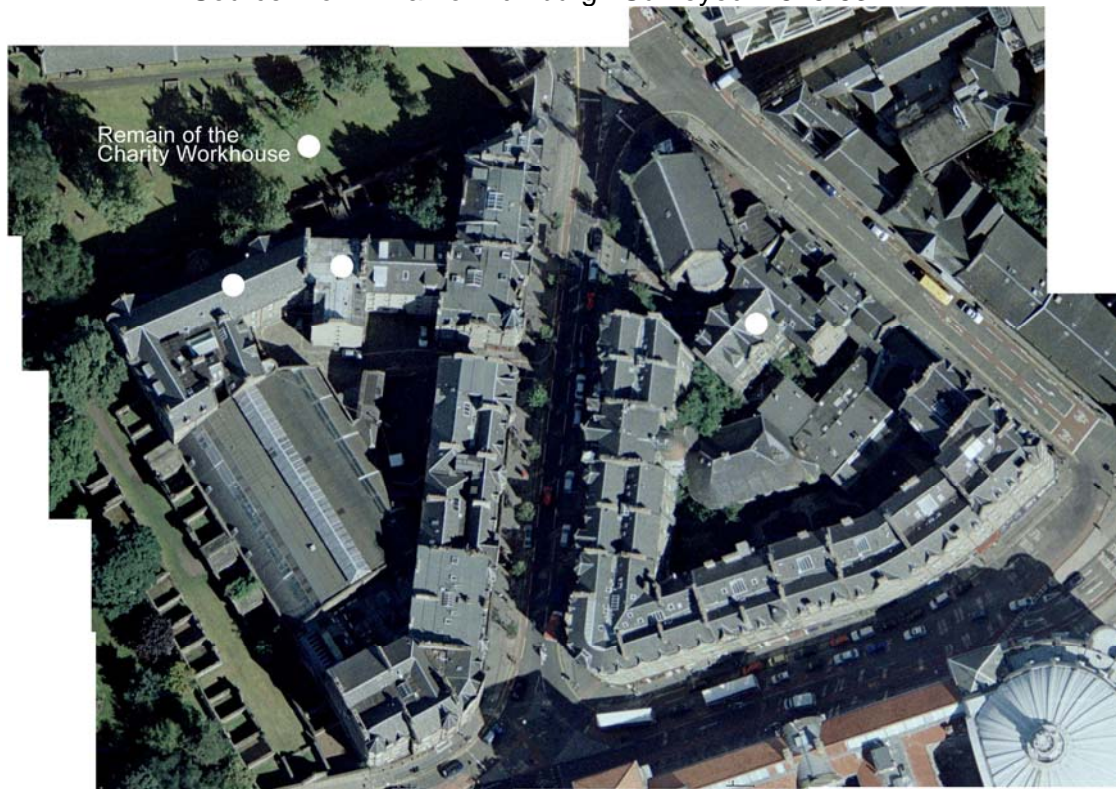
A perspective of the main building of the Charity workhouse, 1820
Source: RCAHMS

As the Edinburgh Charity Workhouse housed a large number of poor of various kinds, its architecture appeared quite different from other smaller voluntary hospitals. In fact the institution was composed of several buildings. The representative one was the main building, erected and opened in 1743. As shown on William Edgar's 1742 map, it was a long, linear building with enlarged blocks at the center and the two ends. This shape, as shown before, was the common model used by Edinburgh poor relief institutions. The building had four storeys and the appearance was quite simple, with only very limited decorative elements, such as the slim arch windows and the decoration above the three front entrances. Compared to other voluntary hospitals, the workhouse was plainer and humbler, it did not have the special elements such as central tower, pediment, or grand stairs that characterised other institutions. In this aspect it formed a stark contrast to the adjacent Heriot's Hospital.

The building was situated in an open site, and there were gardens to the front and back of the building. Three small routes were laid in the front garden; one led to the other part of the Workhouse, and the other formed a pathway cross the garden from the northeast corner to the southern edge. This layout became the basis for later developments in the urban fabric, when the two routes across the front garden were turned to a street, today called Forrest Road, which separated the workhouse into two parts.



Plan of the Charity Workhouse
 Source: Town Plan of Edinburgh Surveyed: 1849-53



Architectural remain of the Charity Workhouse, 2008 (marked by white dots)
 Source: <http://maps.google.com/>

The architectural plan of the main building was rather simple; its original layout can be detected from later plans that appeared in the map *Town of Edinburgh Surveyed: 1849-53*. A central corridor connected two bigger rooms at the two ends. Two stairs were located at the center of the two wings besides the central block. Opposite to them were the two side

entrances. This arrangement was probably for the segregation of the two sexes, although the plan itself did not directly indicate such separation. The three long windows on the first floor of the central block indicated a large room, probably the location of the chapel. Generally speaking, the plan of the original building was not very different from other voluntary institutions and also not far removed from common domestic buildings.

While this simple plan was suitable in other hospitals, where the inmates were of the same type, it could hardly answer the demand for accommodation for a large body of people of various types. Meanwhile, the single building clearly did not have enough space to support all the functions of an institution of such a size. Soon after the opening of the Workhouse, it began to obtain old buildings in nearby areas or build new ones in order to serve the different functions. In the process, the workhouse developed into a complex of several buildings that was far removed from the simple plan of the other Edinburgh hospitals but closer to the complicated plans of the big English new workhouses, which had plenty of facility rooms and various sections for different group of inmates.

The earliest enlargement was the incorporation of the old Bedlam, “a beautiful edifice of ashler-work, erected about half a century ago, for the reception of lunaticks.”³⁰ It was converted into an infirmary to accommodate the sick inmates. On its southern side, two buildings were erected in 1746 and 1748, respectively. One of them was used to house lunatics and the other one was used to train children in textile manufacture. Later, when a larger building was constructed on the north side of the previous Bedlam, these four buildings formed the east division of the workhouse. In 1842, all lunatics were moved to the new City Asylum built at Morningside. Except for the building used for training children, and which still served a similar function, the other three buildings were all used as infirmary elements of the workhouse, according to the 1853 city map. Although the general layout did not have strict spatial order, the separation of the department of sick poor was similar to the new poor law workhouses designed in England under the principle of complete separation.

A similar structure of segregation also appeared in the west division of the Charity Workhouse. There were also various new additions. A new office block was built along the Forrest Road. Its situation made it easy to supervise the main entrance of the west division. In this respect the Charity Workhouse was not very different from Kempthorne’s model

³⁰ Maitland, *The History of Edinburgh, from Its Foundation to the Present Time, Containing A. Relation of the Publick Transactions of the Citizens. With the Several Accounts of the Parishes. Within the Suburbs. The Ancient and Present State of the Town of Leith, And. A Great Variety of Cuts of the Principal Buildings, Etc.* p. 431.

designs in which the offices were put above the main entrance. Extensions were added on the front side of the two ends of the main building. At its rear side a west wing was built for the female and child residents. Some facility rooms were also added, rendering the plan of the building less regular than it originally had been.

Generally speaking, the transformation of the Charity Workhouse illustrates a transformation from the model of the traditional Scottish hospital to the model of large workhouse used in England. Although the spatial layout of the workhouse as a whole was irregular and complex, its organizational character, with the segregation of different types of inmates, control of entrance, and sitting of facilities at the peripheral areas were similar to its English counterparts. This similarity does not necessarily suggest English influence. It is more likely that such principles had been commonly accepted for big institutions. This transformation from Scottish charity poorhouse into a more disciplined institution was clearly expressed in the development of Workhouse rules. In its early days, there was “free ingress and egress to all corner of the house,” recorded in a 1777 book: “it is impossible to prevent provisions and coals from being pilfered and carried away: nor can the managers, with all their vigilance, hinder both men and women of the house, from begging in the streets; nor from plying without doors, in the character of scavengers, and doing other menial offices in private families, at the same time that they are maintained in the house.”³¹ In later time this disorder was rectified by the strict regulation that “no inmate shall have permission to go out of the House, except during one day of the week, viz. the males on Tuesday, from ten to four o’clock, and the female on Friday during the same hours.”³² Various punishments were meted out for any violations of this rule. Meanwhile “all the inmates, according as the Managers shall judge them respectively able, as a condition of their being allowed to remain in the House, shall be employed in such useful work or labour as shall be furnished to them.”³³ The inmates were employed in various businesses such as tailoring, shoe making, gardening and carpentry. According to the workhouse’s 1842 rules, the education of children was given special emphasis. The children were taught reading, arithmetic, book-keeping, geography, penmanship and religion. The school was conducted on the monitorial system, in which an assistant teacher instructed part of the children under the supervision of the headmaster, who taught as well. For one hour each day, the monitors and assistant teacher were taught by the headmaster specifically to improve the general quality of the monitorial

³¹ A Citizen of Edinburgh, *A Plan for the Better Providing for the Poor of the City of Edinburgh, by an Alternation of the System of Management of the Charity-Workhouse* (Edinburgh: A.Murray and J.Cochran, 1777), p. 30.

³² Edinburgh Charity Workhouse, "Rules and Regulations for the Edinburgh Charity Workhouse," (1842), p. 15.

³³ Ibid.

teaching.³⁴

The large number of poor both inside and outside the workhouse produced a strong financial pressure upon the governors. At the end of the 18th century the annual cost of the workhouse, including out-relief, was no less than 4000L. The assessment of 2% valued rent could yield about 600L. annually, and other funds could bring in about 400L. The remaining gap was supposed to be filled by church collections and voluntary contributions, but as this source always fell short of need, the governors had to make frequent recourse to extraordinary donations, governmental intervention or bank loan.³⁵ To fundamentally solve this problem, in 1773 some members of the town council suggested that the assessment be expanded, so that the workhouse could be fully supported by the poor rate without the aid of voluntary contributions, a measure widely used in England. But this proposal soon aroused public opposition, as it was argued that “it was a decided folly, for men, with their eyes open, to load themselves with a tax, which, in our neighbouring country, had become a most intolerable burden, and had degenerated into the most palpable abuse.”³⁶ The opposition defeated the proposal, but also left the financial problem unsolved; the managers had to solicit public collection for temporary aid. As a consequence, the workhouse often fell into debt and the condition of the building was undermined as no surplus money could be used to repair it. This situation lasted till 1813, when the City Council ultimately decided to increase the assessment and accordingly passed an Act of Council “to increase the Assessment at present levied, from 2 percent of the valued rents, as ascertained by the Stent Masters, to 5 percent for the current year only.” After that, the poor rate was yearly reviewed, normally it was about 5% or 6%.³⁷ Thus the city government was able to provide much stronger support for the workhouse. The voluntary dimension of poor relief declined further, the more governmental control increased. In this way the workhouse finally escaped from financial difficulty and the whole cost of the workhouse increased considerably, so that over the year 1841-1842 out relief alone reached 4080L.

The Charity Workhouse remained in operation till a new workhouse was established in 1869. Most parts of the buildings of the old workhouse were demolished except for the largest building of the east division, part of the main building and the west wing. From the

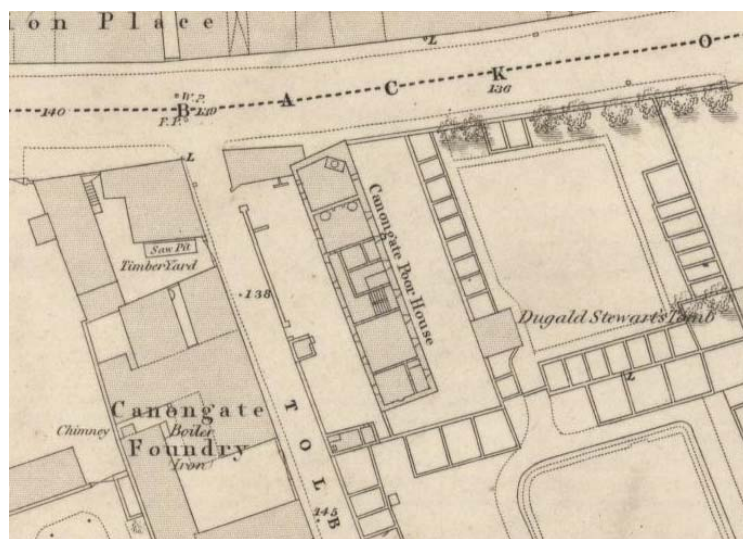
³⁴ Ibid., pp. 21,22.

³⁵ *A New Guide to the City of Edinburgh: Containing a Description of All the Public Buildings, and a Concise History of the City. Embellished with Elegant Engravings of the Principal Public Buildings*, p. 102.

³⁶ *Edinburgh, A Plan for the Better Providing for the Poor of the City of Edinburgh, by an Alternation of the System of Management of the Charity-Workhouse*, p. 6.

³⁷ *Case for the Lord Provost, Magistrates and Council of the City of Edinburgh, Regarding the Constitution of the Charity Workhouse; with Opinion Thereon by the Lord Advocate (M' Neill), and Alexander Dunlop, Esq., (1842).*

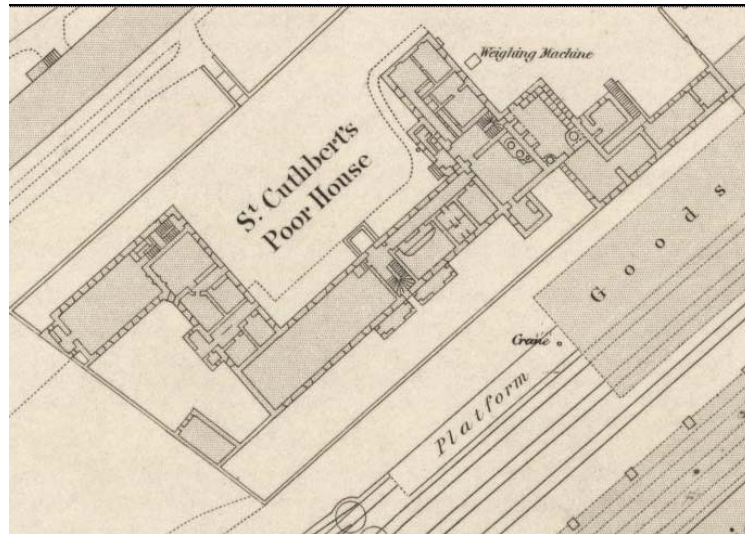
remains of the original building we can still conjecture its original undecorated appearance.



Plan of the Canongate Charity Workhouse
Source: Town Plan of Edinburgh Surveyed: 1849-53

In the 18th century, Edinburgh had three parishes, the city parish, Canongate, and St. Cuthbert's or West Kirk. Following the example of the Charity Workhouse, the other two parishes also built their own workhouses. The Canongate Charity Workhouse was built by the residents' subscriptions. A building was constructed in the empty space behind the Canongate church. It was a simple linear building with only one internal stair inside. In 1778 the workhouse accommodated 60 men and women and 36 children. The running fee was about L.500 which came from church collections and voluntary donations, and no assessment was imposed.³⁸ In 1873 Canongate was merged with St. Cuthbert's parish to form the St. Cuthbert's Combination for Poor Relief. All inmates were moved to the Craighleith Workhouse previously erected by the St. Cuthbert's Parish. The building was subsequently turned into a hospital for infectious diseases.

³⁸ Arnot, *The History of Edinburgh, from the Earliest Accounts to the Present Time. By Hugo Arnot. To Which Is Added, an Appendix*, p. 560.



Plan of the St. Cuthbert's Poor House
Source: Town Plan of Edinburgh Surveyed: 1849-53

St. Cuthbert's Parish was also called the West Kirk Parish, and its poor relief institution was named the West Kirk Poor-House. As a parish, St. Cuthbert's had a robustly independent spirit with regard to poor relief. In 1739 the parishioners refused the tax of L.100 levied by the city council and decided to take care of the poor by themselves.³⁹ With the subscriptions of parish inhabitants, a poor house was built between 1759 and 1761, and opened for the reception of the poor on the 27th May 1762.⁴⁰ Unlike other poor relief buildings in the city, the St. Cuthbert's poor house was a U-shaped building. The main entrance was in the center, facing which was the main stair. By the time of the 1853 map, various additions had been introduced. During the four years prior to 1778 it accommodated about 105 men and women and 53 children.⁴¹

Ever since the establishment of the poor house, an assessment of 4d. to 6d. in the pound

³⁹ M. A. Eastwood and Anne Jenkinson, *A History of the Western General Hospital: Craighleith Poorhouse, Military Hospital, Modern Teaching Hospital* (Edinburgh: John Donald, 1995), p. 8.

⁴⁰ Arnot, *The History of Edinburgh, from the Earliest Accounts to the Present Time. By Hugo Arnot. To Which Is Added, an Appendix*, p. 560.

⁴¹ *Ibid.*

had been collected from annual rents to support the institution. Out relief was also delivered by the poor house. An out-pension committee was set up to review the applications. Interestingly it required every applicant to make the statement “with an offer to go into the workhouse, if no out-pension could be allowed.”⁴² In this sense, the eligibility to enter the workhouse was used as a standard to test the applicant’s real need of poor relief. As indoor relief was clearly not welcomed in the Scottish tradition, only people of real need would apply for fear of being confined in the workhouse. The policy of the St. Cuthbert’s Parish has a similar function as the “workhouse test” policy of English New Poor Law. Local managers were quite satisfied with the savings to the poor fund brought by this policy.⁴³ This unique policy also showed the independence of this parish. Probably for this reason, the parish refused to be incorporated into Edinburgh’s unified provision of poor relief, and in the 1860s they built their own new workhouse - the Craigleith Workhouse.

Despite the differences, the three workhouses or poorhouses had the same policy of not receiving the able-bodied. Their out relief list also excluded unemployed healthy adults, but those with temporary sickness or particular difficulties could receive short term assistance, although the amount was quite small. The buildings of the three workhouses were not very regular, especially after various additions were made. Although some kind of segregation could be detected from the general plan, the architecture itself did not specifically reflect these considerations. The tightening of discipline caused some enhancement of supervision but it was hardly the chief principle of workhouse design. In general the workhouses belonged to the Scottish tradition of using the model of domestic architecture for poor relief institutions. This was later changed by the incorporation of English models of new workhouses after the reform of Scottish poor law in 1845. The two Edinburgh workhouses built in 1860s both represented this new development.

5.3 Reform of Scottish Poor Law

The two main reasons for the reform of English poor law in 1834 were the high expense of poor rate and the rural agitations that were related to the system of allowance by wage. Neither factor applied in Scotland. There were no large-scale riots, and the poor cost was kept at a low level compared to England.

⁴² C.S. Loch, "Poor Relief in Scotland: Its Statistics and Development, 1791 to 1891," *Journal of the Royal Statistical Society* 61, no. 2 (1898): p. 301.

⁴³ *Ibid.*

SCOTLAND : *Expenditure on the Poor, 1806-16, 1835-37.**

Year.	Collections at the Church Doors.	Other Voluntary Contributions.	Sessional Funds.	Assessment.	Expense of Litigation.	Gross Funds.	Expenditure per Head of Population
	£	£	£	£	£	£	s. d.
1807-16..	34,069	10,702	19,705	49,718	1,977	116,171	1 3½
'35-37..	38,300	18,976	20,604	77,239	921	156,040	1 3¼

* Scotland. Population, 1811, 1,805,688 ; population, 1831, 2,364,388. The figures are taken from the "Reports" of the General Assembly, published in 1820 and 1839.

Source: C.S.Loch, "Poor Relief in Scotland: Its Statistics and Development, 1791-1981"

ENGLAND AND WALES : *Expenditure on the Poor, 1813, 1832.**

Year.	Expended on Relief of the Poor.	Expenditure per Head of Population.
	£	s. d.
1813.....	6,676,105	13 1½
'32.....	7,036,960	10 1½

* England and Wales. Population, 1811, 10,163,676 ; population, 1831, 13,889,675. The figures are taken from Marshall's "Digest."

Source: C.S.Loch, "Poor Relief in Scotland: Its Statistics and Development, 1791-1981"

The difference between Scotland and England is manifestly illustrated by statistical numbers. It is clear that average expenditure per head of population was much higher in England and Wales than it was in Scotland, and in Scotland more than half of the funds came from church collections and voluntary contributions. The sharp contrast between the two systems was noticed by contemporaries. In England poor law reformers of the 1830s regarded Scotland as a counter example to the English system, with its wide adoption of Speenhamland scheme.

Although the Scottish tradition of poor relief was praised by 18th century reformers, in the early 19th century, rapid changes soon brought a strong need to reform the old system. Firstly, the population of Scotland increased rapidly. Between 1755 and 1841 the population of Scotland increased from 1,265,380 to 2,620,184.⁴⁴ In big towns the increase was even quicker, Glasgow's population increased from 77,385 in 1801 to 274,324 in 1841; and in Edinburgh the population increased from 67,288 in 1801 to 138,182 in 1841. A large part of the increased population consisted of comparatively poor immigrants from the Highlands and from Ireland. This directly increased the pressure on poor relief. Secondly, the

⁴⁴ Cage, *The Scottish Poor Law, 1745-1845*, p. i.

development of industry created a large body of workers whose conditions were very vulnerable to market fluctuation. Thus in time of trade depression, many of them became unemployed and fell into financial difficulty. In Scottish poor law this group of unemployed healthy adults were generally refused any official relief, but in industrial parishes such as Paisley, the problem was so severe that a legal assessment for the assistance of the able-bodied unemployed was introduced.⁴⁵ Although an exception, the Paisley case did show the inadequacy of the Scottish poor law under the new economic conditions. Thirdly, the disruption of the Church in 1843 heavily weakened the main support of the traditional way of poor relief. The Disruption substantially decreased the power and authority of the Established Church. It could no longer support the heavy burden of poor relief. As church collections fell sharply, the main pillar of the voluntary system was shaken. Fourthly, the urban sanitary problems aroused deep concern not only related to poor relief, but also in regard to the whole society. Similar to the sanitary reform of England, the various epidemics in the 1830s formed a severe threat to all classes in the big cities, and were exacerbated by the unhealthy living conditions in these cities. In his *Sanitary Report*, Chadwick stated that “the most wretched of the stationary population of which I have been able to obtain any account, or that I have ever seen, was that which I saw in company with Dr. Arnott, and others, in the wynds of Edinburgh and Glasgow.”⁴⁶ He quoted Dr. Arnott’s words that the unhealthy living conditions of the labouring class in Edinburgh “go far to explain why fatal fever has been more common in Edinburgh than from other circumstances would have been anticipated.”⁴⁷ This alert aroused wide public attention. In 1840 Dr. W.P. Alison published a series of pamphlets establishing the correlation between epidemic fever and inadequate poor relief. His effort led to the formation in 1840 of an association aimed at obtaining an inquiry into pauperism in Scotland.⁴⁸ All these factors worked together to form a strong conviction that a reform was needed of Scottish Poor Law, and a special commission was appointed to inquire into the administration and practical operation of the Scottish Poor Laws and made suggestions for change. The procedure of English Poor Law reform was then repeated in Scotland.

As in England, the commission made the most thorough investigation of poor relief that had ever been undertaken in Scotland, which provided the basis of a reform scheme recommended in the report that was later accepted by the parliament and determined the

⁴⁵ Ibid., p. 60.

⁴⁶ Edwin Chadwick, *Report on the Sanitary Conditions of the Labouring Population and on the Means of Its Improvement* (1842), ch. 1

⁴⁷ Ibid.

⁴⁸ Cage, *The Scottish Poor Law, 1745-1845*, p. 129.

structure of new Scottish poor law from 1845. But there existed a deep contrast between the reforms in England and Scotland: while the former brought about a break with old poor law and achieved a radical change in poor relief philosophy, the latter rather confirmed its traditional theory of poor relief, and simply established a new bureaucratic system to implement it. On the one hand it shows the strength of tradition in Scotland, and on the other hand it shows the significant absence in the Scottish poor law reform of the Utilitarians, who had promoted radical reform in England rather than conservatism or compromise.

The main suggestions of the report of the Commission were embodied in *An Act for the Amendment and better Administration of the Laws relating to the Relief of the Poor in Scotland*, passed in 1845. The most important innovation it introduced was in the management structure. Traditionally the administration of poor relief was in the hands of local sessions or town councils. In place of this autonomous management, the 1845 Act established a central authority, the Board of Supervision for Relief of the Poor in Scotland, as the governing body of the whole nation's poor relief. At local level every burgh parish or combination of parishes would form a Parochial Board of Managers of the Poor, which controlled the whole administration of poor relief. The Board of Supervision would set rules and regulations for the Parochial Board, and the Parochial Board had the responsibility of submitting reports to the Supervision Board. In this way the previous management system consisting of independent units was replaced by a structural bureaucratic system with close internal links. Obviously this administrative structure was a transplantation of the structure of English New Poor Law. Its main effect was to place the poor relief of the entire country under the strict control of the central government.

Except for this change, the 1845 Act did not challenge but rather confirmed the essential tenets of Scottish tradition. With regard to the scope of poor relief it stated that "all assessments imposed and levied for the relief of the poor shall extend and be applicable to the relief of occasional as well as permanent poor: provided always, that nothing herein contained shall be held to confer a right to demand relief on able-bodied persons out of employment."⁴⁹ It can be seen that the two categories of occasional and permanent poor were kept, and unemployed healthy adults were still excluded from receiving official poor relief. It shows the reformed Scottish poor law still insisted on strong moral criteria in defining the proper recipient of relief, while England had chosen economic criteria firmly supported by Bentham's thought.

⁴⁹ *An Act for the Amendment and Better Administration of the Laws Relating to the Relief of the Poor in Scotland*, (1842), section lxviii

In responding to the financial problem of the poor fund, the Scottish Act provided detailed regulations for assessment collection. But it did not define it as a compulsory policy, and it was left to the Parochial Board to decide whether to collect it or not. On the other hand, the Act gave the Kirk Session the power to take all church collections, since this fund was no longer regarded as a source of public poor fund. These changes indicated that the Act already recognized that assessment would be the main source of poor fund, although it did not impose it unanimously to all parishes as did the English poor law.

Unlike previous poor laws, the 1845 Act provided fuller instructions regarding the erection of poorhouses in Scotland. It enacted that Parishes could unite to build a common poorhouse. They were given the power to borrow money for construction and pay the debt with assessment.⁵⁰ This policy in fact provided a reliable financial source for poorhouse construction, since these institutions no longer needed to depend on voluntary donations to obtain building funds. Under the new management structure, the Board of Supervision stressed its controlling power over poorhouse construction. It was ordained that all plans of new poorhouse, of extensions, or alternations must be approved by the Board of Supervision.

Generally speaking, the 1845 Act was a compromise between the Scottish tradition and English influence. Although it inherited the traditional attitude towards the unemployed able-bodied, the bureaucratic structure and the stronger emphasis it gave to assessment indicated a leaning towards English New Poor Law. The Act did not establish a uniform system, however, as it allowed considerable freedom to local boards on matters such as collecting assessment and erecting poorhouse. Nevertheless, it already indicated the future direction of the development of Scottish poor law. The change brought by the Act was manifest. Before 1845, only 230 out of the 878 parishes in Scotland collected assessment. In 1846 the number of parishes assessed increased to 448, and in 1862, 765 parishes already had annual assessment as the source of poor fund.⁵¹ The number of poorhouses also increased substantially. Prior to the passing of the 1845 Act, there were 13 poorhouses in operation in Scotland: the number increased to 19 by 1849. In 1863 there were already 48 poorhouses,⁵² and by 1894 there were 66 poorhouses in Scotland, providing accommodations for more than 15,000 paupers.⁵³

⁵⁰ Ibid., section lx

⁵¹ Ferguson, *The Dawn of Scottish Social Welfare: A Survey from Medieval Times to 1863*, p. 196.

⁵² Ibid., p. 212.

⁵³ Englander, *Poverty and Poor Law Reform in Britain: From Chadwick to Booth, 1834-1914*, p. 53.

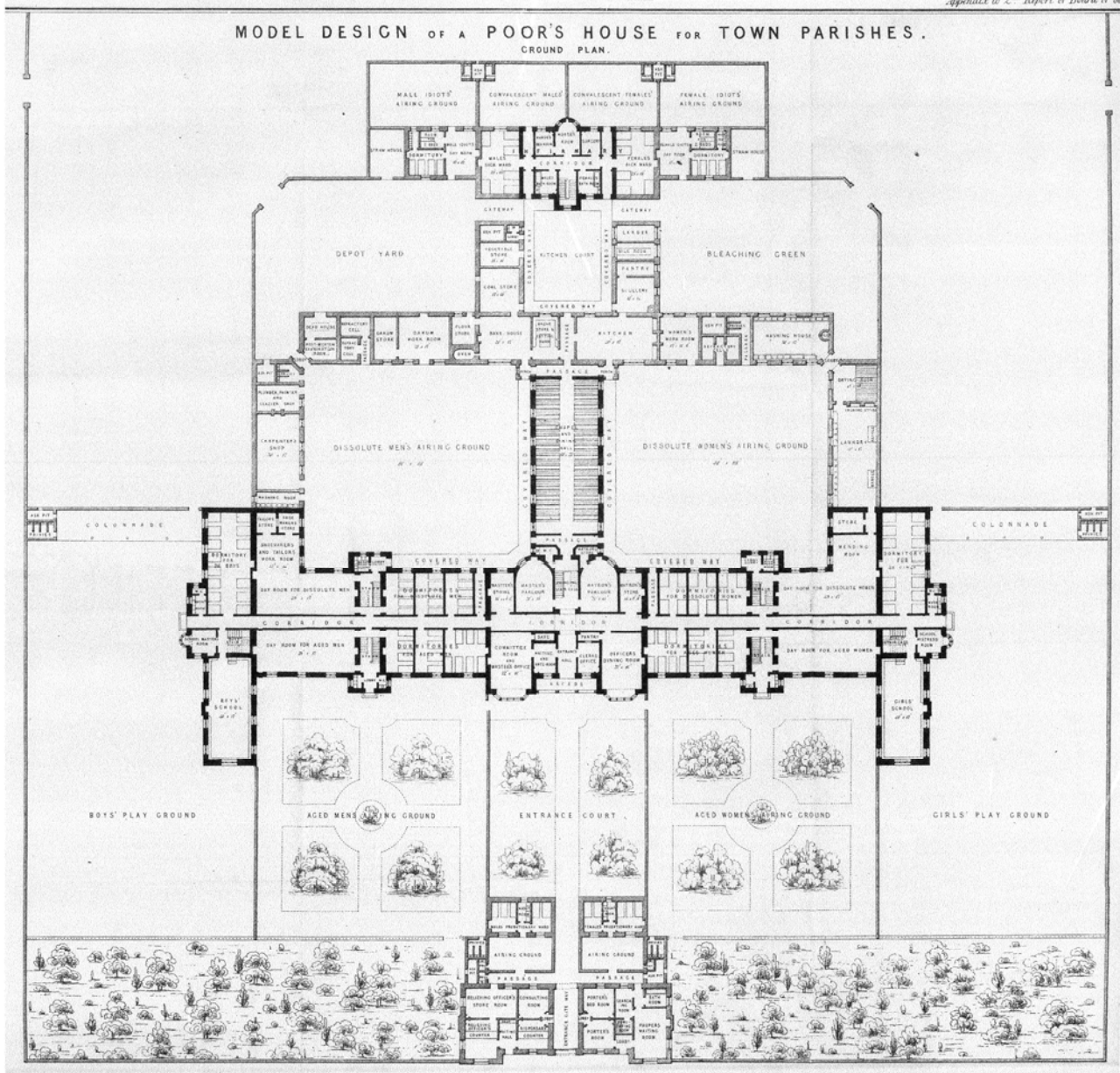
5.4 Model Designs and New Workhouses in Edinburgh

Following the example of the English Poor Law Commission, the Board of Supervision, the highest authority in Scottish poor law, issued model designs for poorhouses in its *Second Annual Report*, published in 1848. The architects of these plans were Thomas Mackenzie and James Matthews. Originally they had provided designs for the poorhouse of the united Parishes of St Nicholas and Old Machar in Aberdeen. When this design was adopted as the model design for urban poorhouses, the architects introduced some minor alternations. Together with this design they also provided plans for a smaller poorhouse for country parishes.

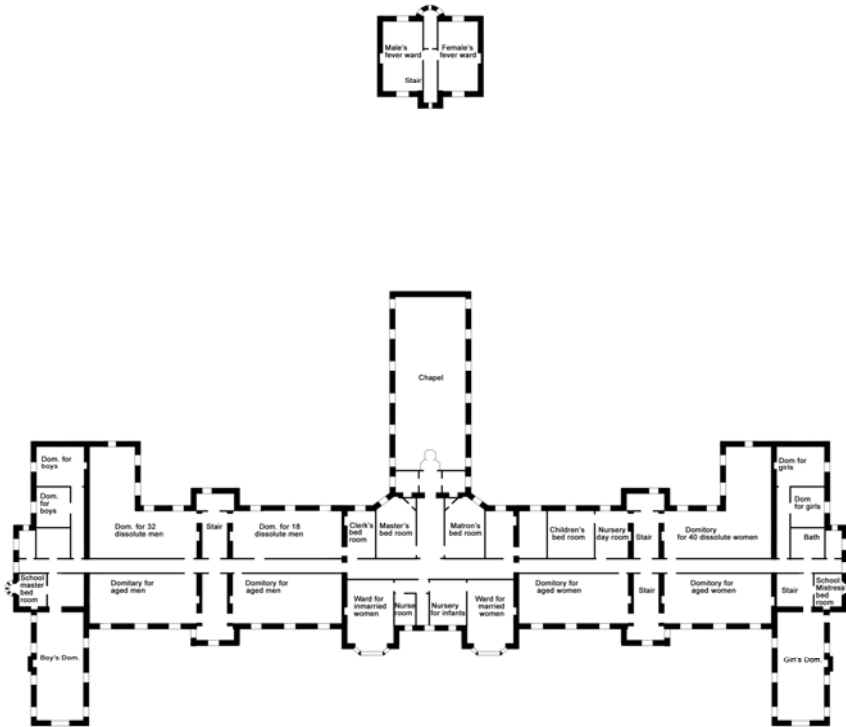
As the architects stated in the introduction text accompanying the model designs, they were familiar with English examples, as they had “examined most of the published reports on the subject, and visited many of the best and most recently erected houses in England.”⁵⁴ The architects also gave high evaluations to English workhouses: “the houses which have been erected of late years under the superintendence of the Poor Law Commissioners, are not only cheerful and agreeable in their external character, but in their internal arrangements are made convenient and comfortable.”⁵⁵ These words show that the targets of their appraisal were the later workhouses such as those built to Scott and Moffatt’s designs, rather than the earlier plain buildings designed by Kempthorne. Although the architects did not state the origin of their designs, there appeared a strong similarity between their model designs and Scott and Moffatt’s mature designs for workhouses.

⁵⁴ "Second Annual Report of the Board of Supervision for Relief of the Poor (Scotland)," ed. Board of Supervision (1848), Appendix B,

⁵⁵ *Ibid.*

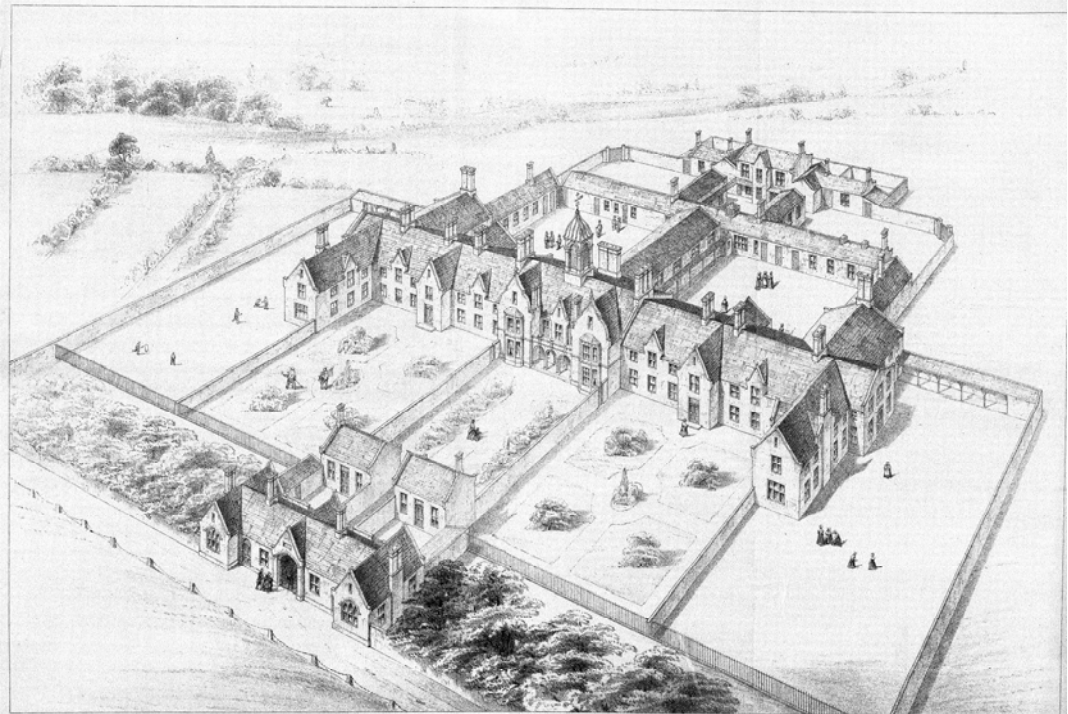


Ground plan of the Model Design of A Poor's House for Town Parish, 1848
Source: *Second Annual Report of the Board of Supervision for Relief of the Poor*



Plan of the first floor of the Model Design of A Poor's House for Town Parish, 1848

Source: *Second Annual Report of the Board of Supervision for Relief of the Poor*



Isometric view of the Model Design of A Poor's House for Town Parish, 1848

Source: *Second Annual Report of the Board of Supervision for Relief of the Poor*

The architects provided two poorhouse designs, one for an urban poorhouse with 400 inmates and one for a rural workhouse of 300 inmates. The plan of the urban poorhouse is comprised principally of three parts, the entrance block, the main building and the facilities rooms including the infirmary. This general layout, and the separation of entrance, main building and infirmary part does not differ from Scott and Moffatt's model. In the Scottish model plan, the entrance block is even more complicated. Except for the rooms provided for the porter and for the probationary poor — in which all the procedures of entering the poorhouse were carried out, such as bathing and receiving uniforms — several rooms are provided for the relieving officer and the physician on the left side of the main entrance. Through a smaller door the outdoor poor can enter this part to get food and clothes from the relieving officer and receive medical care at the dispensary counter. This part, generally absent in English workhouses, represented the special characteristic of Scottish poor law with its combination of indoor relief and outdoor relief. The right part of the entrance block is also carefully designed. The poor's waiting room, searching room, bathroom, and probationary wards were arranged to form a continuous route. This arrangement was far more sophisticated and functionally appropriate than the model designs of the English Poor Law Commission. The architects had clearly grasped the new development of workhouse designs in England.

The main building is also close to Scott and Moffatt's model. It is a linear building with two vertical wings at each end and another wing, accommodating the chapel, in the center. In their explanation of the plan the architects wrote, "the form of the plan is of great consequence, and we have chosen that which we consider gives the greatest amount of supervision, and the most complete separation of the sexes, combined with a cheerful and pleasant external appearance. As the arrangement is described, it will be seen that the supervision is as perfect as in the radiating plan, which was adopted for several of the first houses in England, and had only this good quality to recommend it."⁵⁶ The two key aspects of supervision and separation are clearly represented in the plan of the main building. The central block is provided for governors. Two big rooms with bay windows are used as the master's office and dining room respectively. They have a very good view of the entrance block and the court in front of it. The two big rooms at back are used as the master and matron's parlour, respectively, and have a direct view of the airing yards for dissolute men and women. Male and female inmates are separated in the two sides of the building, and the end wing on each side is intended exclusively for children. They contain the children's

⁵⁶ Ibid..

dormitory, school room and the school master's room. To enable the master to have better supervision of the children's playing yard, a semi-circular window is provided for the master's room.

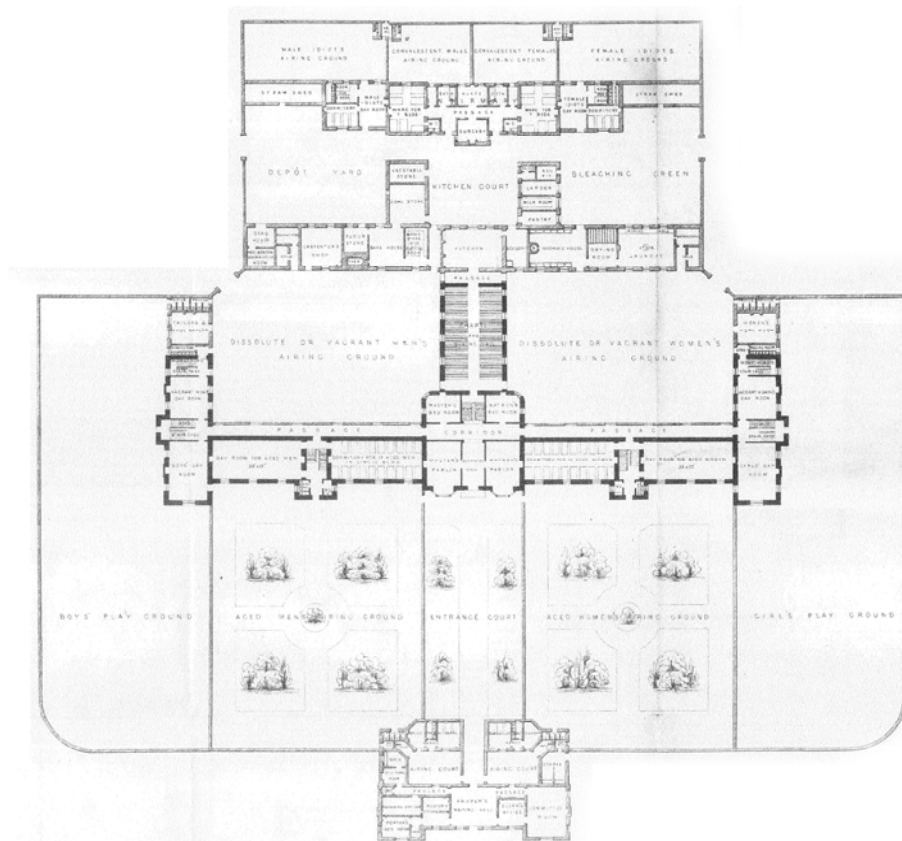
The parts between the end wings and the central block belong to the adult poor. They are separated into two groups, the dissolute poor and the aged poor, and are accommodated on the two sides of the central corridor. The dayroom for the dissolute adults is larger than that of the aged and also serves as a workroom. A special character of this plan is that each group of inmates in the poorhouse — children, dissolute poor, and aged poor — is provided with a separate stair and access to the open yard; hence the interaction between them is largely reduced. In this respect, the segregation of various groups in the Scottish model design is even more complete than in most English workhouses.

All the facility rooms such as the kitchen, wash house, and various store rooms are put behind the main building. Behind them is the infirmary. Similar to the main building, the infirmary has the nurse's room in the center, which separated the two sexes on its two sides. Through a semi-circular window in the central room the nurse can supervise the two airing grounds for male and female sick poor. This infirmary part also contains the wards and airing grounds for lunatics, who are separated from the common sick.

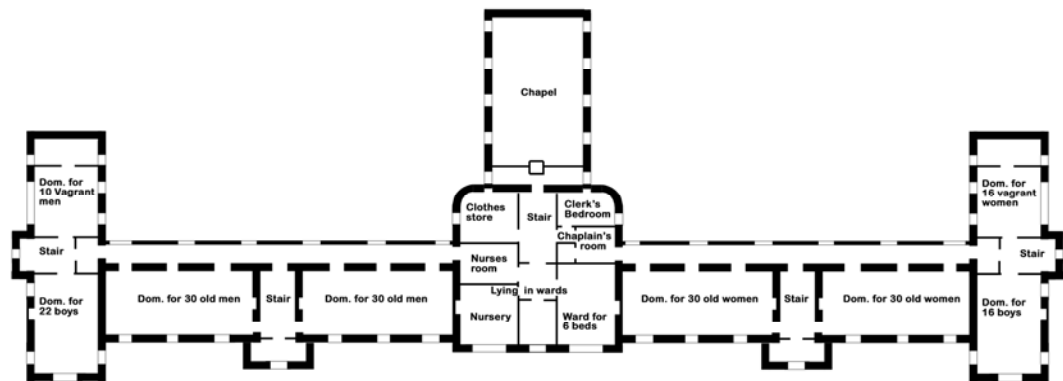
The architects chose to give the poorhouse an Elizabethan style. They explained, "we have adopted the plain Elizabethan style, as in our opinion best adapted for the purpose, combining a cheerful and pleasing effect, with substantial construction, at less cost than any other."⁵⁷ This choice was not new. As noted before Tudor and Elizabethan style had been used in English workhouses to emphasize local character.

The front façade of the main building is a variation of Scott and Moffatt's model design. Deriving from the surveillance function, the two big rooms with bay windows on the two side of the central entrance form a strong formal character. The architects accentuated the formal significance of the central block by adding a tower and a porch in front of the main door. These features also appeared in the two new poorhouses of Edinburgh.

⁵⁷ Ibid..



Ground plan of the Model Design of A Poor's House for Rural Parish, 1848
 Source: Second Annual Report of the Board of Supervision for Relief of the Poor

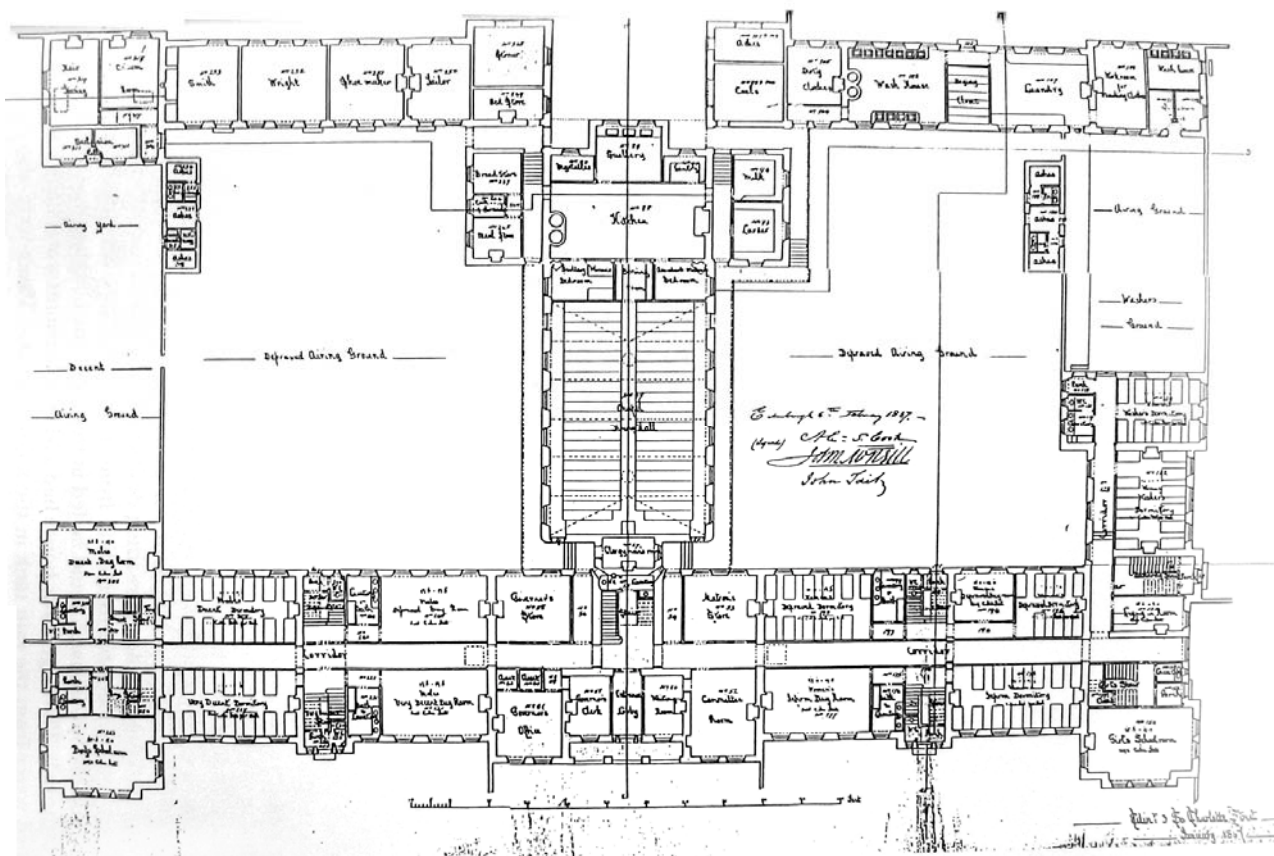


Plan of the first floor of the Model Design of A Poor's House for Rural Parish, 1848
 Source: Second Annual Report of the Board of Supervision for Relief of the Poor

The model design of the rural poorhouse generally follows the same principles. Containing fewer inmates, it has a smaller scale and the rooms provided for dissolute or able-bodied adults were removed as the architects believed this group was quite small in rural parishes. Except in this principal difference, the two model designs were very close.

As the architects explained, the model designs were derived from the project they prepared for the poorhouse of the St Nicholas parish in Aberdeen. An 1890 map shows the general layout of the poorhouse is close to the model design. Even the Oldmill poorhouse, erected between 1907-08 in Aberdeen, still followed the model design strictly: its appearance was probably closer to the model design rather than any other poorhouse in Scotland. The influence of these model designs was not limited in Aberdeen, however, and the two new poorhouses built in Edinburgh also followed the guidelines of the urban poorhouse model.

After the passing of the 1845 Act, Edinburgh established new managing structures for poor relief. The Board of Supervision was located here and the three parishes had their own Parochial Board. By the 1860s, conditions at the Canongate poorhouse and St. Cuthbert's poorhouse had become very bad, with high mortality among the inmates. It was then proposed that the two parishes should be combined to form a single Parochial Board and build a new poorhouse together. But the Chairman of St. Cuthbert Parochial Board, Sir James Gardener Baird firmly opposed this scheme and insisted that the parish should build a new poorhouse separately.



Ground floor plan of Craigeith workhouse
 Source: The National Archives of Scotland

In 1867 a site of ten acres at Porterfield, Craigeith, was obtained and Messrs Peddie & Kinner were appointed the architects of the project. The design of the main building was clearly based on the Scottish model design published 20 years earlier. The two main changes were that the entrance block was moved to the right side of the main building and the infirmary part was separated and accommodated in a T-shaped building on the left side of the main building. Compared to the model design, the second change was more beneficial as the infirmary was completely separated from other parts of the poorhouse and a much larger space was provided for sick poor.

Except for the removal of the infirmary section, no major changes were introduced to the layout of the main building. The inmates were divided into six groups and accommodated in six separated sections, just as in the model design. The adults were divided into two classes according to their morality. Sir James Gardiner Baird explained, “to promote the happiness and comfort of the inhabitants they had adopted a thorough system of classification which would prevent the respectable poor from being annoyed or having their time infringed upon by those who were reckless or bad tempered, or who were inclined to make manifest the

vicious cause which had brought them to poverty.”⁵⁸ This classification of people according to the criterion of morality was absent in English model designs. In Scotland it illustrated the character of Scottish poor law, which considered morality as a more important factor than economy. In the Board of Supervision’s model design moral criteria had already appeared with the separation of dissolute and aged poor, but in St. Cuthbert’s new workhouse it was more clearly defined and practised.



Craigleith workhouse central block

Source: photo by author

The external formal characters of the new poorhouse also represented the influence of the model design. The features of central tower and porch at the main entrance in the model design were both present in the new poorhouse, but the architects did not adopt the pure Elizabethan style suggested by the model design, and more classical elements were used to enrich its appearance. The strong financial support of the Parish enabled the architects to use good quality stone and to ornament the building more highly.

In 1873, the St. Cuthbert’s Parish and Canongate Parish were finally united to form the St. Cuthbert’s combination. The building served as poorhouse for the combination till 1914 when it was turned to the 2nd Scottish General Hospital. The main building and the infirmary building still exist and are now part of the Western General Hospital in Edinburgh.⁵⁹

Nearly at the same time, a new poorhouse was also built by the Parochial Board of

⁵⁸ Cited from Eastwood and Jenkinson, *A History of the Western General Hospital: Craigleith Poorhouse, Military Hospital, Modern Teaching Hospital*, p. 21.

⁵⁹ *Ibid.*, p. 37.

Edinburgh. Although various expansions had been gradually introduced to the Charity Workhouse to create a poor relief complex in the Forest Hill area, the main building dating from 1740 had become insufficient for its function. An 1843 report pointed out that “the charity workhouse, like the Royal Infirmary and other buildings of a similar date, is essentially defective in the lowness of its ceilings; the due elevation of which is the only means of giving sufficient breathing space to individuals accumulated in crowded apartment. ... the building will, I apprehend, stand but an unfavourable comparison even with the Union Workhouses recently erected in England and Ireland.”⁶⁰ This remark shows that the influence of English new poor law workhouses had extended across the border, and the new English workhouse buildings were regarded as a new standard for poor relief institutions.

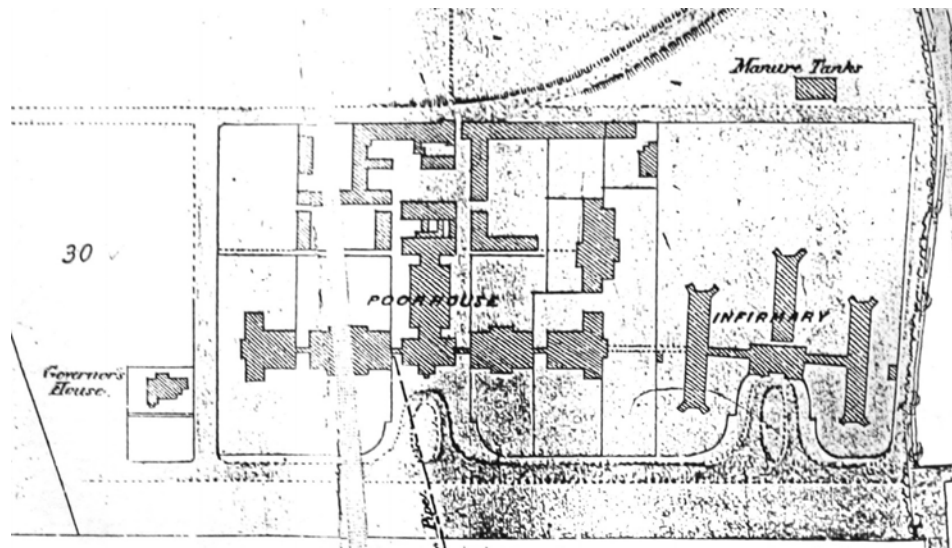
The project of erecting a new poorhouse only started in 1865. A large area near Craiglockhart Hill in the southern suburban area of Edinburgh was purchased for the new institution. A competition was held to select the architectural design. The Board required that the candidates should submit a design of a “Poorhouse with all sanitary conveniences, with proper supervision of the inmates, and, above all, with such an arrangement of the various classes as will ensure their entire separation.”⁶¹ Judging with this rule, the jury reported that most competition plans failed to meet the requirements because “little or no provision for supervision, by the officials of the administrative department, of the corridors, and of the airing grounds, is made in any of the plans, except one bearing the motto, “Comfort for the Poor, with Care for the Ratepayers.”⁶² Therefore it was the exceptional design that won the competition and went on to be built. The jury commented that “it is decidedly superior to all the others: - 1st. In the arrangement of the various classes, with references to each other, with reference to the officials, and with reference to the workshop and washing department, &c. 2nd. In the arrangements for the constant supervision of the inmates by the officials. This difficulty it successfully meets, and the officials can at once and readily command the whole kitchen department, the corridors of communication, and the paupers on their airing-grounds.”⁶³

⁶⁰ M.D. Alex. Macaulay, "Report by the Treasurer's Committee on Memorial from the Managers of the Charity Workhouse Regarding the Assessment for the Current Year," (1843).

⁶¹ "Notice of Competition Plans for Edinburgh City Poorhouse," ed. Edinburgh Parochial Board (1865), p. 10.

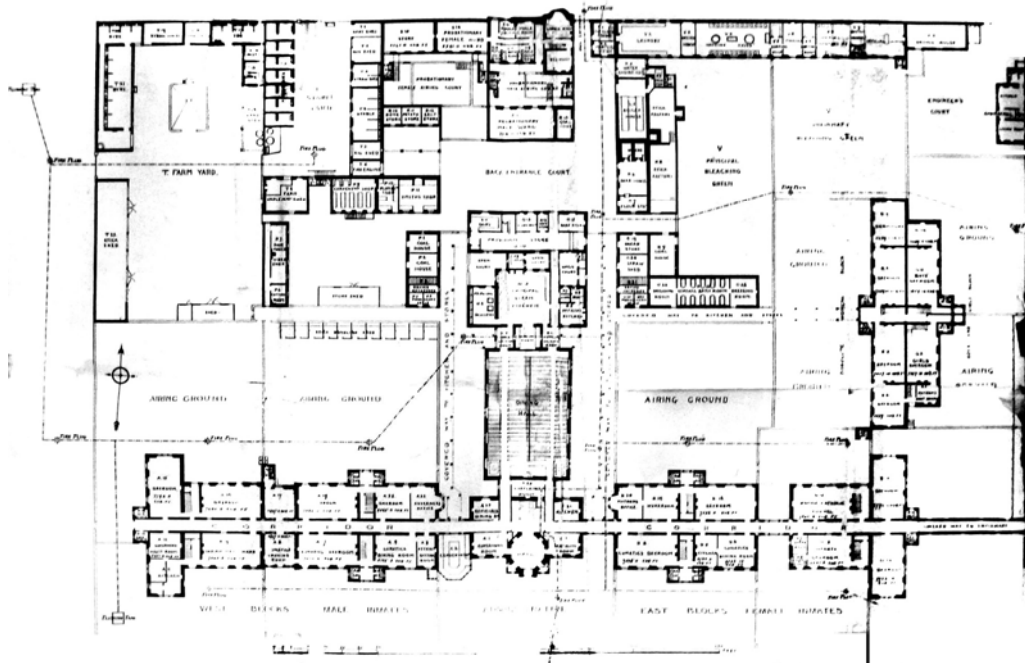
⁶² *Ibid.*, p. 1.

⁶³ *Ibid.*, p. 14.



General plan of Craiglockhart Workhouse
Source: Edinburgh City Archives

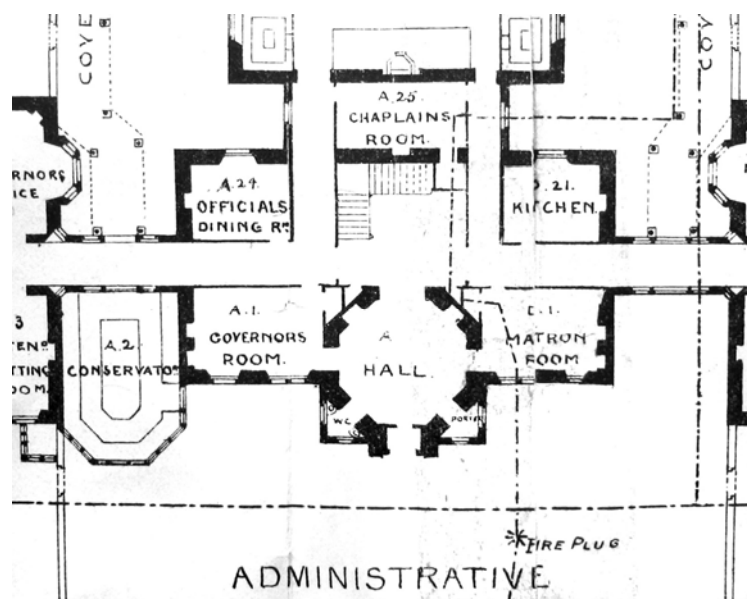
GROUND FLOOR PLAN OF HOUSE



Ground floor plan of Craiglockhart Workhouse
Source: Edinburgh City Archives

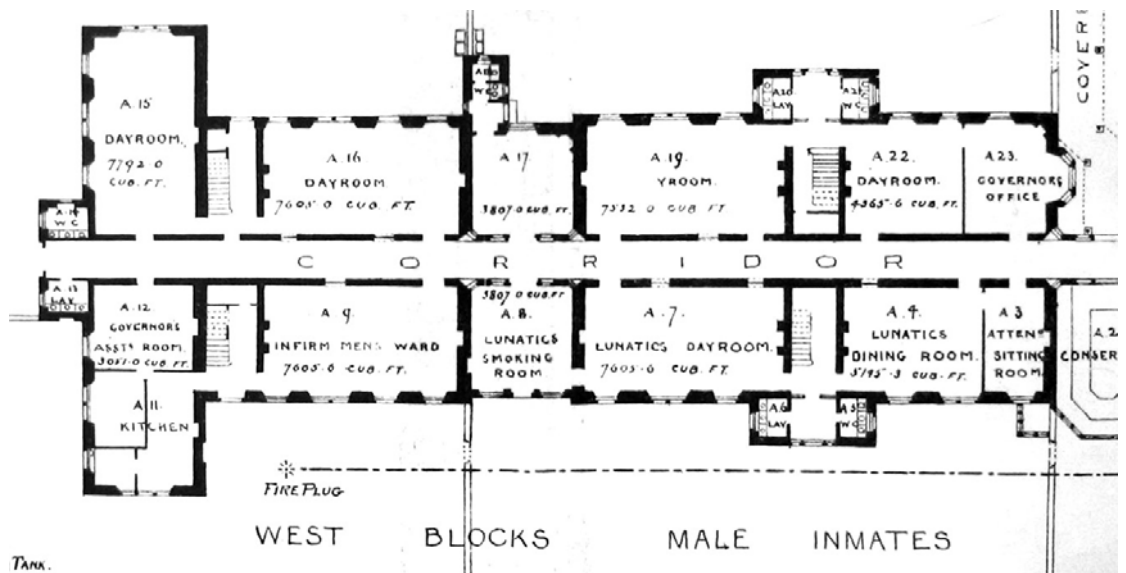
The chosen plan was designed by George Beattie. With only minor alternations, the plan was implemented. The design was close to the Scottish model design and its English precursor in its general layout, but the architect also introduced some unique characteristics. Together with the plans, a detailed description was provided. The architect envisaged different arrangements for different groups of inmates in the poorhouse. For the aged, infants, orphan, weak minded or wholly insane persons, the “poorhouse should furnish a cheerful and comfortable abode.” But for the dissipated, improvident and the vicious “a stricter and more

rigorous discipline is necessary, so that the Poorhouse may act as a test of real poverty, and not become a place where the lazy and the vicious are maintained in idleness. To render the Poorhouse unattractive to such, an entire separation of classes, a strict discipline and a constant surveillance are indispensable.”⁶⁴ It shows that the architect intended to combine the idea of “deterrent workhouse” into his design. But this deterrent function had quite different uses in Scottish poorhouses compared to English workhouses. In the English system, strict discipline was adopted in the workhouse to prevent the able-bodied from applying for relief. But in the Scottish system, able-bodied were denied the privilege of poor relief, thus the strict discipline in the poorhouse was designed not against them but against the less-disciplined inmates inside the poorhouse who were also aged or infirm. The architect seems to have confused the two situations. Nevertheless his emphasis of strict separation fitted the Board’s requirement of separating people of different moral levels.

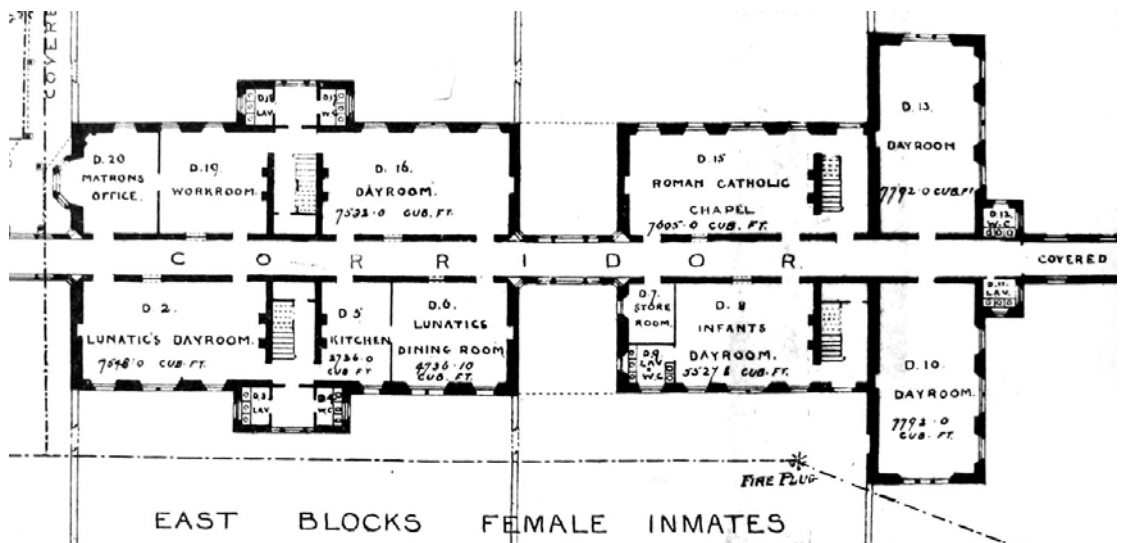


Craiglockhart Workhouse central block
Source: Edinburgh City Archives

⁶⁴ George Beattie, "New City Poorhouse at Craiglockhart, Description of Plan," (1865), p. 6.



Craiglockhart Workhouse west blocks
Source: Edinburgh City Archives



Craiglockhart Workhouse east blocks
Source: Edinburgh City Archives

Having considered this requirement, the architect concluded that the building of the poorhouse “should, as much as possible, be subdivided into separate blocks; this, of course, to be done without sacrificing facility of communication and surveillance.”⁶⁵ This idea led to the most distinctive characteristic of the architecture of the Craiglockhart poorhouse: the

⁶⁵ Ibid., p. 7.

three-storey main building was divided into five blocks connected by a central corridor. The architect explained that this arrangement could not only enhance separation but also provide light and ventilation to the long corridor, meanwhile avoiding the destruction of the whole building if only one part were to catch fire accidentally. Of these reasons the sanitary advantage had a strong appeal to the judges. While long corridors appeared in most of the competitive designs, only in this arrangement was the problem of lighting and ventilating the corridors satisfactorily solved.

Besides the common separation between the two sexes, and of the children from the adults, a deeper division and segregation of the adult inmates according to their morality was also introduced. The plan shows that the adults of both sexes were divided into three groups: men or women of good character; dissolute men or women and doubtful men or women. Each was accommodated in a separated division. The architect explained that the dissolute men and women were placed at the blocks just next to the central block to enable the governors to supervise them easily.

Except for the common setting of the governors in the central block to enhance surveillance over surrounding areas, the design provided specific supervision over the kitchen area. Bay windows were added to the governor and matron's offices besides the route leading to the kitchen. As the main entrance for the poor was on the rear side, these windows had the benefit that "no person can come in or go out at the back entrance without being seen from these offices."⁶⁶ The location of the entrance block at the back was a unique feature of the Craiglockhart poorhouse. This was probably due to the location of the poorhouse in the southern suburb of the city. Thus it was more convenient to put the entrance at north side for people coming from the city. In the model plan this area was occupied by the infirmary. At Craiglockhart there was no need for an infirmary, as a separate hospital was designed beside the poorhouse. Except for its location, the functional arrangement of the entrance block did not differ from the model design. As there were more female than male inmates, another separate block was erected at the eastern edge of the poorhouse to accommodate girls and old women. A large fever hospital was built on the eastern side of the poorhouse, again with management blocks at the center, and pavilion wards with windows on opposite walls provided plenty of crossing ventilation.

⁶⁶ Ibid.



Craiglockhart workhouse central block
Source: Photo by author



Craiglockhart Poorhouse male blocks from the south-west
Source: Photo by author

The architectural form of the poorhouse was rather plain, much simpler than the new poorhouse built by the St Cuthbert's parish. A plain appearance seems to have been in the design guidelines for the competition, as the judges criticized two designs which used gothic and palace-like style respectively for the poorhouse. Except for the separated blocks, the most important formal characteristic of the institution was the central tower, which had strong Elizabethan characteristics.

The example of the new Edinburgh workhouses clearly showed how close the Scottish

and English new poor law institutions were. It indicates that the Scottish tradition, which insisted on the benevolent character and the moral basis of poor relief, does not necessarily lead to a more relaxed control of inmates than the English workhouse system directed by Benthamite considerations. Started from quite different start points, the two systems were not different in their normalizing motivation of turning the poor into standard, model citizens, no matter whether the model was moral or economic; hence the same measures of segregation, supervision, and discipline in the two systems. Although no workhouse was actually built on Bentham's Panopticon model, his idea of turning poor relief establishments into disciplinary institutions based on specific power structures that are facilitated by the architectural spatial layout was nevertheless unanimously adopted. The Scottish example firmly proves the wide influence of this idea in a location where Benthamite thought was not prevalent. Bentham's ambition was to expand this institutional measure to as many different areas as possible. The reform of poor relief in both England and Scotland partly realised his goal. It is also the very first social reform in which the Utilitarians played dominant roles. The period from the early to mid 19th century marked the summit of Utilitarian influence in British governmental reform. While poor relief reform was one of the most important representations of this current, Utilitarianism was also very influential in the area of educational reform, the subject of the next chapter.

6 Utilitarianism and Education Reform

The various reform schemes started at the end of the 18th century were based on the Enlightenment belief that man is shaped by his environment. It was believed that a person's character could be explained by reason and it was possible to understand and transform his characters according to his particular circumstances. As discussed above, both prison reform and poor relief reform in Britain included the goal of reformation in their overall agenda. An important motive of the reformers, including Bentham, was to transform prisoners into industrious and well-behaved workers who could contribute to the public interest rather than do harm to it.

While the new prisons and workhouses confined this reforming project in a rather small group of people, there appeared in Britain a new kind of institution that covered a much bigger portion of population. This was the board school, financed and controlled by local government, and fully regulated by central government. The board schools were the result of educational reforms starting in the early 19th century. These reforms completely changed primary education in Britain. The difference between the situations prior to and after the reforms can be illustrated by the following two images:



David Wilkie, Blind Man's Buff, 1813



A 19th century classroom

Source: Eash Parish, <http://www.eshtarishcouncil.gov.uk/old/epc22.jpg>

The first one is David Wilkie's *Blind Man's Buff* painted 1813, and the second one is a photo depicting one class room of a reformed board school. Wilkie's painting shows children of various ages playing the game blind man's buff in an irregular schoolroom. The room is generally empty with tables and chairs of different sizes and types along the walls. The atmosphere is active and chaotic, children and teacher move randomly in the whole room. Although it is a picture of game-playing, Wilkie's work clearly represents the character of pre-reform education system of British primary schools. It was flexible, loosely organized and quite irregular. In contrast to this chaotic scene, the second photo shows a strictly disciplined class room. The room is spacious and regular; the desks and chairs of children are fixed and in straight rows; all children are regularized by the same behavior criteria without exceptions; standing at the side, the teacher appears as a person of great authority who supervises all students at once. This photo manifestly depicts the character of the new teaching system enforced by the central government after the education reform.

How did the huge transformation happen in 19th century? Was Bentham involved in this process? What was the role of other Utilitarian reformers in this transformation? And finally, how did it change the primary education system in Edinburgh? In the next two chapters, these questions will be discussed.

6.1 Education Theory in the Enlightenment, Rousseau and Helvetius

6.1.1 Rousseau's Education Theory

The stress on education in Enlightenment thought is clearly represented in Rousseau's work *Emile* (1762). For Rousseau, *Emile* is both a philosophical and educational work, and the two aspects are connected together because the education measures Rousseau suggested are based on his philosophical view of human nature. In this sense *Emile* can be regarded as a typical case of the Enlightenment project in which philosophical explanation establishes the basis of reformation plans.

“Reverse the usual practice and you will almost always do right.”¹ This is Rousseau’s declaration against tradition. The weapon he used to fight with tradition is the concept of “human nature.” It is “human nature” rather than God that determines the formation of society. Because of this, education should follow human nature rather than God’s command.

In antitheses to the Christian doctrine, Rousseau holds that human beings by nature are good and it is society which causes the corruption of man. To see man as naturally good is the view of Locke, which Rousseau inherited. He vehemently attacked the social reality that distorted human nature and turned people to evil. In his early *Discours sur les science et les arts* (1750), Rousseau attributes the corruption of man to the development of science and art, and in the later *Discours sur l'origine et les fondements de l'inégalité parmi les hommes* the source of evil is traced to the origin of society. It was inequality, a product of private property that led to the formation of society and consequently the distortion of human goodness.

It has been widely argued that Rousseau’s idea is a kind of primitivism which advocates a return to the primitive condition. But this interpretation was clearly opposed by Rousseau himself. He affirmed repeatedly that he never considered the possibility of return of the first condition, and on the contrary, without culture, he claimed, modern man would be even more vicious than he already was.² Rousseau proposed two solutions to the corruption of society and man. The first is a political one. A different form of society is envisaged in which man will be virtuous and happy. In Rousseau’s political institution, the authority comes from the “general will,” which is the manifestation of those who shed their ephemeral desires and realize their “true” needs and wishes in a way that Rousseau’s educational prescriptions would encourage and foster.³ Here the education scheme established the basis for a political programme. As the political transformation was not attainable, Rousseau transferred his attention to the second solution: education, which aims at transforming the individual rather than society. In *Emile* Rousseau describes a process to cultivate the natural goodness and happiness of man, and then realize them in the society.

¹ J.J. Rousseau, *Emile*, trans. B.Foxley (London: Everyman, 1943), p. 58.

² Peter Jimack, *Rousseau, Âemile, Critical Guides to French Texts*; 28 (London: Grant & Cutler, 1983), p. 15.

³ G. H. Bantock, *Studies in the History of Educational Theory. Vol.2, the Minds and the Masses, 1760-1980* (London: Allen & Unwin, 1984), p. 6.

Rousseau's preference for nature over society is manifest in his educational writings. Since man is naturally good, and only becomes evil by the influence of society, the successful education must consist in following the child's nature and protecting her from the corrupting influence of society. But the aim of this educational process was not to produce a hermit: it was to create a harmony between the goodness of natural man and the virtuousness of social man. The key point in this educational process is that the instruction of knowledge and morality should correspond to the child's ability, as Rousseau urges: "nature would have them children before they are men."⁴ Basing his ideas on the sensationism theory of Locke, Rousseau argues that the physical and mental development of a child can be divided into three stages. The first stage, up to the age of twelve, is called "the gate of nature." At that time, children are not capable of understanding reason and morality. Their education should be restricted to physical practice including the exercise of the sense organs. The second stage is from twelve to fifteen. In this period, the capacity for judgement should be cultivated in children. The last stage is fifteen and onward, when virtues should be formed in children.

To cultivate a moral ideal in the mind of children without conflicting with his nature is the task of the teacher in *Emile*. Rousseau repeatedly points out that the teacher should not impose order on children, but should let the child himself find what is good for him. But it does not mean that the teacher is just a "passive and protective" observer. What is needed to be controlled is not children's behavior but their will. In *Emile*, the teacher should stimulate the children's desire for what he thinks is good. This manipulation is effected by the appearance that it is the child's own will to follow the route laid in fact by the teacher. Rousseau says: "no doubt [Emile] ought only to do what he wants, but he ought to want to do nothing but what you want him to do."⁵ However disguised, the manipulation of children's will is still undeniable. From another angle it illustrates the "tyranny of the general will" widely noticed in Rousseau's political work.

Although Rousseau's final aim for Emile is an ideal social being, his tough attack on the corrupted society makes this target impossible without a complete social revolution. The consequence is the strongly solitary attitude in *Emile*. As society is corrupted and evil the only shelter for Emile is himself rather than external world. The only happy life is a self-sufficient life without dependence on other people and external material condition. In this respect, Emile's

⁴ Rousseau, *Emile*, p. 54.

⁵ *Ibid.*, p. 85.

absorption into a family can also be seen as a withdrawal from society; and the *sagesse* urged upon Emile by his tutor at the end represents the ultimate psychological withdrawal, a withdrawal even from the family, into the solitude of self-sufficiency.⁶

Based on this background, the education model Rousseau suggests is a detached, individual education limited in a rural environment without external influences. It is Rousseau's pessimistic view of contemporary society that decides the character of this solitary education. It directly contradicts the optimistic temper of other Enlightenment thinkers who had a strong belief in social progress and the power of science and reason. The education system suggested by these optimists is inevitably different from Rousseau's and this divergence of views is clearly represented in the debate between Rousseau and Helvetius.

6.1.2 Helvetius's Education Theory and Its Difference from Rousseau's View

Both Rousseau's *Emile* and Helvetius's *De l'Esprit* (1758) aroused fierce attack and condemnation from the church and the government. As a consequence, Helvetius had to retract his book three times and Rousseau had to leave France and spend several years wandering from one place to another. Despite the similarity of their fates, the two works of the two greatest Enlightenment philosophers are directly opposed to one other in many aspects. The clear evidence of this opposition is represented by the discrepancy between Rousseau's *Emile* and Helvetius's *De l'Esprit* and *De l'Homme* (1773). Education was one of the main topics of this controversy

Although both Rousseau and Helvetius accept the general theory of empiricism, there is still a huge difference between the two thinkers' understandings of human beings. While Helvetius is an extreme sensationalist, backed by a synthesis of atheism, materialism and determinism, Rousseau is more compromising. He later attempted a reconciliation of Cartesianism and sensationalist theory, and placed a special emphasis on the notions of free will, religion and moral conscience. It makes Rousseau's theory much more complicated and obscure than

⁶ Jimack, *Rousseau, Âemile*, p. 73.

Helvetius's. The theoretical variance produced a distinct difference in the education systems suggested by the two Enlightenment theorists.

The fundamental difference between Rousseau and Helvetius's thoughts is on epistemology. Helvetius's theory is mainly based on Condillac's sensationalism laid out in *Traité des sensations* published in 1754. This theory reduces all mental faculties to sensations and equates judgement with sensation, hence the principle "*juger, c'est sentir.*" Helvetius argues that the human mind is essentially passive with only one faculty, that of sensation. The only active function of mind is selection, i.e. to welcome or shun sense-impressions according to its interest. He also declines the existence of innate ideas; all knowledge and characters are acquired from the environment.

Such an extreme sensationalism is opposed by Rousseau. Different with Helvetius's unitary and over-simplified mental structure, Rousseau's construction of human faculties comprises two parts, the sensitive one which is material and passively receives sensations, and the *âme*, which is spiritual and comprises all the active faculties necessary for thought.⁷ Sensations cannot form idea and thought alone; they need the co-ordination of the active spiritual faculties in the mind. Rousseau distinguishes sharply between perception, which conceives objects, belonging to the passive part of mind, and judgement, which conceives relationships, belonging to the active part of mind. In this way Rousseau rejects the principle of "*juger, c'est sentir*" and prepares the way for Kant.

The difference in epistemology also causes a difference in ethical theory. Helvetius's complete sensationalism leaves no place for any innate moral idea or faculty. For an individual the only motivation is the self interest. Public interest is only a byproduct of the pursuit of private benefit. Helvetius then develops a Utilitarian theory that largely influenced Bentham. But Rousseau, with a belief in the active faculties of the human mind, holds a strong faith in free will and divine providence. He still adopts a Cartesian dualism of mind and body. Man is egoistic and vicious when he obeys "*la loi du corps,*" disinterested and virtuous when he listens to "*la voix de l'âme.*" At a lower level, the human being is controlled by sensation and pursues only self-interest. But at a higher spiritual level, the free will has a consciousness of right and wrong:

⁷ David Warner Smith, *Helvétius: A Study in Persecution* (Oxford: Clarendon Press, 1965), p. 175.

it naturally makes the right choice independent of the consideration of self-interest, and then the individual becomes a moral being.

The difference between Rousseau and Helvetius's education theory is as great as the difference between their moral theories. One major issue is the equality of minds. Helvetius is an advocate of equality. He argues that, since all minds are equally empty at birth, all the subsequent differences in intelligence, characters and temperaments are the result of education. Heredity counts for nothing: environment for everything.⁸ Since Helvetius equates judgement with sensation, all normally-endowed human beings with sufficient sensitivity are equally capable of making right judgements. The intellectual inequalities of individuals are not naturally present at birth but acquired gradually. Such an idea is reiterated by Helvetius in both *De l'Esprit* and *De l'Homme*. One of the inferences that can be derived from this view is that even normal man can be turned genius with the help of education.

Generally speaking, Rousseau also agrees that men are equal. In *Emile* he argues: "In the natural order men are all equal and their common calling is that of manhood ... It matters little to me whether my pupil is intended for the army, the church, or the law. Before his parents chose a calling for him nature calls him to be a man."⁹ But his theory is more subtle and less radical than Helvetius's. The active faculties in Rousseau's theory are present from birth and independent of acquired sensations. They can largely determine the potential development of the individual mind. It seems that Rousseau supports the view that there are significant differences among the faculties of people's minds. The principle of the uniqueness of character (*tempérament*) is followed throughout *Emile*. One of Rousseau's main principles is that the tutor should study the particular potentialities of the child (*le génie particulier de l'enfant*) before trying to educate him in one direction rather than another. A universal education which neglects the individual distinctions of children is intolerable for Rousseau.

On this point, Helvetius and Rousseau differ radically. While Helvetius's theory supports a universal education, Rousseau's theory requires an individual education. Although the controversy about the natural equality of the human mind continues to this day, it was generally Helvetius's theory rather Rousseau's that became the foundation of 19th century educational

⁸ Brian Simon, *Studies in the History of Education, 1780-1870* (London: Lawrence & Wishart, 1960), p. 183.

⁹ Rousseau, *Emile*, p. 9.

reform. Utilitarians, such as Bentham, were the most significant supporters of Helvetius's view.

Another difference concerns the segmentation of education. As mentioned before, Rousseau insists that the education of children should be divided into three stages, and the exercise of judgement should start only from the age of 12. But that division is not accepted by Helvetius. Since the sense organs of a child are not inferior to those of an adult, there is no need to question children's capacity for making judgement. Thus the facility for making judgement does not need to be postponed in the education system. Again, it was Helvetius rather than Rousseau's stance that was welcomed by 19th century reformers. Scientific education started at a much earlier age than in Rousseau's suggestion.

Helvetius and Rousseau also differed on the issue of what motivated children to study. For Helvetius the most important factor is attention, which itself is decided by *intérêt*. *Intérêt* in Helvetius's terminology is a personal interest based on a pain-pleasure calculation.¹⁰ Since *intérêt* provides the only motivating principle in human beings, it is quite reasonable to direct the study of the child through the manipulation of pain and pleasure. Reward and punishment become a significant instrument of education.

But punishment is not accepted by Rousseau. Believing that man was naturally good, it was hard for Rousseau to allow such a natural state to be distorted by punishment. Rather than self-interest, Rousseau maintains that natural curiosity is the main motivating force of studying. Thus the task of the tutor in *Emile* is directing the curiosity of the child. While the general principle of Rousseau is cultivating the good nature of children and expelling the evil influence of society, Helvetius's principle is forming the child via the influence of environment. This difference decides their different attitudes towards punishment in education. Once again, Helvetius's idea prevailed in education reform and was supported by the Utilitarian reformers.

In general the difference between Helvetius and Rousseau is a difference between deterministic sensationalism and dualism. Rousseau refuses to reduce the human mind to an accumulation of sensations and holds that there are significant non-empirical faculties in human understanding. Although the empirical part is significant, Rousseau's education scheme

¹⁰ Jean H. Bloch, "Rousseau and Helvetius on Innate and Acquired Traits: The Final Stages of the Rousseau-Helvetius Controversy," *Journal of the History of Ideas* 40, no. 1 (1979): p. 34.

generally focuses on the non-empirical part, because it is this non-empirical part that coordinates sensations, makes judgement and determines moral criteria. What he emphasizes in education is to cultivate children's nature rather than transforming them by means of external influence.

Contrarily, Helvetius's theory provides a simplistic and confident foundation for a deterministic education system. Regarding the human mind as totally understandable and controllable, he gives an unlimited power to education. All these are based on the pseudo-scientific explanation of human mind, and all the mysterious or unknowable spiritual parts were banished, every thing became simple and transparent to the empirical analysis of sensations. This optimistic mood supports the belief that education can completely transform a child according to a planned outcome. This is the fundamental belief lying behind the Utilitarian scheme of educational reform.

6.2 Bentham and Mill on Education

To some extent, Bentham was a student of Helvetius. Following Helvetius, Bentham regards education as the essential force which shapes the distinct character of a man. "Between two minds equal by nature, the strength at each period of their growth will be in proportion to the variety and extent of the ideas with which they have been infused; and in this circumstance, may be seen the only causes of whatsoever difference there is between the mind of a well educated youth under the existing system of education, and the mind of the Esquimaux, or the New Zealand savage at the same age."¹¹ This notion provides the basis for Bentham's educational ambition. With his distinguished enthusiasm in practical issues, Bentham attempted to use the formative function of education with the help of both material and intellectual innovations.

6.2.1 Education in the *Panopticon Letters*

Bentham's education writings consist in three parts. The earliest one is in the *Panopticon Letters* written during his stay in Russia. The second part is incorporated in his *Outline of a*

¹¹ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Viii*, p. 11.

Work entitled *Pauper Management Improvement*, published in 1789. The third and the most important one is the *Chrestomathia* published in 1817. In all three parts, the architectural model of the Panopticon plays a significant role.

Words on the cover of *Panopticon Letters* clearly indicate that the architectural idea of the Panopticon is not intended for penitentiaries only. It is suitable for houses of industry, work-houses, poor houses, manufactories, mad houses, hospitals and schools. On page XXI Bentham discusses Panopticon schools. The architectural layout of the Panopticon School is not dissimilar to the prison. Bentham just simply replaces the prisoners with students. Every student will be given a cell, with a bed, a desk and a chair. Since security is no longer an issue, the “gratings, bars, and bolts and every circumstance from which an inspection-house can derive a terrific character” are all removed.

Compared to the Panopticon prison, Bentham’s description of the Panopticon School is quite sketchy. He does not give any information about the curriculum or how the school runs in normal conditions. His intention is only to show the extraordinary advantages of the architectural model, rather than a full education reform scheme. The greater part of his discussion focuses on the benefits derived from the combination of central inspection and individual isolation. First of all, discipline is strengthened. “All play, all chattering, in short all distraction of every kind, is effectually banished by the central and covered situation of the master, seconded by partitions or screens between the scholars as slight as you please.”¹² The normal problem of cribbing can be removed completely. Since punishment is no longer necessary as a consequence of strict discipline, Bentham believes the Panopticon School can definitely promote the happiness of the students. The isolation also provides a peaceful environment for the students. “Those sinkings of the heart at the thought of a talk undone, those galling struggles between the passion for play and the fear of punishment, would there be unknown.”¹³ A purified environment is created, and children can concentrate their energy totally on studying.

The students in the Panopticon School are individualized to a certain extent. “The different measures and casts of talent, by this means rendered perhaps for the first time, distinctly

¹² Bentham, *Panopticon. In a Series of Letters*, p. 107.

¹³ Bentham, *The Panopticon Writings*, p. 108.

¹⁶ *Ibid.*, p. 107.

discernible, will indicate the different degrees of attention and modes of culture most suitable to each particular disposition; and incurable and irreproachable dullness or imbecility will no longer be punished for the sins of idleness or obstinacy.”¹⁶ From this point of view, Bentham seems to support individualized education closer to Rousseau rather than Helvetius.

One interesting point is that Bentham thinks his plan will please both Rousseau and Helvetius in some degree. For Rousseau, he argues that the Panopticon might not be suitable for Emile but might be good for Sophia, Emile’s wife. The reason is that the virginity of the girls could be guaranteed by the isolation system. And for Helvetius, Bentham argues that in the Panopticon school Helvetius “might have been enable to give an experimental proof of the truth of his position (supposing it to be true) that any body may be taught any thing, one person as well as another.”¹⁷ As the student is isolated in the cell, his environment can be controlled completely. Bentham thinks this provides the ideal condition for educational experiments. Bentham even suggests manipulating the education process to obtain unusual results such as “two and two might here be less than four, or the moon might be made of green cheese.” This demonstrates how deeply Bentham believed the effect education could have; in Bentham’s word: “you make of them what you please.”¹⁸

This confidence in the power of education lies behind Bentham’s proposal that children should be taken out of the hands of their parents as much as possible. This not only increases the effect of education but also relieves the parent from the trouble of taking care of their children. The same principle underlined Robert Owen’s later experiment in infant education at New Lanark; but in the present case, Bentham pushes it to the extreme.

Bentham is aware how unusual his school model is and how many problems may be caused by it. He lists many objections his opponent may raise, such as: “whether it would be advisable to apply such constant and unremitting pressure to the tender mind, and to give such Herculean and ineludible strength to the gripe of power?” “Whether what is thus acquired in regularity may not be lost in energy?” “Whether the defects, with which private education had been charged in its comparison with public, would not here be carried to the extreme?” “Whether the liberal spirit and energy of a free citizen would not be exchanged for the mechanical discipline of a

¹⁷ Ibid., p. 116.

¹⁸ Ibid., p. 115.

soldier, or the austerity of a monk?” “And whether the result of this high wrought contrivance might not be the constructing a set of machines under the similitude of men?” Bentham’s candid record of these questions shows that he does not want to avoid opinions opposed to his programme, and is prepared to face the challenge. To all these challenges he responds: “to give a satisfactory answer to all these queries ...it would be necessary to recur at once to the end of education. -Would happiness be most likely to be increased or diminished by this discipline? Call them soldiers, call them monks, call them machines, so they were but happy ones, I should not care.”¹⁹

The justification of all these unusual measures is the simple criterion of happiness. All the doubts are unnecessary if the students are happy. With happiness as the exclusive target, all the other concerns such as freedom, emotion or energy can be sacrificed. Bentham never doubts that people in his Panopticon facilities would be unhappy, no matter he is a prison a poor man or a child. These inmates can not fail to be happy because they are not ordinary persons, but individuals constructed under Bentham’s Utilitarian theory of human nature.

6.2.2 Education in the *Pauper Management*

Bentham’s educational writings in the *Panopticon Letters* only represent a brief sketch of the combination of the Panopticon idea and education. A fuller discussion of an education plan appears in his writings about pauper management.

In the last chapter Bentham’s plan to build Panopticon Houses of Industry to solve the problem of poor relief was discussed. This plan appeared in his *Outline of a Work entitled Pauper Management Improvement*, published serially in the *Annals of Agriculture* in 1798. Bentham suggested establishing a national company that would build 250 Panopticon House of Industry to accommodate 500,000 people at the outset. Within 21 years, when the population in the House of Industry reached a balance, there would be 500 such Houses with one million residents.

¹⁹ Bentham and Bowring, *The Works of Jeremy Bentham Vol.Iv*, p. 64.

Children are a special class in the population of Panopticon House of Industry. In Bentham's plan, all the children born in the House or entering it with their parents are obliged to remain in it until adulthood. Bentham's intention is not only to cultivate these children, but also to use them as working labour.²⁰ In the House of Industry, children must work as apprentices – “male, till twenty one or twenty three; female, till twenty one or nineteen: without prejudice to marriage.”²¹ This regulation is equal for all children, no matter who their parents are or whether their parents have left the House of Industry. Once there, they have no other choice but staying on till the prescribed age. One reason for the strict regulation is that the children's apprentice work constitutes “the chief basis of the company's profit-seeking arrangements.”²² Bentham has calculated that the profit from a child would be more than 300% of that of an adult male labourer, and would “more than equal the amount of the present poor rates.”²³ For Bentham, the apprentice work of children is not just a source of profit; but that consequence is definitely a most important one. As children need to stay for years, their education constitutes a significant part of the management of the House of Industry.

Starting from the aim of education, Bentham argues “the proper end of education is no other than the proper end of life – wellbeing.” Well-being here includes both “that of the individual to be educated” and “that of the parties at whose expense, and by whose care, he is to be educated – viz. the proposed Company.”²⁴ Following the maximum happiness principle, Bentham believes education should bring benefit both for the children and the company. This principle underlines nearly every aspect of Bentham's discussion of education in the House of Industry. All the arrangements are required to fit multiple purposes.

From 15 aspects, Bentham discusses the ends of education in more detail. The 15 aspects are divided into 3 categories: “1, For the advantage of the Company, as well as his own. The item of *Profit* of productive industry belonged to this category. 2. For his own advantage, in respect of his present condition in the apprentice-state. This section included *Comfort* (including amusement), *Continuation of existence* (viz. by nourishment.), *Health, Strength, Cleanliness,*

²⁰ Bentham and Bowring, *The Works of Jeremy Bentham Vol. Viii*, p. 374.

²¹ *Ibid.*, p. 369.

²² *Ibid.*, p. 390.

²³ *Ibid.*, p. 385.

²⁴ *Ibid.*, p. 395.

Personal security. 3. Partly for his own advantage – in respect of his future condition after emancipation – partly for the advantage of the public at large. Belonging to this category were *Faculty of self-maintenance, Faculty of self-amusement, Intellectual strength, Moral health, Military strength, Faculty of pleasing, Religious affections* and *Suitable instruction* – instruction in all suitable points of art and knowledge.”²⁵ As Himmelfarb points out, this division is not accurate because the combined interest principle works in all three categories rather than only in the first.²⁶

In Bentham’s calculation, there is no conflict between the interest of the children and the interest of the company. The apprentice work, beneficial for both sides, becomes the most important content of education. In the published work, there is no indication at what age the apprentice work should start. But in the manuscript, Bentham wrote that four is much better than the customary fourteen.²⁷ Thus after the age of four, children have to spend most of their time, six days a week, on apprentice work. Only Sunday is left for religion and book learning. As for whether or not this labour was good for the child, Bentham never doubts the rightness of child labour.

Of the 15 aspects outlined by Bentham, only two items belong to the traditional scope of education, the *intellectual strength* and *suitable instruction* –*instruction in all suitable points of art and knowledge*. But Bentham does not give any detail about the content of these conventional aspects of education.

The Panopticon House of Industry would have been an ideal place for education based on Helvetian theory because the environment in it is so strictly controlled, making it possible to create any kind of individual that the educator intends to. On the other hand, it shares with Rousseau’s theory the character of creating a purified world for children. For Emile, the purified world is the countryside residence, and for Bentham’s children it is the Panopticon poorhouse. The difference is that while Rousseau makes the world to let the child’s nature develop freely Bentham makes it to turn the child into the ideal model he has designed for him.

²⁵ Ibid.

²⁶ Himmelfarb, "Bentham's Utopia: The National Charity Company," p. 104.

²⁷ Ibid.: p. 101.

Even inside the House of Industry, isolation and separation are of great significance. In Bentham's view this has at least two advantages for education: "prevention of unsatisfiable desires" and convenience for educational experiment. Bentham had mentioned the second advantage in the *Panopticon Letters*.²⁸ Of special interest is the first one.

Bentham suggests several measures of separation to prevent "unsatisfiable desires": "1 separation at meal times, as between those who have the homeliest fare, and those, who in consideration of habit or infirmity, are indulged with choicer fare. 2. Separation as between sex and sex, from the commencement of a certain age. 3. Separation of the indigenuous and quasi-indigenuous stock of the non-adult class, from the coming-and-going stock, who might excite hankerings after emancipation, by flattering pictures of the world at large."²⁹ The simple idea is that by preventing outside influences, the children's mind can be kept unaware of the unsatisfiable desires; then they will not suffer the pain caused by the failure to fulfill them. Here, Bentham is echoing the Epicurian idea of negative pleasure, which holds that the real happiness can only be obtained by abnegating all the sensual desires. The difference is that, for Epicurists, people should intend voluntarily to give up these desires, but for Bentham's children, it is the controlled environment that blinds them to the existence of these desires.

As discussed in the first chapter, Utilitarianism holds a positive view of pleasure. There is a manifest contradiction between such a view and the Epicurean's negative view of pleasure. To welcome the Utilitarian one necessarily led to the refusing of the Epicurean one and vice versa. But it does not bother Bentham at all. What he wants is supportive arguments rather than a logically coherent system. He anticipates the result of a successful prevention of unsatisfiable desires that: "No sense of deprivation, none of the pains attendant on the emotions of regret, discontent and envy."³⁰ In Bentham's ideal world, children are happy with their insipid diet because they never know the existence of something better. Here it is ignorance rather than knowledge that becomes the target of education. Moreover he even extends the principle into the field of art and argues that "all the efforts of art are but a vain struggle to pass the limits set to enjoyment by the hand of nature."³¹ Thus art is not necessary at all. It is not surprising that art occupies only a small place in all of Bentham's various reform schemes.

²⁸ Bentham, *The Panopticon Writings*, p. 116.

²⁹ Bentham and Bowring, *The Works of Jeremy Bentham Vol. Viii*, p. 373.

³⁰ *Ibid.*, p. 436.

³¹ *Ibid.*, p. 439.

One necessary condition of Bentham's "desire preventing" plan is that the children must be separated from any adult, including their parents. In Bentham's proposal, parents will be permitted to "view" their children, but not talk to them without permission. To defend this unusual measure, Bentham argues that the "natural parents would have had an interest of their own, distinct from and oftentimes opposite to that of the child." They are "essentially arbitrary, essentially variable, essentially uncertain, can draw no improvement from experience." Thus Bentham suggests replacing these natural parents with the appointed Father. "The natural fathers are of all characters: negligent as well as careful: rough and brutal as well as tender and affectionate. The appointed Father is but one, and of but one character: and that character selected for the purpose."³² Thus in Bentham's plan, children are brought up collectively by the appointed personnel of the company. Compared to the old tradition, the mechanic in the Panopticon House of Industry is "uniform, systematical, governed by principle." While providing the "most advantageous" benefit for the children, this system was also the most economic. The collective cultivation means that a large quantity of labour and resource could be saved. In Bentham's plan 140 infants are accommodated in one room with the attendance of 4 nurses.³³

With a characteristically thorough confidence in his education system, Bentham came to the conclusion that the condition in the Panopticon House of Industry would be "obviously more eligible than that of the children of the self-maintaining poor, even in the highest classes." He even envisaged that parents of the "superior classes" would like to send their children to the Panopticon poor house and educate them under the apprentices work.³⁴

The education scheme largely distinguishes Bentham's poor relief plan from other rival proposals. The scant discussion around the usual contents such as studying and learning shows the uniqueness of Bentham's education system which does not exist as an independent sphere but is combined with working and deeply integrated into the whole life of the children. The normal boundary of the domain of education vanishes. For Bentham education is the synonym of formation - anything that helps to form the character of a child is a kind of education. The

³² Univ. Coll. MSS.CLIIIa,93. Cited from Himmelfarb, "Bentham's Utopia: The National Charity Company," p. 110.

³³ Bentham and Bowring, *The Works of Jeremy Bentham Vol. VIII*, p. 103.

³⁴ *Ibid.*, pp. 422,23.

manipulative power of education was used to the extreme by Bentham, and the Panopticon is definitely the ideal place for that manipulation as it provides an isolated and strictly controlled environment. It is almost inevitable that he would continue using the Panopticon model in his later education plans.

6.2.3 Education in the *Chrestomathia*

The two parts discussed above were both written by Bentham before 1790, when his Panopticon idea was formed and most of his interest was concentrated on realizing it. His educational thought in this period was incomplete and did not make much real impact. Bentham's real influence on education only came later, with the publication of the *Chrestomathia*, the only published work of Bentham dedicated exclusively to education.

The *Chrestomathia* was published in 1817. In this work Bentham provides a plan of a new secondary day school for the children of the "middle and higher ranks" in London. Different from the earlier writings, the *Chrestomathia* is based on the conventional school teaching rather than a modified education scheme tailored for the Panopticon institutions. Bentham adopts the usual model of school teaching and concentrates mainly on curriculum setting and the teaching methods to be used. Providing many useful and feasible suggestions for the new schools, the *Chrestomathia* is regarded by some researchers as the "essence of the Utilitarian outlook in educational terms."³⁵

The birth of the *Chrestomathia* was called forth by practical demands. Francis Place, a Benthamite radical reformer, a close colleague of James Mill, found that there was no school suitable for the education of his nine children. The normal boarding schools were expensive and were regarded by many as the hotbeds of bullying and vice. The grammar schools were frozen by the Eldon judgement of 1805 in their classical tradition, which, in the eyes of Bentham and Utilitarians, was "pernicious, useless, purposeless and antiquated," in short, irrelevant to the life

³⁵ Simon, *Studies in the History of Education, 1780-1870*, p. 79.

of middle class.³⁶ Instead of the mere classical education, Place wanted a wide teaching curriculum including mathematics, living languages, politics, moral theories and other disciplines useful for the future life of middle class children. For many Utilitarians this is of great importance. James Mill clearly argues: the middle class “contains, beyond all comparison, the greatest proportion of the intelligence, industry, and wealth of the state. In it are the heads that invent, and the hands that execute the enterprise that projects, and the capital by which these projects are carried into operation.” Because of this crucial status of the middle class he concludes that “the proper education of this portion of the people is therefore of the greatest possible importance to the wellbeing of the state.”³⁷

Being disappointed with the current schools, Place formed the idea to establish “a superior Lancasterian school” – a new school using the Lancaster monitorial system. From Mill, Bentham knew the idea. With enthusiasm he immediately set about to consider “the architectural, administrative and pedagogic plan.” The result was the *Chrestomathia*, a school designed “for the extension of the new system of instruction to the High Branches of Learning for the use of the middling and higher ranks in life.”³⁸

Two principles - of Utility and Facility - underlie Bentham’s whole plan. All the subjects taught in this school should provide useful knowledge for the practical life. And for Facility, it means that the curriculum should be arranged from the simple to the complex, the particular to the general, so that the requirement of progress of children’s mentality can be met.

In order to lay out all the disciplines that were to be taught in the new school, Bentham continues in his usual style: to start from the beginning. He tries to provide a description of all the human knowledge according to the criteria of utility. Based on d’Alembert’s model, he revises the “Encyclopedia Tree” from the *French Encyclopédie*. He argues that all human knowledge is constituted by Eudæmonics, which signifies happiness, and science. His definitions are: “Eudæmonics, the art, which has for the object of its endeavors, to contribute in some way or other to the attainment of well-being, and the science in virtue of which, in so far as it is possessed by him, a man knows in what manner he is to conduct himself in order to exercise

³⁶ Jeremy Bentham, M. J. Smith, and W. H. Burston, *Chrestomathia, The Collected Works of Jeremy Bentham*. *Chrestomathia* (Oxford: Clarendon, 1983), p. xiii.

³⁷ Westminster Review, Vol. I, No. 1, January 1824, 68-9.

³⁸ Bentham and Bowring, *The Works of Jeremy Bentham Vol. Viii*, p. 8.

that art with effect.”³⁹ This hierarchical *Encyclopedia Table* includes some of the most recent advances in science and technology; it provides the theoretical basis for educators to decide what subjects are most relevant to the well-being of the child and are to be taught in the school.

It is largely in the curriculum setting that Bentham’s *Chrestomathia* school differed radically from the conventional schools. According to the Facility principle, Bentham divides all courses into 6 stages. The first is devoted to preparatory studying of reading, writing and common arithmetic, and the courses of next 5 stages are as follows:

Stage I –natural history, geometry, geography, historical chronology, biographical chronology and drawing;

Stage II- all parts of physics and chemistry, geometry, geography, history, drawing, and comparative grammar;

Stage III-application of science to industry and agriculture, geography, history, grammar, and drawing;

Stage IV- all branches of medical science, geometry, geography, history, grammar and drawing;

Stage V- mathematics, astronomy, history, drawing, grammar, technology, bookkeeping, and commercial subjects.

While the traditional courses of religion and classics are totally abandoned, Bentham’s curriculum concentrates dominantly on science and technology courses. These courses cover a surprisingly wide range of subjects that even exceeds the scope of the modern middle school curriculum. It may not be too much of an exaggeration to call it an encyclopedia education. Students would have to spend 7 years to finish all these courses after they entered the school at the age of 7.

The significance of this curriculum is not limited to the sphere of education. What it illustrates is a Benthamite Utilitarian outlook on human knowledge. All the subjects are reframed hierarchically on the value basis of Utility. In some respects, this work ranks among Bentham’s most ambitious projects. It is a proof of the belief that with the Utilitarian principle

³⁹ Bentham, Smith, and Burston, *Chrestomathia*, p. 180.

nearly everything of human society can be given a rational order, and such order can lead to the ultimate goal of greatest happiness. Bentham's Encyclopedia Table is a typical example of the "great narrative" of Enlightenment which intended to rationalize all the human world.

A good example of Bentham's Utilitarian interpretation of human knowledge is his explanation of the subject of Architecture. In the Chrestomathia School, the *Architecture* course is put in the third stage together with *Land-Surveying & Measure* and *Husbandry* (including *Theory of Vegetation and Gardening*). With regard to the content of this discipline, Bentham wrote:

"[Architecture.] From two Greek words, one of which signifies chief or principle; the other, Handicraft work.

For its products, and in that view its subjects, Architecture in general has constructions in general. Constructions may be distinguished into principle constructions, i.e. constructions of independent use, and constructions for the purpose of communication. Principal constructions are mostly receptacles. According to the nature of the bases on which the receptacles rest or move, they are distinguished into terrestrial, aquatic and aërial: fixed buildings, navigable vessels, and air balloons.

Of communication, the principal instruments are, 1.Roads; 2 Canals, including tunnels and drains; 3.Quays, including Wharfs and Jetties; 4. Bridges."⁴⁰

These words show that Bentham's understanding of architecture is totally based on the constructional or engineer perspective. Architecture as building technology belongs to the same sections with the construction of roads, bridges and so on. Bentham's view echoed the tenet of the Ecole Polytechnique founded in 1794, in which architecture was taught as a branch of engineering. Durand, the professor of architecture at the Ecole Polytechnique, had given an explanation of architecture not far away from that of Bentham: the most important thing in architecture is the "usefulness both public and private, conservation, and the happiness of the individual, the family and society."⁴¹ Besides the general Utilitarian approach, there is another

⁴⁰ Ibid., p. 76.

⁴¹ Jean-Nicolas-Louis Durand, *Prcis des leons d'architecture donnees a l'Ecole Politechnique*, 2 vols, Paris 1802-05 (rev.

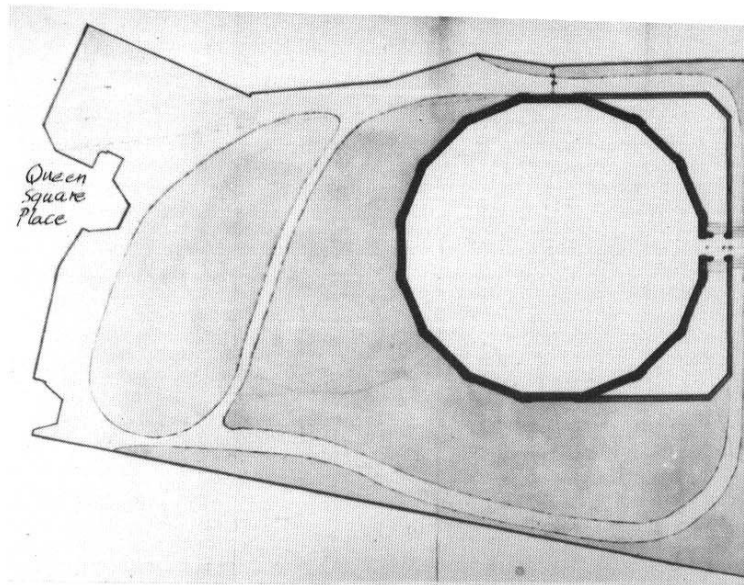
interesting similarity between the two persons. In the same section about the discipline of Architecture, Bentham argues: “substituted to the present costly and comparatively useless stock of a toy-shop, architectural models of buildings and furniture, might, if made to take to pieces and put together again, be to this purpose productive of real and lasting use.” His statement echoes Durand’s characteristic grid system in suggesting prefabricated construction. Such idea was perfectly realised in the building of the Paxton’s Crystal Palace for the Great Exhibition of 1851.

It is not surprising that Bentham would use the Panopticon model again in the Chrestomathia School. According to the plan, the school can accommodate 1000 students, 600 males and 400 females, the same as the Westminster Free School. “The above number of 600 is understood to be generally regarded as the greatest number that, in the same school-room, can be taught under the constant inspection of one and the same Master.”⁴² But when put into architectural plan, the number of students changed. Bentham had offered his garden as the site of this school Beavans, an architect, drew up preliminary plans following the Panopticon model. As the space is limited, the school has only one big schoolroom accommodating 900 children. It is a twelve-sided Panopticon. The only master is located in the central chamber with small windows open to the students. Bentham writes, “by the Panopticon principle of construction, security, in this respect, is maximized, and rendered entire: viz., partly by minimizing the distance between the situation of the remotest scholar and that of the master’s eye; partly, by giving to the floor or floors that inclination, which, to a certain degree, prevents remoter objects from being eclipsed by nearer ones; partly by enabling the master to see without being seen, where by, to those who, at the moment, are unseen by him, it cannot be known that they are in this case.”⁴³ The section shows that the height of the seats of students increased gradually to make all scholars visible to the eye of the master.

ed. Paris 1817-19), vol. I, p.6. cited from Hanno-Walter Kruft, *A History of Architectural Theory: From Vitruvius to the Present* (London: Zwemmer, 1994), p. 273.

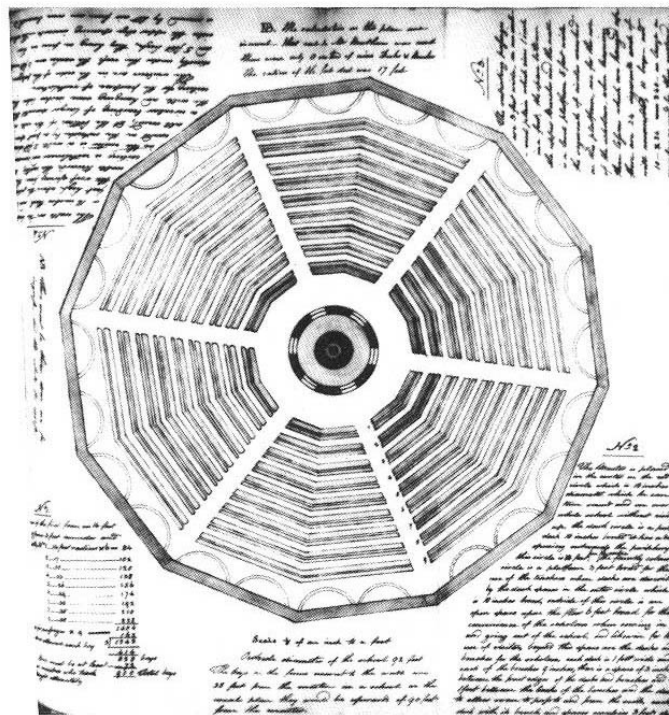
⁴² Bentham, Smith, and Burston, *Chrestomathia*, p. 124.

⁴³ *Ibid.*, p. 106.



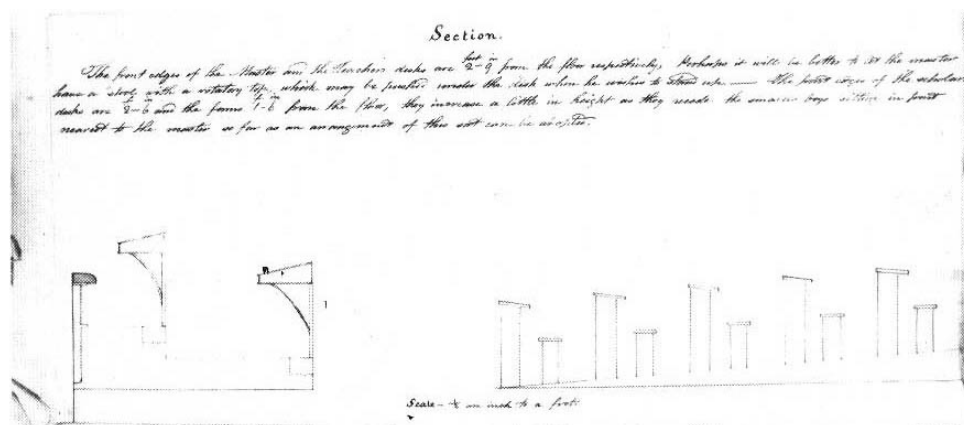
The general plan of the Chrestomathia School

Source: Bentham, *Chrestomathia*



The plan of the Chrestomathia School

Source: Bentham, *Chrestomathia*



The section of the Chrestomathia School

Source: Bentham, *Chrestomathia*

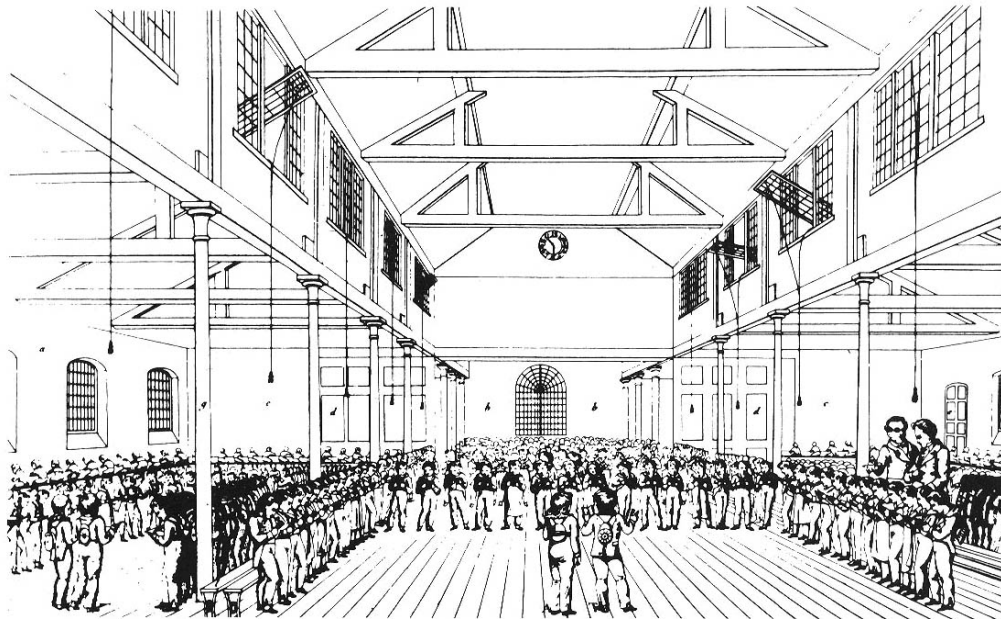
But there is an obvious contradiction in this plan. If the master is invisible, how can the students be taught? Furthermore, if there is only one schoolroom how can students of different stages be taught together by one master? These practical problems are inherent in the Panopticon model when used in education, but Bentham omitted them in his earlier writings. In the *Chrestomathia*, a plan of a real school, they could no longer be ignored. These considerations led to the second most important characteristic of the *Chrestomathia* School, the Bell-Lancaster monitory system.

It has been noted that when Place had the idea at first, it was intended to be a “superior Lancasterian school.” Place himself was an active advocate of this system. He was one of the originators of the West London Lancasterian Association, which was set up to provide the “schools for all” on a systematic basis in London. Both Bentham and Mill strongly believed in the monitorial system, and in the *Chrestomathia* Bentham referred to both the Bell and the Lancaster systems, the two most important monitorial systems.

Despite some differences, both the Bell and the Lancaster system were created to solve the same problem: how to increase the teaching efficiency when there were few teachers. This was not substantially different from the problem Samuel Bentham met with, when he needed to train a large number of workers. Similar to Samuel’s solution, Bell and Lancaster’s depended on

organized inspection to meet this challenge of efficiency.

Andrew Bell was a Scotsman, born and educated in St. Andrews. He took Church of England Orders and went as Army Chaplain to India. He first developed the idea of the monitory system in 1789 when he was superintendent to the male orphan asylum in Madras. He trained an 8 year old boy to act as monitor, who then taught the younger and less-educated children. Bell published this system in 1797 in a book originally entitled *An Experiment in Education, made at the Male Asylum of Madras*, and subsequently republished many times as *The Madras School* and then as *Elements of Tuition*. Because of its religious background, the Bell system was supported by the Church of England, which established in 1811 the National Society for the Education of the Poor in the Principles of the Established Church to promote the monitory system in sectarian schools.⁴⁴

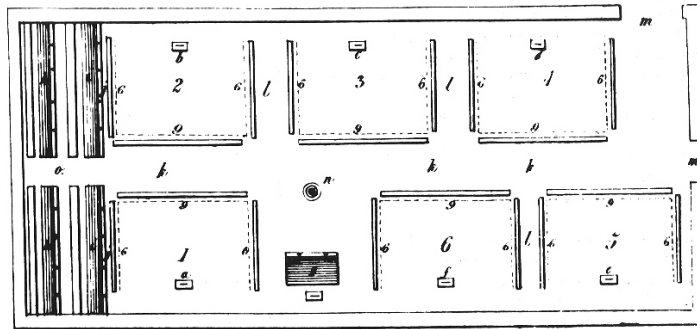


Interior of the school at Baldwin's Gardens

Source: Markus, *Buildings & Power*

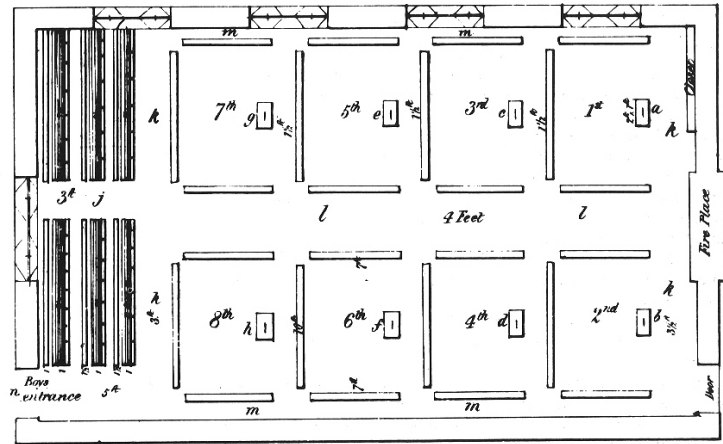
⁴⁴ See Charles Cuthbert Southey, *The Life of the Rev Andrew Bell Prebendary of Westminster, and Master of Sherburn Hospital, Durham: Comprising the History of the Rise and Progress of the System of Mutual Tuition* (London: John Murray, 1844).

M. 40 Feet by 18. (120 Children)



For Time Table See N^o 3. (Page 79)

V. 50 Feet by 30 (250 Children)



Model plan for National Schools

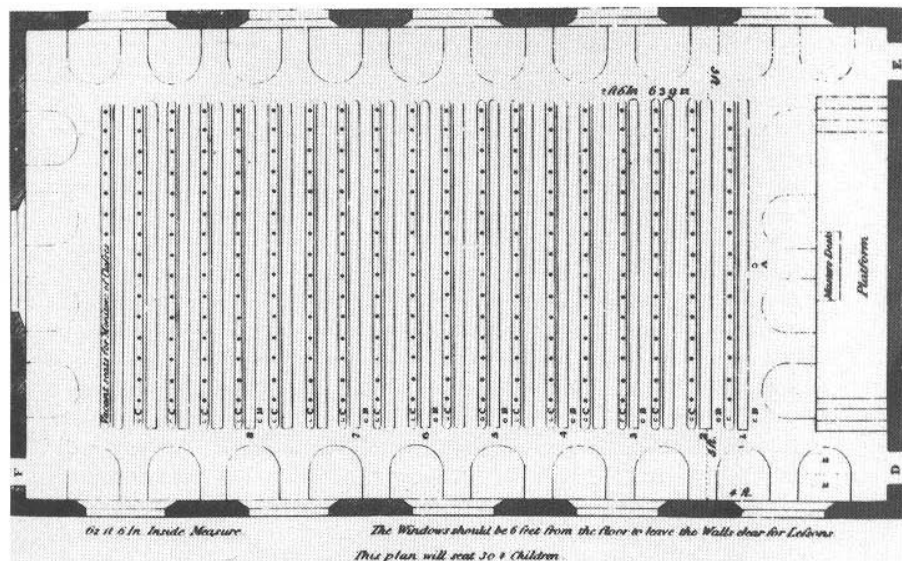
Source: Harries, *The School-Room Vol.2*

Model plans of National schools based on Bell's system were published in J.J.H.Harries's book *The School-Room*.⁴⁵ The greater part of the classroom is divided into a number of smaller groups, each surrounded by long benches on three sides and a standing platform on the fourth side. On the left side of the classrooms are long tables for writing exercises. In each smaller group around 36 students are divided into 18 pairs, so that the more advanced can help their colleagues. The students stand or sit along the U-shaped benches, an assistant teacher – normally

⁴⁵ See J. J. H. Harris and Frederick Tearle, *The School Room. Part I. Its Arrangement and Organisation Etc.* (London, 1848); J. J. H. Harris and Frederick Tearle, *The School Room. Part II. Its Discipline and Supervision; or, a Practical Manual on the Management of Children. And Other Subjects Connected with the Government of National Schools.* By J. J. H. H. With a Chapter on Registration. By F. Tearle. Pt. 2 (London, 1849).

a boy older than the students – stands on the platform to provide instruction and to supervise discipline. For the whole class only one teacher is needed, “who has charge of the class, directs and guides his assistant, intends him in hearing the class, or himself hears both the assistant and scholars say their lesson, and is responsible for the order, behaviour, diligence, and improvement of the class.”⁴⁶ A picture of the model school of the National society, the Baldwin’s Gardens School, clearly shows how the school is running.

Although based on the similar monitorial mechanism, the Lancaster system, when embodied in the classroom, represents a quite different spatial arrangement from Bell’s school. Joseph Lancaster started his experiment in a Sunday school in early 1798 in a room of his father’s Southwark house. Later he moved to Borough Road where he rented two workshops. It became a day school and by 1799 he had 130 pupils. In 1801 he erected his first schoolroom, which was enlarged in 1803 from its original size of 35 feet by 33 to a length of 75 feet to accommodate 700 children. In the same year he published *Improvement in Education*, and in the following year he built a new room for 1000 boys in Belvedere Place, Borough Road, which was enlarged to 1200 capacity in 1811 and remained as Lancaster’s model school till 1817.⁴⁷

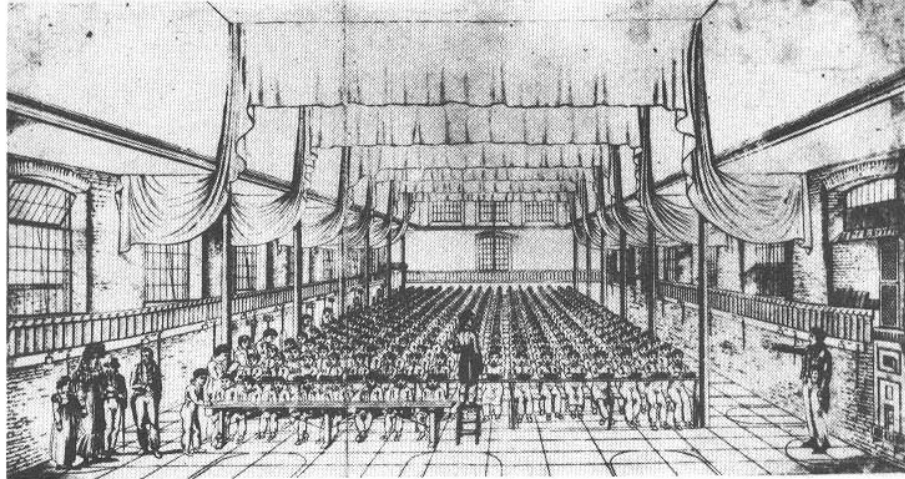


Plan of Lancaster’s Borough Road schoolroom

Source: British and Foreign Society, *Manual of the Lancasterian System*

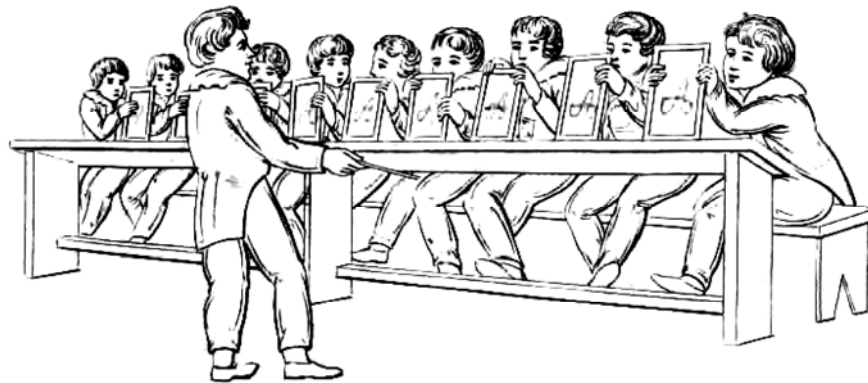
⁴⁶ Andrew Bell, *The Madras School, or Elements of Tuition* (London: T. Bensley, 1808), p. 16.

⁴⁷ See Carl F. compiler Kaestle, *Joseph Lancaster and the Monitorial School Movement: A Documentary History* ([S.l.]: Teachers Coll Pr., 1973).



The interior of Lancaster's Borough Road schoolroom

Source: British and Foreign Society, *Manual of the Lancasterian System*



Group teaching in Lancasterian schools

Source: British and Foreign Society, *Manual of the Lancasterian System*



Group teaching in Lancasterian schools

Source: British and Foreign Society, *Manual of the Lancasterian System*

In contrast to Bell's U-shape arrangement, the class room of Lancaster's room is mainly occupied by the fixed benches and writing desks. Students of the same group sit in the same or adjacent rows. One monitor stands at the end of the rows supervising his group. There is a "general monitor of order" standing on a stool in the center, and the master stands at the corner supervising all monitors and students. Along the walls there are many semi-circles marked on the floor. These are used for the monitor to teach students, who stand on the semi-circle, facing the wall with lesson cards. Thus different groups can be taught separately.

The difference between Bell's and Lancaster's systems is not stressed by Bentham in his *Chrestomathia*. Although he makes more acknowledgment of Bell, the classroom of the Chrestomathia School is in fact closer to the Lancasterian system. As showed above, the space of the Panopticon class room is mainly occupied by fixed seats and tables, semi circles are drawn along the wall (see page 237). It is the student-teacher who takes charge of the teaching of every specific group and the master's job is teaching the student-teachers and inspecting the whole class. Besides these Lancasterian characteristics, Bentham also incorporates Bell's idea of pairing students to promote mutual teaching.

One peculiarity of Bentham, compared with Bell and Lancaster, is that he intended to use the monitory system for the children of the middle classes while the other two used it only for the children of lower classes. The monitory system had been proved useful where not enough teachers could be provided. But for the middle class, the problem of teacher numbers may not have been that severe. In this case, is the monitory system still necessary? Yes, Bentham answered, because “the application of this principle is, therefore, not a *make-shift*, occasionally employed, as under the old system, for want of a sufficient supply of grown-up under Teachers, but an *essential feature*, operating to the complete and purposed exclusion, of all such naturally reluctant and intractable subordinates.”⁴⁸ As usual, he lists all the advantages of the monitory system such as “saving in money,” “saving in time” and “increase in relative aptitude,” to prove that the monitory system is good in-itself and that there is no reason why it should not be used in the education of middle class children.⁴⁹

As a typical project of Bentham, abundant practical details are also provided in the *Chrestomathia*. Bentham lists 43 principles for the management of the school. In the *Tabular Exhibition* principle Bentham suggests covering the interior walls of the class room with boards written or drawn on, with the matter of instruction. So that even in the free time, the children could see these and gain instruction. In another principle of *Distraction Preventing* Bentham suggests: “By height, or otherwise, so order the windows, that, so far as such exclusion can be made consistent with the admission of a sufficiency of light, no object, exterior to the building, shall be visible in any part of it occupied by the scholars.” Here Bentham repeats the same measure he proposes in his Panopticon prison design.

One of the most important of these principles is the *Place-Capturing* principle. “On the occasion of the saying of a lesson, whatever it be, the scholars, by whom that same lesson has been got, are placed, or are kept, standing or sitting, in one line, straight or curved, as is found most convenient; with an understanding, that he whose place is at one end of the line is considered (no matter on what account) as occupying, at the time, the post of greatest honour; the one whose place is next to his, the post next in honour; and so on.” This spatial arrangement also determines who will be the scholar-teacher. “The highest scholar, as above, begins to say

⁴⁸ Bentham, Smith, and Burston, *Chrestomathia*, p. 104.

⁴⁹ Arthur Valentine Judges, *Pioneers of English Education: A Course of Lectures Given at King's College, London* (London: Faber and Faber, 1952), p. 91.

the lesson: in case of an error, the next highest, on giving indication of it, takes, in pursuance of an instantaneous adjudication, the first place, which the sayer of the lesson is, in punishment for such his delinquency, adjudged to lose: failing the next, the next but one; and so on to the lowest.” Bentham argued, this arrangement turned the intellectual exercise into a game: “punishment attaching instantaneously upon demerit, and, by the same operation, reward upon merit, and in both cases, without further trouble or expense in any shape.”⁵⁰

The *Place-capturing* principle represents Bentham’s trust in the effect of reward and punishment. As discussed earlier, this method is recognized by Utilitarian Helvetius but rejected by Rousseau who believes in the existence of the *a priori* principles of humanity which cannot be violated no matter what result would be. This difference is an example of the opposition between consequentialist theory represented by Utilitarianism and deontology theory represented by Kantian ethics.

Although Bentham approves the use of punishment, he clearly limits it to the non-corporal. Bodily torture is totally forbidden. This is a tenet existing in nearly all his reform schemes. In Bentham’s concept of pleasure, it is the bodily pleasure which occupies the largest portion of all considerations even though he did not spend time to explain it in detail. This is a manifest defect of Bentham’s theory from the standpoint of contemporary critics; but it was clearly a merit from the standpoint of 18th and 19th century reformers. What it can offer is a concrete and empirical basis for ethical consideration, a basis that is hard to defy: the humanitarian increase of bodily pleasure. This basis provides Bentham’s theory with a special clarity and perceived practicality, which successfully gained wide sympathy and support for Utilitarianism.

In general terms, Bentham’s *Chrestomathia* consists of two parts, the curriculum and practical measures. In neither of these two aspects is Bentham really an original inventor, except in the idea of using the Panopticon model. In the curriculum, as Judges points out, Bentham was likely to be familiar with Condorcet’s project for a modern and technological curriculum and the *écoles centrales* of the Convention. Even in England, schools organized around practical or technological courses were not hard to find. In the beginning of the 19th century there were about 200 academies in England. And in Bath, where Bentham visited frequently, there was a

⁵⁰ Bentham, Smith, and Burston, *Chrestomathia*, p. 106.

well-known academy, run by Florian, which had a curriculum almost identical with that of the Chrestomathic School.⁵¹ Bentham's idea of curriculum setting clearly benefited from these earlier experiments.

In terms of practical measures, the focus is no doubt on the Bell-Lancaster system. Although Bentham tailored it to his Panopticon there is no great change to the mechanics of this system. Nevertheless, Bentham's combination of the intellectual and technical parts into a general scheme did provide a comprehensive quality lacking in the schemes of other educational reformers. It largely confirmed the determination of other Utilitarians such as Place and Mill to build the school in reality.

At first, the future of this school was quite promising. Bentham not only provided the detailed plan, he also agreed to offer part of his garden at Queen's Square Place as the site for the new school. Other Benthamite reformers including Sir James Mackintosh, Henry Brougham, James Mill, William Allen, Joseph Fox, and Edward Wakefield, Joseph Hume, James Beavans, David Ricardo, and Place himself were active in raising money. It was thought that £3,000 would be needed and it was proposed to raise this by means of 300 shares of £10 each.⁵² Ironically, it was Bentham himself who largely obstructed the school project. In 1814 he retracted the donation of his garden as the site of the school. Then the committee began to seek other sites. Unfortunately this endeavour was not successful. They had to return to Bentham who agreed to lease part of his garden at a price lower than the market. However, Bentham produced innumerable conditions, some legal, some personal, such as his desire to install a pipe-organ in the school and to be free to play it. The negotiation did not resolve the difficulties, the committee decided on 1 July 1820 to abandon negotiation with Bentham. This failure, together with the insufficiency of the funds caused the final abandonment of the whole project, and Place remarked that the difficulty made by Bentham was "one of the principle causes of the failure of the scheme."⁵³

The failure of the Chrestomathia project was not the end of the effort of Utilitarian reformers on education. Unlike the case of prison reform, it was not Bentham but a group of Benthamites

⁵¹ Judges, *Pioneers of English Education: A Course of Lectures Given at King's College, London*, p. 92.

⁵² Bentham, Smith, and Burston, *Chrestomathia*, p. xiv.

⁵³ See *Ibid.*, pp. xv,xvi.

who occupied dominant positions in the reform movement, although Bentham was regarded as intellectual leader of this group. Like the case of poor relief reform it was these followers of Benthamism who really made great impact on 19th century British education reforms.

6.2.4 James Mill and Education

For the early 19th century public, the word Benthamism was more familiar than Utilitarianism. Another word, Benthamite, was used to describe a group of reformers around Bentham. They might not have been one hundred percent Utilitarian, but they were definitely largely influenced by Bentham's idea of both legal and political reform. The greatest happiness principle convinced Bentham and his followers that the Utilitarian reform schemes they suggested were rational and correct, leaving no place for confusion or compromise. It made their opinions more tough and uncompromising than other reformers. As a consequence the name "philosophical radicals" were given to this group of Utilitarian reformers'. According to Halévy, the word "radical" first appeared in political discussion in 1797, or possibly 1798. Between 1810 and 1819 it was frequently used to refer to the supporters of annual parliaments and universal suffrage in the parliamentary reform movement.⁵⁴ Both measures were proposed by Bentham and adopted by his followers in their reform campaign.

Clearly Bentham was the intellectual mentor of this group, but it was the Benthamites who disseminated Bentham's thought and more importantly adapted these ideas into the reality of social reform. Based on their work, philosophical radicals became an indispensable force in the large scale reform movement which largely determined the formation of Victorian Britain.⁵⁵ Their influence was so deep that one researcher argues that, as a theorist of social reform, Bentham was, apart from Karl Marx, the most successful . However, this success is to be seen in terms of the realization and not necessarily the merits of the programme of change, and much of the credit for that must be attributed to his disciples – the Benthamites.⁵⁶

Of all the Benthamites in Bentham's life time, the most important is James Mill. Although

⁵⁴ Halévy, *The Growth of Philosophic Radicalism*, p. 261.

⁵⁵ See Parris, "The Nineteenth-Century Revolution in Government: A Reappraisal Reappraised."

⁵⁶ Jacob Viner, "Bentham and J.S.Mill: The Utilitarian Background," *The American Economic Review* 39, no. 2 (1949): p. 362.

widely regarded a disciple of Bentham,⁵⁷ Mill himself did not accept this judgement. Some researches have emphasized the theoretical difference between the two and Mill's unique contribution to the early development of Utilitarianism.⁵⁸ Mill not only helped largely in spreading Benthamism but also enthusiastically engaged in the practical reform of education.

James Mill was a Scotsman, and was brought up in the Scottish education system with a continuity of study through the parish school, Montrose Academy and finally Edinburgh University. Mill met Bentham in 1808 and soon became a close friend. Every week Mill walked from Pentonville to Bentham's house at Queen's Square Place to dine and walk with him. Meanwhile Mill worked extensively editing Bentham's writings. But what Mill offered to Bentham was more than secretarial assistance: in some aspects he was an intellectual partner of Bentham. There is a widely acknowledged view that it was Mill who turned Bentham into a supporter of democracy after their first meeting in 1808.⁵⁹ It is argued that Mill's independent view on democracy was the vital motivation for Bentham's attention to representative government, which marked the dividing line of "early" and "late" Bentham – "the young Bentham, concerned only with jurisprudence and legal improvements and unmindful of political questions, is contrasted with the crusty old reformer who threw caution to the wind to mount a far-reaching critique of England's political and ecclesiastical institutions."⁶⁰ Although this view has been challenged by a recent scholar who points out that early in 1788 to 1790 Bentham had already developed his view of universal suffrage and secret voting, and Mill's democratic view had probably been influenced by Bentham,⁶¹ it cannot be denied that it was after 1808 that the Benthamism school was formed and began to engage in the political reform.

Of all the Benthamites who were involved in educational reform of the early 19th century, James Mill is the most representative. His work occupies a central position in both theory and practice. His main argument on education theory can be found in his *Essay on Education* written for the *Encyclopedia*. Different from Bentham who mainly concentrated on providing practical

⁵⁷ For example, see A. Bain, "The Life of James Mill," *Mind* 2, no. 8 (1877): p. 525.

⁵⁸ See W. H. Burston, *James Mill on Philosophy and Education* (London: Athlone Press, 1973); Simon, *Studies in the History of Education, 1780-1870*; Bantock, *Studies in the History of Educational Theory. Vol.2, the Minds and the Masses, 1760-1980*.

⁵⁹ For example Halévy, *The Growth of Philosophic Radicalism*, p. 255; Plamenatz, *The English Utilitarians*; J.R. Dinwiddy, "Bentham's Transition to Political Radicalism, 1809-10," *Journal of the History of Ideas* 36, no. 4 (1975).

⁶⁰ James E. Crimmins, "Bentham's Political Radicalism Reexamined," *Journal of the History of Ideas* 55, no. 2 (1994): p. 260.

⁶¹ See *Ibid*.

criteria, Mill's writings presented more theoretical discussions. He attempted a more complete justification of Utilitarian principles in a philosophical manner. In this respect, his former university education on classical philosophy was significant. It gave Mill's theory a unique classical character which Bentham's never had. But fundamentally, Mill was a firm Utilitarian and a follower of empiricism. It made his theory a combination of Utilitarianism, classical philosophy and empiricism. However, Mill's contribution to education is not limited to theoretical discussion. In practice, he also occupied a significant place, arguably, even more important than Bentham's. His practical work was in two parts: the promotion of public education and the private education of his own children.

Mill's contribution to public education started with his support of Lancaster's monitorial system. Lancaster's remarkable early success, exemplified by his Borough Road School and his book *Improvement in Education*, attracted wide attention among educational reformers. For them, Lancaster had overcome a big obstacle for promoting universal education. Lots of people visited the school; even the King paid a visit and became a subscriber in 1806. Bentham himself visited Borough Road in 1809 or earlier in the company of General Miranda, the South American revolutionary, who planned to introduce the Lancastrian system to Venezuela.⁶² Mill visited the school in 1802, and later in 1810 became a member of the committee of the Royal Lancastrian Society, which was established in 1808 to help Lancaster cope with the financial difficulties of the Borough Road institution. In 1811, Mill published a review, "School for all, in Preference to Schools for Churchmen Only," in response to an attack on Lancaster's plans made by a prominent Anglican clergyman in a sermon at St. Paul's Cathedral.⁶³ This well-known review was later reprinted as a pamphlet in 1812 under the title *Schools for All*. It became a significant defense of the Lancastrian system and an attack on the National Society formed by the church to promote Bell's system.

In 1814 the Royal Lancastrian society was transformed into the British and Foreign School Society. As Lancaster later withdrew from the BFSS, the power came into the hands of Joseph Fox and William Allen and their small group of non-conformists, who formed an opposing view to the Benthamites on the issue of religious education in Lancastrian schools. Their stubborn

⁶² George F. Bartle, "Benthamites and Lancasterians - the Relationship between the Followers of Bentham and the British and Foreign School Society During the Early Years of Popular Education," *Utilitas* 3, no. 2 (1991): p. 277.

⁶³ *Ibid.*: p. 278.

insistence that the Bible should be the only book read in these schools clearly contradicted the Benthamite's ideal of nondenominational public education. This conflict continued as the non-conformists refused to compromise, and the use of secular reading books was only permitted in 1839, several years after Mill's death. It shows that the role of the Benthamite members in the society was quite weak.

Mill's next education project was the Chrestomathia School started from 1815. It also failed for the reasons discussed above.

Mill's last involvement in a public education project was the establishment of the University of London. At first, Mill was not enthusiastic in view of the fate of earlier schemes such as the Chrestomathia. In 1825 he met Thomas Campbell, an enthusiast for this project, and was won over by him. He became quite active in securing subscriptions for the new university. At the end of that year, he was elected as a member of the first council of the University College. In 1827 the foundation stone was laid.

The religious issue was still central in this scheme. What Benthamites wanted was to establish a civil university for the London middle class, in competition with Cambridge and Oxford. In contrast to the two old universities, the new university would have no religious ties, at least in the minds of secular Utilitarians. But Mill was aware of the difficulties caused by religious discrepancy. As a significant member of the first council, he was prepared to compromise on this principle for the sake of getting support from religious groups. He worked hard to reconcile oppositions around religious issues. Meanwhile Mill also drafted *Outlines of the Course of Lectures* for the new university. This *Outlines* consists of Logic, Moral Philosophy, and History. Logic includes a good deal on Association Psychology, and a section on logical fallacies. History is the study not of the facts, but of "the mode of studying History and of deriving from it the lessons it affords."⁶⁴ All these contents show Mill's own mark deriving from his own education and theoretical orientation.

Despite some compromise, the college kept a strong Utilitarian character. In addition to Mill as a council member, John Austin, a Bentham follower, was appointed as the first Professor of

⁶⁴ Burston, *James Mill on Philosophy and Education*, p. 73.

Jurisprudence in 1829. Under the Benthamite tenet of public education, it was the first English university that was open to all, regardless of race, creed or political belief, provided they could afford reasonable fees. Scientific and technical education was emphasized as professorships were set up in various subjects such as Chemical Engineering, Chemistry, Electrical Engineering, Papyrology, Phonetics, Psychology, and Zoology. Meanwhile, the secular principle was insisted upon in the college. Because of this, it was described as the “godless institution of Gower Street.” All these aspects illustrate the Utilitarian character of this college, and naturally, Bentham was regarded as the spiritual father of this institution although he did not contribute anything to the founding of the college directly.

A sense of indebtedness to Bentham is clearly represented in the mural by Henry Tonks, in the main library of UCL. It depicts an imaginary scene when Bentham accepts the architectural plans from William Wilkins, the architect of the main building. Bentham himself had great interest in the college. He even gave his body after his death to the college. This original body, with a wax head (the original one was not properly preserved), became the famous Auto-Icon placed in the College vaults till today.



The Auto-Icon of Jeremy Bentham

However, notwithstanding this recognition of Bentham, it was actually Mill rather than Bentham who contributed most to the founding of the institution. In addition to his enthusiasm, Mill's mild temper and will to cooperate with anybody regardless of religious or political stance, largely helped the project. Under the control of a Benthamite, the project did not end in religious

dispute. The business-like and practical character of the Utilitarians made the college one of the most distinguished material products of Benthamite educational reform.

Compared to these public activities, Mill's work on private education is more widely known. It is largely owing to the famous *Autobiography* written by his son John Stuart Mill. John declared clearly that one main purpose of this autobiography was to record "an education which was unusual and remarkable, and which, whatever else it may have done, has proved how much more than is commonly supposed may be taught, and well taught, in those early years which, in the common modes of what is called instruction, are little better than waste."⁶⁵ Here he is referring to his own education under the control of his father James Mill.

J.S.Mill did not attend school at all. His whole education was designed, implemented and supervised by his father. There exists a contrast between James Mill's view on public education and his own practice on J.S.Mill's education. To the former, he supported a wide public and practical education, but to the latter he advocated a private elite education of the intellectual. It is true that he educated John Mill as a Utilitarian, but the education itself was closer to Rousseau than Bentham.

J.S.Mill was born in 1806, the eldest of the 9 children of James Mill. His home education started at 3 years old, when he was taught Greek and arithmetic. In the early days he had already read some popular books of Herodotus and Xenophon. At the age of 7 he began to study Latin and subsequently read lots of Virgil, Horace, Ovid and Cicero. At the same time he also read the *Iliad* and some dialogues of Plato. Soon after, he studied Euclid and algebra. History was John's favorite subject; he read a lot including Hume and Gibbon's books; and in the 11th or 12th year, he even tried to write a "History of the Roman Government." At the age of 12, John was taught logic. His ability in Greek enabled him to read some of the most important parts of Plato's dialogue such as *Giorgias*, *Protagoras* and *The Republic*. The next year, John studied political economy and he read Adam Smith and Ricardo. When he was about 14, John spent more than a year in France, and after his return, though his studies still went on under James Mill's general direction, the father was no longer the schoolmaster of the child.⁶⁶

⁶⁵ John Stuart Mill, *Autobiography of John Stuart Mill* (New York: 1964), p. 25.

⁶⁶ *Ibid.*, ch. 1

The breadth and depth of what John learned in his early years is quite astonishing. It is probably a good example of Helvetius's theory that children are capable of studying difficult subjects and how a special education can produce a special result. "Through the early training bestowed on me by my father," John Mill writes, "I started, I may fairly say, with an advantage of a quarter of a century over my contemporaries."⁶⁷

At the centre of this education was the classics, which does not appear in Bentham's *Chrestomathia* curriculum at all. It was a result of James Mill's own preference for classical philosophy, of which Plato was his favourite. Bentham's Utilitarian writings were entirely absent and it was only later in his youth that John was given these materials to read. He explained that his father did not want him to acquire an uncritical approach to Bentham's writings, although James Mill was an honest Benthamite. All the subjects he studied were about intellectual matters rather than practical capability. As John remarked, "the education which my father gave me was in itself much more fitted for training me to know than to do."⁶⁸ What James Mill aimed at was creating a member of the intellectual elite and, without doubt, he succeeded excellently.

In addition to this intellectual character, Mill also used the pupil-teacher monitory system in his family education. Here, John, the eldest and the most capable, took the responsibility to teach his sisters and brothers. The general way was that James Mill taught John, and then set John to teach his sisters, and later brothers. Then the father would hear the lessons of all of them: if they were not good enough, he would require them to repeat the course again. John acknowledged that this method gave him the advantage of learning more thoroughly, nevertheless he also claimed that "it was a part which I greatly dislike the more so as I was held responsible for the lessons of my pupils in almost as full a sense as for my own...the teaching, I am sure, is very inefficient as teaching."⁶⁹ This statement clearly indicated the inadequate capability of pupil teachers, an inherent problem of the monitorial system.

It is not easy to evaluate James Mill's family education experiment. It cannot be denied that J.S.Mill later became one of the best British thinkers of the 19th century. But, equally, he suffered his well known "mental crisis" in his early manhood, which, by his account, was related

⁶⁷ Ibid., p. 43.

⁶⁸ Ibid., p. 46.

⁶⁹ Ibid., p. 30.

to his education background. He argues in his *Autobiography* that after a happy period of accepting Benthamism he suddenly “awakened” from this as from a dream in the autumn of 1826. He could no longer be convinced by the Utilitarian ideal and asked what the fundamental joy of his life was. Most researchers agree that the crisis marked a reaction against his upbringing – his intense intellectual education. John Mill recorded that he realized that the Benthamite doctrines left little space for the nobler human feelings and did not offer a sufficiently full prospect for human happiness. He then embraced a wide openness to other doctrines and developed his “great readiness and eagerness to learn from everybody, and to make room in my opinions for every new acquisition by adjusting the old and the new to one another.”⁷⁰ This eclecticism characterized the work of J.S.Mill’s later life and partly explains his view that there are qualitative differences in happiness, a tenet many researchers believed has undermined the coherence of Benthamism.

A consequence of this crisis was a deviation from Benthamism. From 1833 on, J.S.Mill published a series of articles partly critical and partly corrective of Benthamism. Although he still held that “happiness is the test of all the rules of conduct, and the end of life,” he no longer believed Benthamism could give a full answer. As he commented, “a philosophy like Bentham’s ... can teach the means of organizing and regulating the merely business part of the social arrangements ... it will do nothing (except sometimes as an instrument in the hands of a higher doctrine) for the spiritual interest of society.”⁷¹ In some respect, this critique can be explained as a reaction to his former education, in which Benthamism was a part. But on the other hand, it should not be ignored that his education also included many other subjects including classical philosophy. It also might be that his advanced classical education prepared his reaction to Benthamism. Probably, the evaluation of J.S.Mill’s education cannot be simplified as right or wrong, and a deeper analysis is needed to evaluate the remarkable experiment of James Mill.

Now Bentham and Mill’s work on education has been shown. They were clearly the intellectual leaders of Utilitarian educational reformers. But the evaluation of the Utilitarian contribution to educational reform cannot be limited to the individual work of Bentham and

⁷⁰ Ibid., p. 180.

⁷¹ Jeremy Bentham and John Stuart Mill, *John Stuart Mill and Jeremy Bentham: Utilitarianism and Other Essays*, *Penguin Classics* (London: Penguin Books, 1987), p. 157.

James Mill. It was rather a big and long project that many other Benthamite or Benthamite sympathizers engaged in. It was this collective work that finally led to the establishment of a national education system, which completely transformed the image of public education in Britain.

6.3 Utilitarians and the Establishment of the National Education System

Educational reform in the 19th century was a comprehensive project that attracted reformers of different or even conflicting backgrounds. Their goals were not always the same and controversy and competition continued during the whole process. Utilitarians were not the only vital group in this reform, but their reform schemes were among the most radical proposals and formed a sharp opposition to the education system of the Anglican Church. Although they did not achieve immediate success in this competition at first, the general current of education reform gradually turned in a direction that was much closer to the Utilitarian's suggestions than those of other groups, including the Church.

The main character of Utilitarian opinion in 19th century public education reform consisted in four aspects:

1. Governmental intervention should be involved to promote universal education;
2. The traditional curriculum must be expanded to include more scientific and technical subjects;
3. A hierarchical monitorial system should be used to enhance teaching efficiency;
4. Public education should be secular rather than religious.

These four aspects are not separate rules; working together they constitute a modern “governmentality” absent in traditional British elementary education. The concept of governmentality, coming from Foucault, refers to the discourse and practice of governing on the basis of a bureaucratic system and an “integrated power mechanism.”⁷² This concept perfectly

⁷² The concept was developed by Foucault in his lectures at the Collège de France between 1977 and 1984. A fuller

describes the transformation of the education system in Britain, which culminated in the passing of 1870 Education act, the act that lay the foundation stone of the national elementary education system.

In previous sections, we have seen the function of the “integrated power mechanism” in Bentham’s various Panopticon proposals. The last chapter on poor relief also shows how Utilitarians contributed to the national bureaucratic structure of poor relief, which became a paradigm for later government reform. Both of these aspects played significant roles in the formation of the new governmentality which turned elementary education in Britain into a highly regularized discipline. How did this happen and what did Utilitarians do in this process? This section will discuss these questions.

6.3.1 Progress prior to the 1870 Education Act

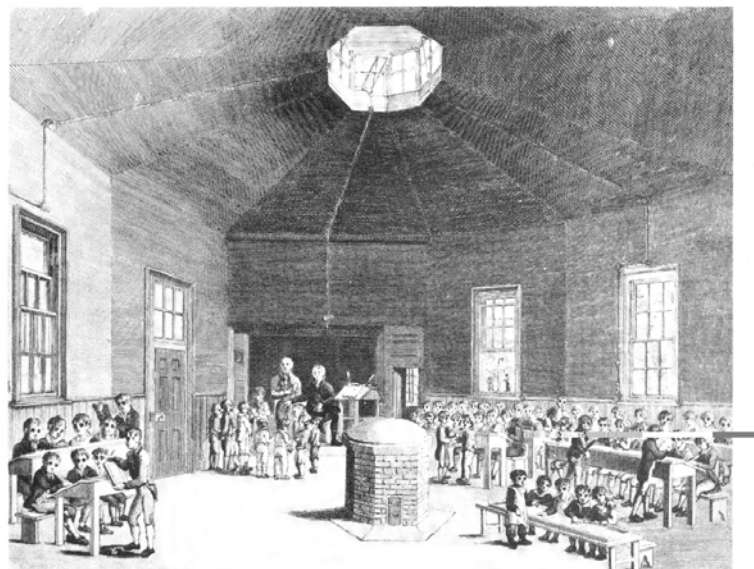
The transformation of elementary education is clearly represented in the transformation of school architecture and its spatial layout. One of the most characteristic transformations is that in 1800 most students were taught in schoolrooms, which means all students were accommodated in a single room; but in 1900, most students were taught in separate classrooms. Behind this replacement of schoolroom with classroom is not simply an architectural rearrangement, but a whole institutional transformation. While schoolroom-teaching represents a pre-modern pedagogic system in the hands of rather independent private or voluntary organizations, the classroom teaching represents the modernized national education system under the tight control of a central authority. Utilitarians played significant roles in this transformation.

As discussed before, the transformation of the spatial layout of the schoolroom was initiated by the two voluntary organizations, the National Society and the British and Foreign Society. Both societies worked hard to promote their own monitorial systems on a nation-wide scale. Apart from the books written by Bell and Lancaster themselves, the two societies both published various instructions to set normalizing rules for hundreds of schools that they controlled. The

discussion can be found in Graham Burchill, Colin Gordon, and Peter Miller, *The Foucault Effect: Studies in Governmentality* (London: Harvester Wheatsheaf, 1991).

National schools and British schools appeared as a new type of school that belonged to a unified and highly organized institution that laid compulsory rules including spatial layout and management regulations for all its subordinate schools. The two societies established themselves as central authorities, which anticipated later governmental bodies on education.

The difference between the two monitorial systems is worth noting. Generally speaking the Lancastrian system is more static and more powerful on surveillance and control. In British and Foreign schools the schoolroom was mainly occupied by parallel desks and benches. The instructions suggest the desks and benches should be fixed on the ground. Within such a spatial arrangement every student is fixed in a specific position; little space is left for individual movement, and while there is less movement there would be less disorder. Meanwhile, as the floor is inclined, the supervisor can conveniently see every student as once. Contrary to the static arrangement, there are no fixed desk and benches lined in the schoolroom in National schools. Small groups are often organized on u-shaped benches. Such an arrangement allows a higher flexibility. The schoolroom teaching of National schools was a diversity lacking in the Lancastrian system. The advantage of the Lancastrian model is its stable order and higher efficiency of surveillance, and the advantage of Bell's model is its flexibility and diversity. Both of them started the reform inside schoolrooms which finally led to the characteristic spatial layout of British elementary schools in late 19th century.



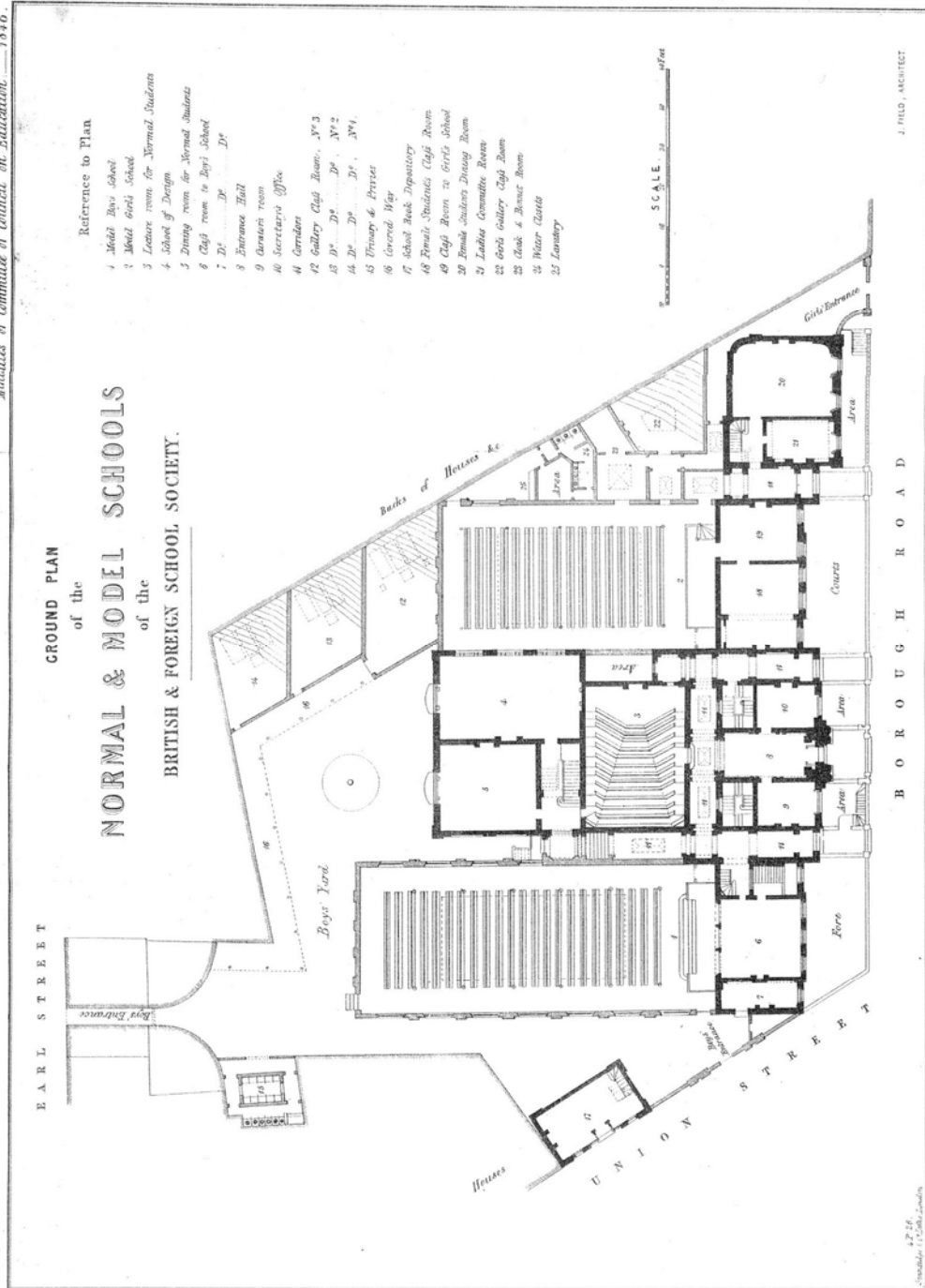
Interior of Clapham Madras School, Wandsworth London

Another crucial step taken by the two societies was the establishment of affiliate teacher training institutions based on the monitorial system. In fact, the monitorial system itself was intended to solve the problem of the lack of qualified teachers. Monitors played important supplementary functions for the school master. In early 19th century England, the monitorial system became the best choice for promoting elementary education on a weak foundation. The ambition of the two societies was not only building schools but also developing a nation-wide elementary education system, hence the need of a large number of masters who were familiar with such a mechanism. When the British and Foreign Society was formed, it was clearly stated that "...it shall support and train up young persons of both sexes for supplying proper instructed Teachers to the inhabitants of such places in the British dominions, at home and abroad."⁷³ In practice, Lancaster's teacher training activity started even earlier. In 1805 he raised £400 to support a number of youths boarding in his Borough Road School to be trained as school masters. This was referred to as Lancaster's "family." In later years, the "family" kept expanding, and in 1808 there were 24 persons in residence. After Lancaster left the British Society, the teacher training department was continued and expanded. In an 1846 plan of Borough Road School, the teacher training section of the British and Foreign Society is clearly shown in the middle. With its considerable size, the normal school seems to have had an important status in the institution. In later days, it was turned into the "Borough Road College," one of the earliest teacher training colleges in UK. Today it is one part of the Brunel University.



Elevation of the Normal and Model Schools of the British & Foreign School Society
 Source: *Minutes of the Committee of Council on Education, 1846*

⁷³ British and Foreign School Society, "Annual Report," (1814): p. 3.



Ground plan of the Normal and Model Schools of the British & Foreign School Society

Source: *Minutes of the Committee of Council on Education, 1846*

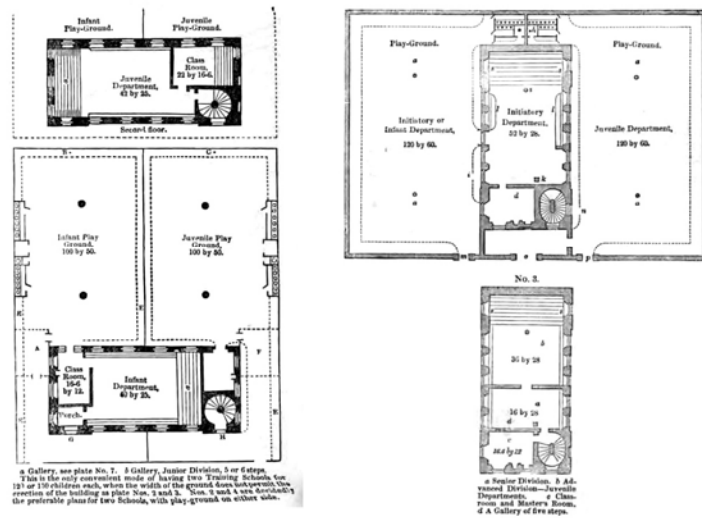
Similar measures were also taken by the National Society. In a letter prior to the foundation of the Society Bell wrote: “We shall never thrive as we ought, till we have one school in perfect order in the metropolis, where masters may be trained and to which they may be referred.”⁷⁴ After the establishment of the model school at Baldwin Gardens, teacher training was started on a similar pattern to that of the British and Foreign Society.

In this way, the two societies integrated teacher training into their education schemes. They not only predated later development of national teacher training, but also initiated the idea of a comprehensive system comprising all aspects of education under the uniform control a central authority.

Based on monitorial systems, the two voluntary societies became quite influential in the first half of 19th century. Their success proved that a central authority plus a highly regularized management mechanism was much more efficient than traditional voluntary schools. The necessity of a monitorial system was soon accepted and became the most influential teaching method in the early 19th century.

Started by the two societies, many new educational experiments were carried out in Britain. One of the most important projects was brought about by David Stow in his Glasgow experiment. Stow’s teaching method combined the characteristics of both Lancaster’s and Bell’s systems. It is directly represented in the arrangement of the school hall. In his book *The Training System of Education, for the Moral and Intellectual Elevation of Youth*, Stow suggests several model plans. The element common to the Lancasterian school is the fixed gallery located at one end of the hall. It is used to accommodate all students at the same time. However, it differs from the Lancasterian model, in which students are taught by monitors, because here in Stow’s gallery, all students are taught simultaneously by a single teacher. Because of this feature, Stow’s method was given the name of “simultaneous method.” This method still relies on the static spatial arrangement to facilitate surveillance and also increase teaching efficiency.

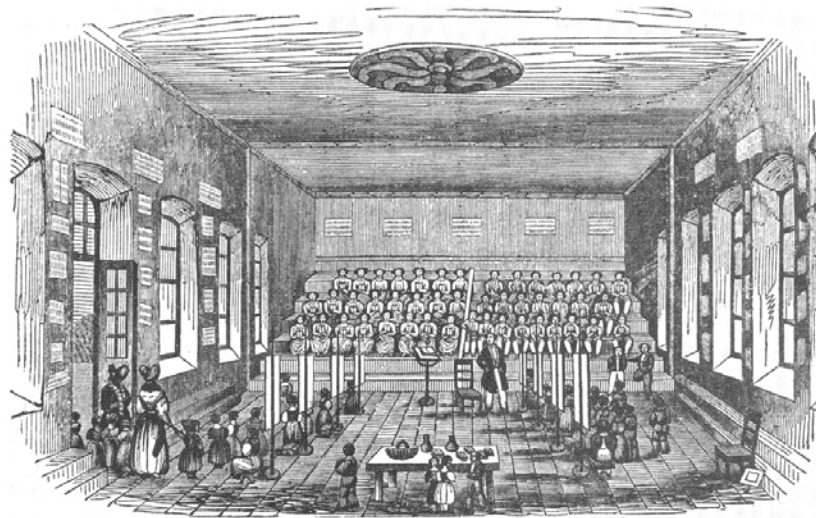
⁷⁴ Rowland William Rich, *The Training of Teachers in England and Wales During the Nineteenth Century* (Cambridge: CUP, 1933), p. 7.



Suggested plan of Stow's teaching system

Source: Stow, *The Training System of Education*

The remaining part of Stow's school hall is generally empty, with only some benches along the side wall. In this space students can be divided into groups. This group teaching in a big empty space resembles Bell's system, it has the flexibility and variety that the gallery cannot provide.



Interior of Stow's Schoolroom

Source: Stow, *The Training System of Education*

One aspect of Stow's method that differs from both Bell's and Lancaster's is that he introduced classrooms together with the schoolroom. Not fully satisfied with the quality of monitorial teaching and simultaneous teaching, Stow believed that smaller class teaching was necessary, especially for infants and juveniles. In his plans, one or two classrooms were added for the purpose of rotating the teaching of different classes. Stow regarded both schoolroom teaching and classroom as necessary and complementary to each other. His combination of schoolroom and classroom became the most important characteristic of the late 19th century elementary school in Britain.

Like the other two societies, Stow also stressed teacher training. In 1836 the Glasgow Normal Seminary was opened on Stow's model school. It was one of the earliest teaching training institutions in Britain. Besides the two societies, Stow's experiment provides another example showing how teacher training in Britain was developed together with the reform of elementary education, in which the monitorial system played a significant role.

In the monitorial system, the monitors occupy an intermediate position between pupils and teacher. They are required to give instruction to common students under the supervision of the master. Hence the quality of the monitors largely determines the teaching quality of the school. In some monitorial schools, such as that of Stow, young men who were slightly older than the students were employed as paid monitors. On the one hand employing these young men was quite efficient and economic as the payment was much lower than teachers; on the other hand, their working in the monitorial schools gave them abundant teaching experience that a real teacher needed. In the conditions where no systematic teacher training existed, these monitors were the best candidates for future teachers. It was this double function that turned the monitorial system into an official pupil-teacher system, which became the foundation of both elementary education and teacher training systems of Britain in the second half of 19th century.

This transformation was largely promoted by an important figure, James Kay-Shuttleworth. In the last chapter, his contribution to poor relief reform, cooperating closely with Chadwick, was mentioned, but in educational reform his significance was even greater.

Kay received a medical education at Edinburgh University and received the degree of

Doctor of Medicine in 1827. If not a complete Benthamite, Kay at least supported and carried out Benthamite ideas of governmental intervention and unified bureaucratic structure. His Benthamite character can be confirmed by his appreciation of Chadwick. Due to his influential report on the condition of the Manchester working class published in 1832, Kay was appointed as Assistant Commissioner to the Royal Commission on the Poor Laws. With the implementation of the 1834 Poor Law Act, Kay was made responsible for carrying through the new poor law policies in the area of East Anglia. It was in this post that Kay started his education experiment in establishing schools for workhouse children. His visit to Stow's Glasgow seminary and various continental countries helped to form his own idea of teacher training. In 1840 he opened a training college at Battersea. Students in this college were apprenticed for 7 years, the first 3 years were mainly devoted to instruction, and in the remaining time they acted as pupil-teachers in the village schools.

In 1839 James Kay was appointed the first secretary of the newly established Committee of Council on Education, the first central governmental office on education. Through this governmental body Kay successfully transferred the pupil-teacher system into an official and regulated one. In the *Minutes of the Committee of Council on Education* published in 1846 the pupil-teacher method was officialized as a national scheme, which established a teacher training system financed by the government in England for the first time. In this scheme, students of good performance are selected out as pupil teachers. Roughly from the age of 13 they began their 5 years apprenticeship in the schools. While conducting some basic instruction work, like the monitors in the monitorial systems, and accumulating teaching experience, they also received instructions on various subjects. At the end of each year, examinations would be held to check their study progress. Based on the result of examination and the school master's report, the government gave payment to those deemed to have qualified. After the 5 years apprenticeship these pupil teachers were eligible to participate in the national examination to compete for the title of "Queen's Scholar." Those who got it entered the national normal colleges under the financial support of the government. In these colleges, they were turned to fully qualified teachers.

It can be seen that various examinations played a crucial role in this system. Even qualified teachers were required to pass specific examinations to get a certificate which could raise their salaries. By the way of tying examination and remuneration together the government

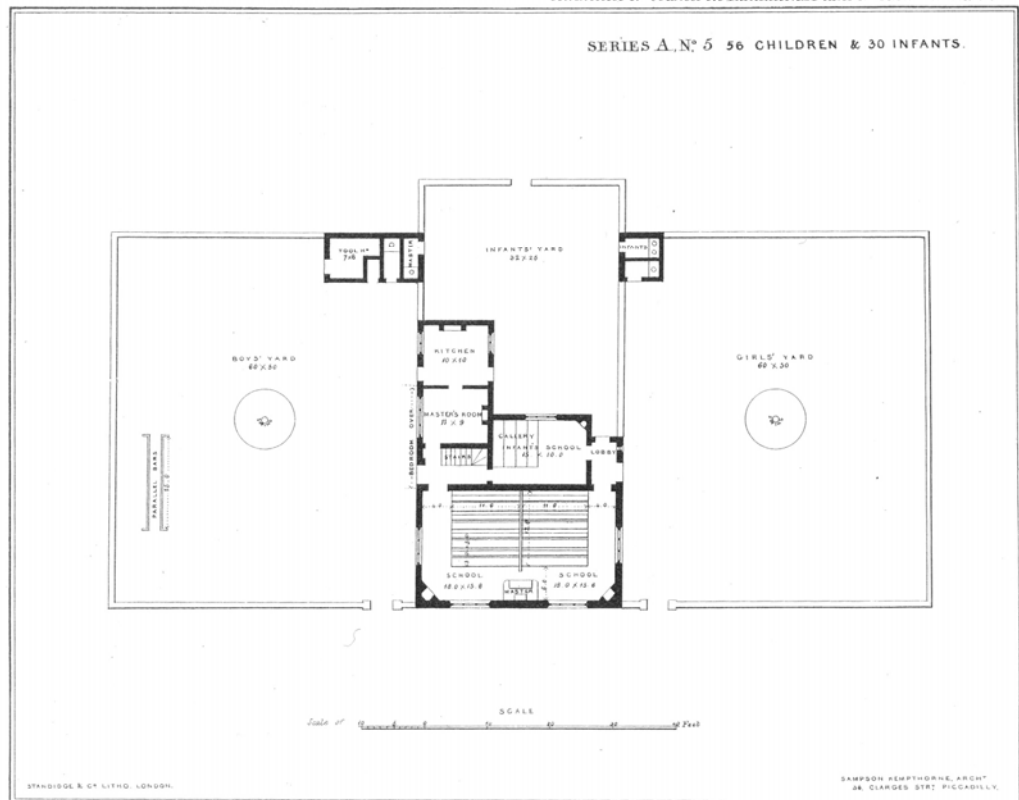
successfully put voluntary schools under its influence and led the whole elementary education into a regularized system. Examination was the most efficient instrument of governmental influence at a time when nearly all schools belonged to voluntary organizations and government did not have direct control over them.

Through the pupil-teacher policy the original monitorial system was developed into a national system that included both school teaching and teacher training. After 1846 it became the foundation of the national elementary education. As a key part of the newly-developed governmentality in education, the pupil-teacher system led English elementary education into a unified and highly disciplined model enforced by the central authority. As shown before, the efficiency of disciplinary power must rely on a specific spatial distribution. Both Bell's and Lancaster's monitorial system have their own spatial model. It was the same case for pupil-teacher system. A characteristic spatial structure emerged with the new teaching method. Based on the support of government, it grew up as the dominant spatial model for English elementary schools and heavily influenced the formation of English school architecture in the second part of 19th century.

This time it was the government that played a powerful role in promoting its spatial scheme. Although the pupil-teacher system was officialized in 1846, school plans appropriate to this scheme had been proposed as early as 1840 in the *Minutes of the Committee on Education*. The distinct character of these plans is the spatial structure of surveillance.

These plans were provided for schools of different sizes. The committee pointed out clearly that their scheme was different from Bell's and Lancaster's. For each design the plan of the two societies were also provided as possible alternatives. At this stage government still lacked compulsory powers in this area.

General speaking these new designs resembled Stow's model school in his combination of schoolroom and classroom together. It was probably directly influenced by the opinion of Kay who gave the great evaluation of Stow's experiment.



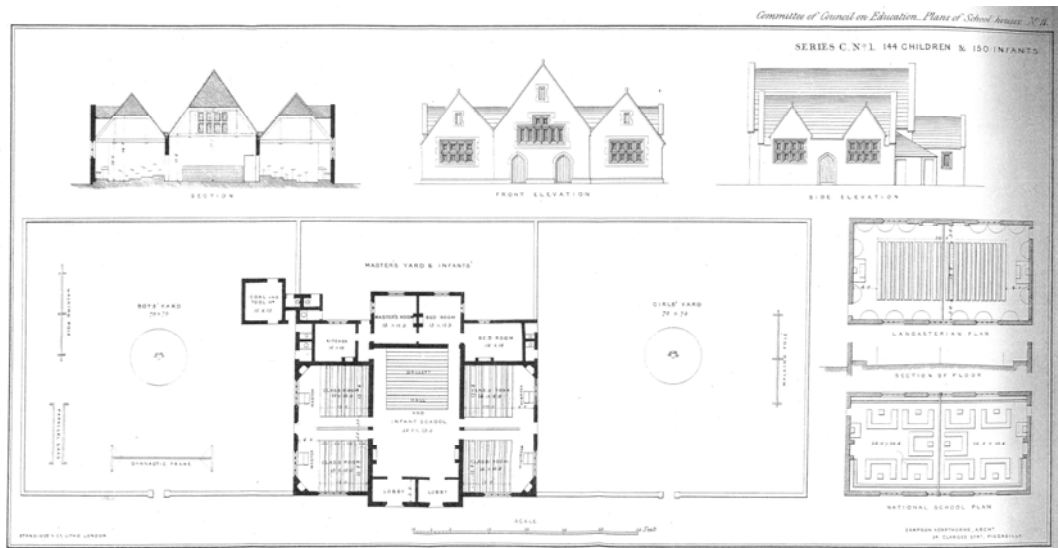
Plan Series A No.5 suggested in the Minutes

Source: *Minutes of the Committee of Council on Education*, 1840

Plan No.5 shows the basic layout of teaching rooms. It is a school intended for 56 children and 30 infants. The students can be separating into two classes, and a flexible partition can divide the schoolroom into two classrooms. In this way, the room can be used for both simultaneous teaching conducted by the master and separated class teaching conducted by a teacher and a pupil-teacher. It is emphasized that the partition should never separate the classrooms completely because it “enables the master, while engaged in teaching one, readily to inspect the other, by retiring to the wall near the door...or by occupying the position of the central seat.”⁷⁵ The central position of the master’s desk signifies its controlling status in the surveillance structure. Since it is a small school separated teaching of boys and girls is not suggested but the playgrounds are strictly separated. In this respect there is a resemblance

⁷⁵ England Privy Council. Committee on Education, *Minutes of the Committee with Appendices and Plans of School-Houses*, vol. 1839/40 (10 vol. London, 1840), p. 60.

between prison, workhouse and school architectures, because in all three cases exercise grounds are completely divided to avoid mutual influence.

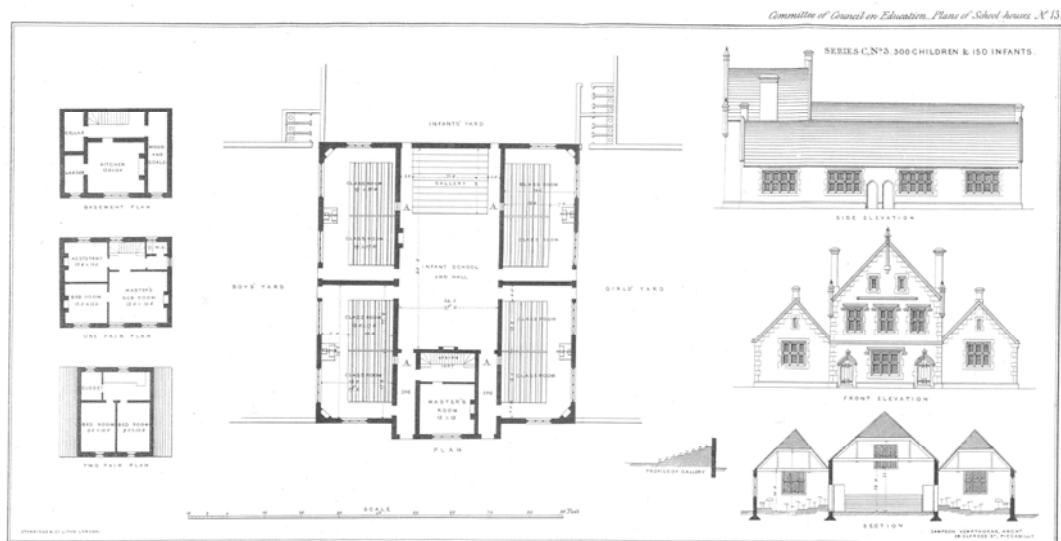


Plan Series C No.1 suggested in the Minutes

Source: *Minutes of the Committee of Council on Education, 1840*

An example of a larger school can be seen in the plan of Series C No, 1. It is designed for 144 children and 150 infants. The central hall with galleries can be used both as infant school and schoolroom. Almost the same surveillance structure determined the layout of classrooms. The difference is that the desks and benches are not fixed to the partition walls as happened in the previous plan. The advantage of this arrangement is that the master can supervise the two classes from the middle point of each side of the central hall. The efficiency of central surveillance is intensified. To aid this goal the *Minutes* especially requires that “the upper part of the doors of these classrooms being of glass, they may all be readily inspected from the central hall, at any moment, by the superintendent or head-master.”⁷⁶

⁷⁶ Ibid., p. 61.

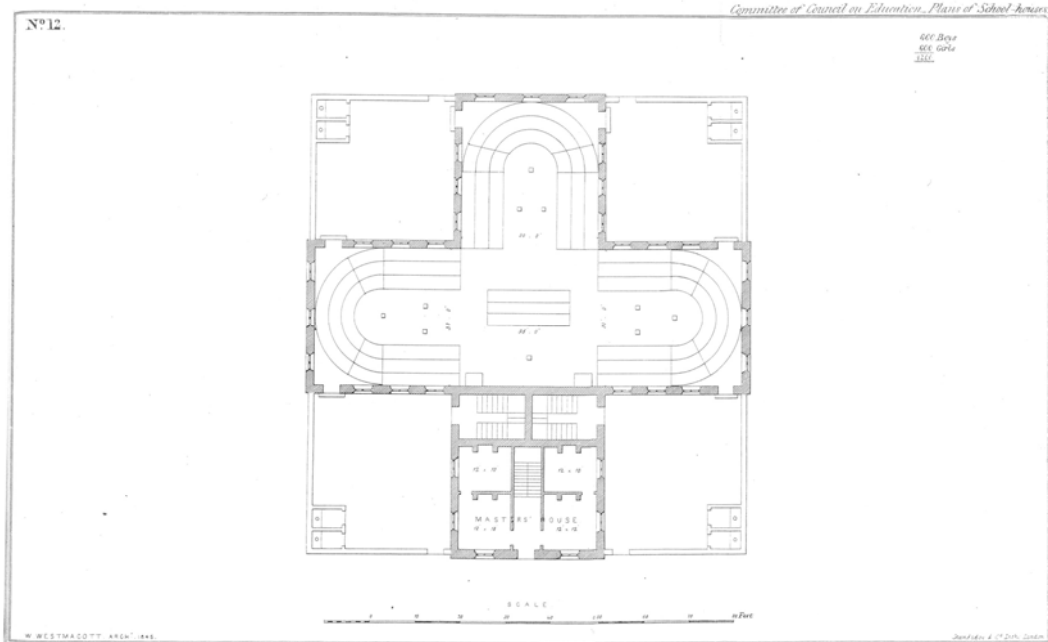


Plan No.3 in Series C suggested in Minutes

Source: *Minutes of the Committee of Council on Education, 1840*

A similar model is enlarged in plan No.3 in Series C. Eight classrooms surround the central hall. “The classrooms may all be readily inspected from the hall, either by the upper parts of their doors (which for this purpose should be of glass), or by windows marked A. in those classrooms where the doors are more difficult of access.”⁷⁷ The *Minutes* also suggests that two more classrooms can be added in the upper side of the central hall, in which case the school can accommodate 700 children all together. This plan describes how a rather big school can be organized in a centralized spatial model. It has been a familiar model for us. As it can increase the efficiency of central surveillance, such a model inevitably became common. From this perspective there appears a similarity between Bentham’s Panopticon and the school plans discussed above. In some respect, the Panopticon can be seen as a combination of schoolroom and classroom. The circular atrium in the Panopticon resembles the central hall in the school plan, circular galleries are provided for public instruction. The individual cells resemble the peripheral classrooms. In Bentham’s plan, students are isolated in the cells for more specific education. Although on different scales, central surveillance plays the same role in both cases. Clearly Bentham’s circular arrangement is more convenient for surveillance than a rectangular arrangement and it is not a surprise that a plan closer to Bentham’s circular model does appear; it will be discussed later.

⁷⁷ Ibid., p. 63.



Centralized plan suggested in the Minutes

Source: *Minutes of the Committee of Council on Education, 1846*

The character of the centralized arrangement is represented even more clearly in a plan published in the *Minutes* of 1846. Although the classroom layout has been changed, the central surveillance was not weakened but increased.

Although these plans appeared as early as 1840s, they did not produce an impact on school architecture immediately. As governmental suggestions, they lacked compulsory force for voluntary organizations which had their own distinct spatial models for schools. Without a full control of elementary education, it was nearly impossible for the government to implement the “integrated power mechanism” it supported on a universal scale. To achieve this goal it needed the back-up of a powerful bureaucratic system to extend its compulsory power to every corner of elementary education. This can only be accomplished by legislation, and it was the 1870 Education Act that finally completed the new “governmentality” of a national education system.

6.3.2 The Influence of the 1870 Education Act

Before 1870, Utilitarians had tried several times to get a public education bill passed in parliament. Bentham's friends or followers such as Joseph Hume, Brougham and John Arthur Roebuck initiated several bills. Although they did not succeed immediately, these activities clearly paved the way for the final success of reformers at the level of educational legislation.

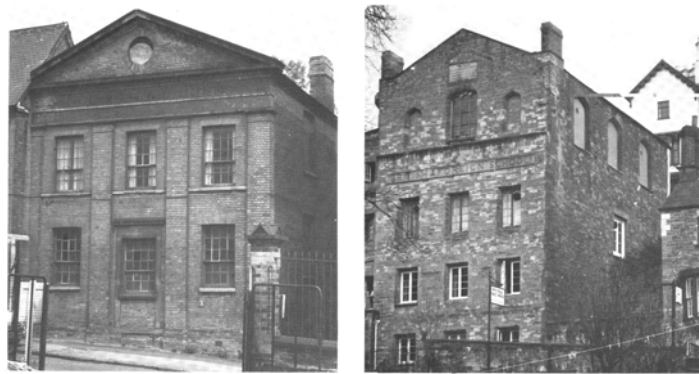
The year of 1870 was the vital turning point in British educational reform. The General Election of 1868 brought the Liberals into power. A new man, W.E. Forster, was appointed as Vice-President of the Educational Department. Forster was a Radical and had a strong interest in public education. In February 1870 he proposed the Elementary Education Bill, about which he claimed: "What is our purpose in this Bill? Briefly this, to bring elementary education within the reach of every English home, aye, and within the reach of those children who have no homes. This is what we aim at in this Bill; and this is what I believe this Bill will do."⁷⁸ The Bill was passed in the parliament and became the famous Education Act of 1870.

The 1870 Act gave local government the right to establish School Boards which could build schools with the provision of municipal finance. This point is important because before 1870 governmental intervention was limited to providing grants for voluntary education organizations, but after that government began to build schools more directly. It largely enhanced government's control over the nation's education system. The Act marked a new age in which the nation took public education as its own responsibility and put the whole system under the influence of central political power. This transformation not only changed the school curriculum and teaching method but also school architecture and townscapes altogether.

Traditionally, English schools were established by individual or voluntary organizations such as the National Society and the British and Foreign Society. Although government provided grant assistance, the voluntary societies did not fully welcome the direct intervention of central authority. The church was afraid that the government might weaken its power and do

⁷⁸ Hansard, Parliamentary Debates, cciii, 746, July 22nd, 1870, quoted from Howard Clive Barnard, *A Short History of English Education from 1760 to 1944* (London: University of London Press, 1947), p. 135.

harm to the religious instruction carried out widely in these schools. For this reason religious groups represented a considerable obstacle to any Bill that suggested direct governmental intervention. Even in the 1870 Act, this tension can still be detected. The School Board was represented only in a supplementary role to voluntary groups if they failed to provide education for all children. Although voluntary groups raised large amount of money to build new schools, their power was still too weak to realise universal education. The establishment of School Boards then became inevitable.



Voluntary Schools: Nottingham, Barker Gate, National School 1834 (Left)
Ross-on-Wye, Herefs, British Schools, 1836 (Right)



Board School: Mansfield Place School, 1874

Backed by the government, School Boards soon became dominant in the sphere of

elementary education. Since local boards were financed by local rates, it gained a powerful and stable resource that voluntary organizations could not obtain. This difference was clearly represented in school buildings built by the two sides. While the School Boards were developing high standards and large scale schools comprised of splendid architecture, many voluntary schools remained no more than a schoolroom with a gallery at one end. The pictures above clearly show the different scales of these two kinds of schools.

Board schools were not only larger, better equipped and accommodated more students; the curriculum and architectural layout also differed radically from the old voluntary schools. While government had full control of these schools, it became quite easy to implement compulsory building and management rules uniformly in all board schools. In this way new ideas and policies were soon to be put into practice on a large scale. Primary education in Britain entered the age of standardisation and uniformity.

6.3.3 London Board Schools

In 1863 the Committee of Council issued “Rules to be Observed in Planning and Fitting-up Schools.” Within a few years they “stand as the only authoritative directions for building, and the only official guide to the school boards of the whole country.” In his book *School Architecture* (1874), Edward Robert Robson remarked that “they formed the first serious attempt in this country to reduce to something like order and scientific system the subject of school planning.”⁷⁹ After 1870 these proposals issued by the Committee directed English school architecture into a new pattern. There appeared a new type of architecture, board schools. Under the control of the city school board, these schools represented a strong uniform characteristic

The best example is Robson’s work for the London School Board. Robson was a professional architect before joining the London School Board in 1871. As the very first architect of the board he worked in this organization until 1889, after which he became the consultant architect of the Education Department in Whitehall. His fruitful work during these years acquired for him the reputation as the leading expert on school design. His book, *School*

⁷⁹ Edward Robert Robson, *School Architecture*, 1st ed., *The Victorian Library* (Leicester: Leicester University Press, 1972), p. 417.

Architecture, published in 1874 was the first detailed analysis of school architecture under the influence of the 1870 Act. It established him and the London School Board as pioneers of the movement, creating new paradigms of school architecture.

Although various plans had been provided in the *Minutes*, and the *Rules* gave some indication on school design, these suggestions were not always consistent and had not been put into reality. It was Robson and the London School Board that converted these ideas into reality and provided examples for followers. According to Malcolm Seaborne, two aspects of their works are of special importance. The first is that they introduced unprecedentedly large schools into elementary education. The second is that they promoted the provision of classrooms in school architecture.⁸⁰ Nevertheless, they did not challenge the pupil-teacher system, and central surveillance was still the deciding factor of their school plans.

Elementary schools in England were generally small before 1870 due to the insufficient resources of voluntary organizations. In contrast, Bentham's proposal of a Chrestomathia school for 1000 students seems quite unrealistic. But after 1870 big schools became quite common. By 1884 the 289 London board schools were accommodating more than 300,000 students, over 1000 in each school.⁸¹ The expansion of the scale of the schools was an economic choice since the school board faced the task of providing appropriate school accommodation for all children at different ages. Hence in big cities such as London, where available land was quite limited, big schools became the best choice.

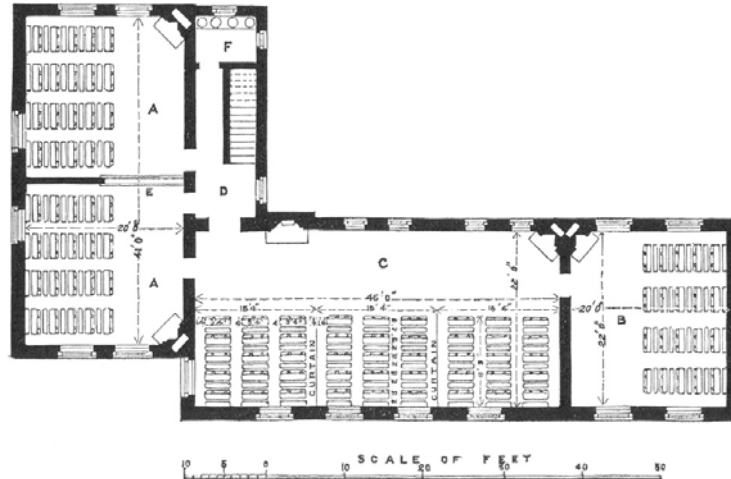
With regard to the second aspect - promoting class teaching - Robson was not a supporter of complete class-teaching in elementary schools. But he did stress that more classrooms should be provided. In *School Architecture* Robson writes that "the pupil-teacher, or English system is not only the most economic but probably the best," which means he still supported the combination of schoolroom and classroom. But he also points out: "as the number of public Elementary Schools increases, some reduction will probably be made in the allowable number of pupil-teachers, and the number of class-room will be increased."⁸² Robson was aware of the conflict between schoolroom and classroom. In practice his solution was "to provide as many

⁸⁰ Malcolm Seaborne and Roy Lowe, *The English School [Vol. 2]: Its Architecture and Organization Vol.2, 1870-1970; Malcolm Seaborne and Roy Lowe* (London: Routledge and Kegan Paul, 1977), pp. 8,9.

⁸¹ *Ibid.*, p. 8.

⁸² Robson, *School Architecture*, p. 22.

classrooms as the schoolroom itself will usually accommodate classes. The size of the desks being usually arranged for writing with comfort, the children can easily sit closer together when the general assemblage takes place.”⁸³ Although only a compromise between schoolroom and classroom, Robson’s proposal did increase the status of the classroom at a time when the schoolroom was still the dominant type.



Ideal plan suggested by Robson
Source: Robson, *School Architecture*

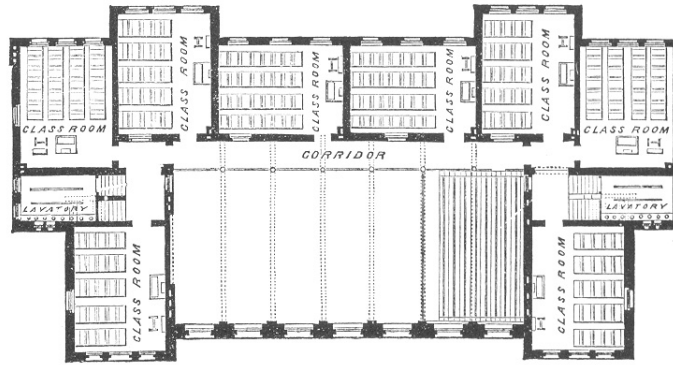
The ideal plan that Robson suggested in *School Architecture* is a L-shaped variation of central hall model suggested by the *Minutes*. He emphasized the convenience of supervision and explained: “easy supervision is secured, for the principal teacher can see at the same moment what his assistants are doing at both ends of the rooms, and each of these, in turn, can observe the progress of his pupil-teacher’s work through the glass pane in the sliding partition.”⁸⁴ But for the purpose of ventilation Robson insisted that classrooms should only be placed at the short end of central hall rather than surrounding it.

Robson’s influence on later school architecture was manifest. His suggestion of having roughly equal seats in schoolroom and classrooms was followed by the London School Board which managed to persuade the Education Department to pay extra grants for a central hall as well as separated classrooms in nearly every new school, a policy to be followed after 1891 in

⁸³ Ibid., p. 165.

⁸⁴ Ibid., p. 200.

London and many other big cities.



Plan of the first floor of Jonson Street School

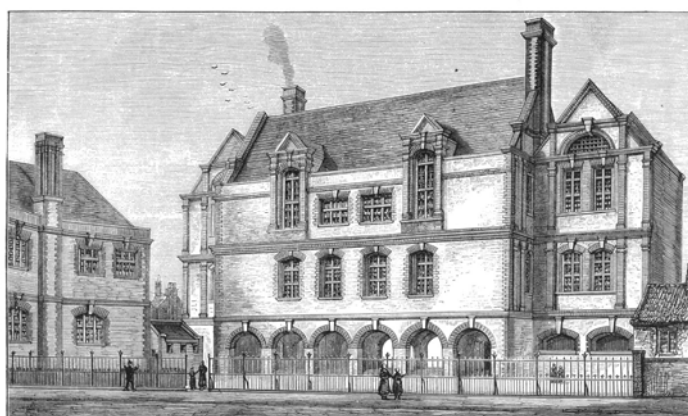
Source: Robson, *School Architecture*

An important early experiment of the London School Board was the Jonson Street Board School built in 1873. Since there was a controversy over whether the German system of complete class teaching should be adopted in England, the board decided to make an experiment. The result was the Jonson Street School designed by the architect T.R.Smith. Different from the German model, the board insisted that a big assembly hall was necessary. The direct result of this consideration was a compromise between the English and German models. The general layout was based on central hall model, but the independent class teaching made the pupil-teacher system unnecessary and surveillance insignificant.

Robson's opinion was that it "cannot, when critically considered, be regarded in the light of a success which invites general imitation."⁸⁵ Its defects included: the space for infants was too limited; the student number was too big; the central hall was comparatively useless and the large number of teachers caused an extraordinarily high cost. Robson then concluded that the German system was "an inferiority to the English method, unless its teaching-result can yet to be of a decidedly higher order."⁸⁶ As a consequence, the Jonson Street experiment did not lead to the adoption of the German system of complete class teaching immediately. Only at a later time, when elementary education had advanced significantly and was no longer bothered by the deficiency of teachers, was the Jonson Street school model reused.

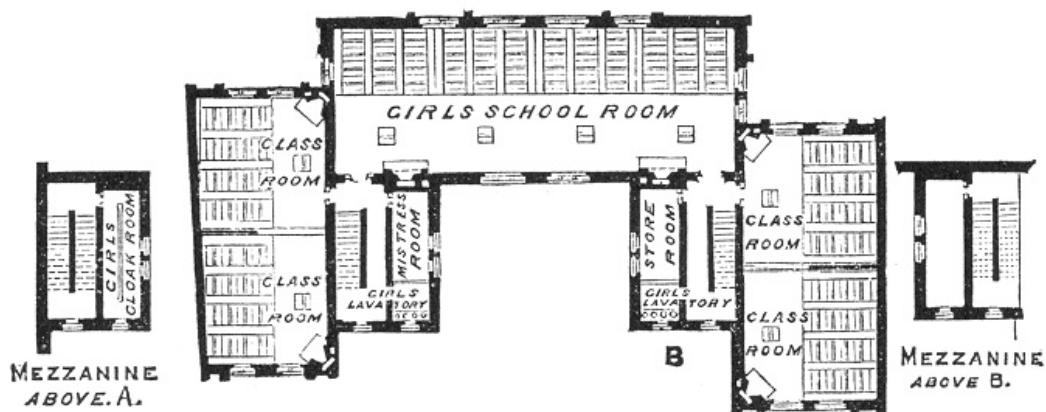
⁸⁵ Ibid., p. 304.

⁸⁶ Ibid.



Angler's Gardens School

Source: Robson, *School Architecture*



Plan of Angler's Gardens School

Source: Robson, *School Architecture*

After the Jonson Street experiment, the new schools built by the London School Board had a much stronger similarity to Robson's ideal plan. A characteristic example is Angler's Gardens School, which was described by Robson as "the first example given of what may, in the main, be rearranged as the model arrangement for a school of the kind."⁸⁷ The central hall accommodates four classes; another 4 classrooms are placed at the two short ends. Such an arrangement meets Robson's requirement of having roughly equal classes in schoolroom and classroom, and also facilitates the master's surveillance of pupil teachers in the paired classrooms.

⁸⁷ Ibid., p. 319.

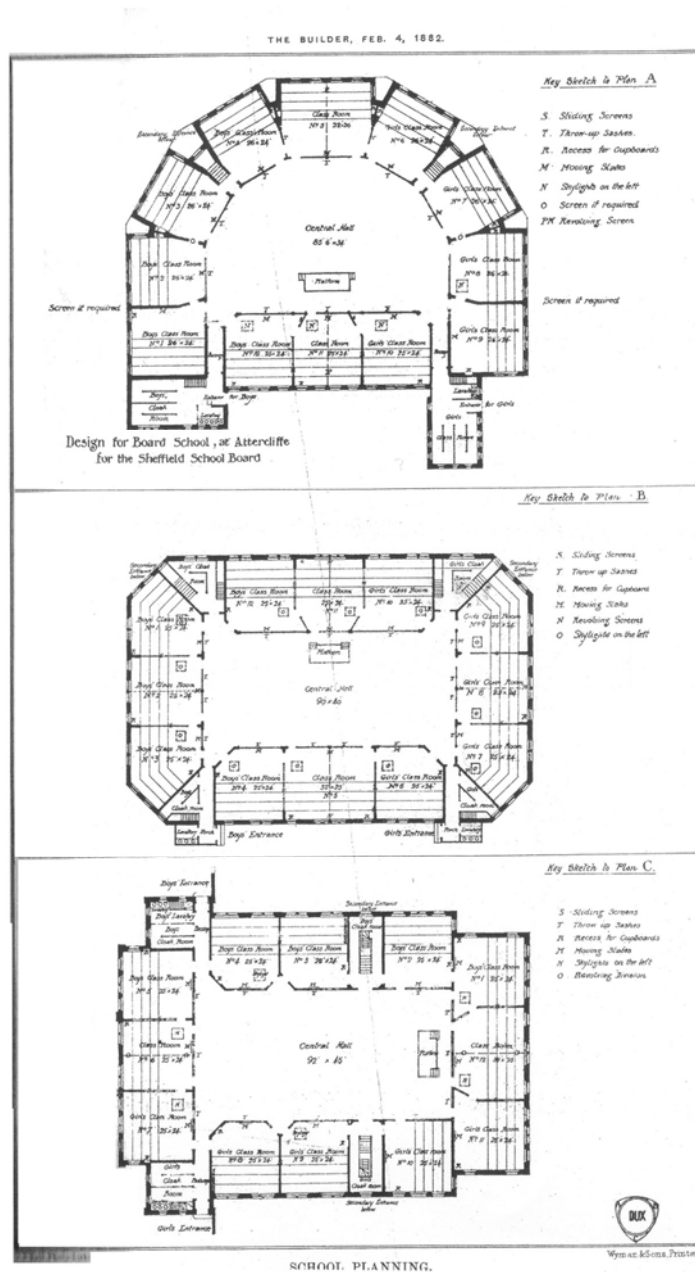
Similar characteristics were also to be noted in many other schools such as Wornington Road School, Aldenham Street School, Orange Street School, Camdan Street School and West Street School. They all generally followed Robson's rules and based architecture on the foundation of the pupil teacher system and the central hall model.

In *School Architecture*, Robson argues: "the plan of the school building depends so much on the method of tuition that an acquaintance with the latter is of the first necessity to the school-architect."⁸⁸ He rightly noted that this point had been neglected by most architects; the published works on this subject paid more attention to external appearance than real function. In this respect Robson differed from his predecessors in his familiarity with both educational reform and architectural design. It enabled him to adapt architectural design to the institutional transformations promptly. As an architect, Robson was not simply a passive employee who only followed the command of the client, but a creative innovator and acknowledged expert who could provide spatial solutions for the requirements of the most advanced of various institutional reforms. Architecture in these reforms was not secondary to developments but was a constructive element of the new power structure. Robson, together with the prison architect William Blackburn and workhouse designer Kempthorne mentioned before, represented a new type of architectural expert who were not only architects but also institutional reformers and who stood side by side with other social reformers, such as Bentham, Chadwick and James Kay. In some respects, they were more similar to these social reformers than to the traditional architects.

Robson's influence was not limited to the London School Board. As the leading expert he was also involved in many projects in other regions such as Chester, Durham and Sheffield. Meanwhile the works of the London School Board were imitated widely by other boards. The central hall model became the archetype of board schools. These new schools might not follow Robson's principles strictly, but the pupil teacher system and surveillance structure were all accepted. One of the best example was Huntsmans Garden's Board School built in 1882 at Sheffield. The design of the school was chosen by a competition. Of all fifty plans submitted, C.J.Innocent, an architect based in Sheffield, won the project. Innocent's design was still based on the central hall type but what made his design distinct was that he tried to optimize the

⁸⁸ Ibid., p. 3.

surveillance function to a higher level. The consequence was a plan very similar to Bentham's Panopticon.



Innocent's competition plan for Attercliffe School
Source: *The Builder*, Vol. XLII, No. 2035, Feb. 4, 1882, p.141

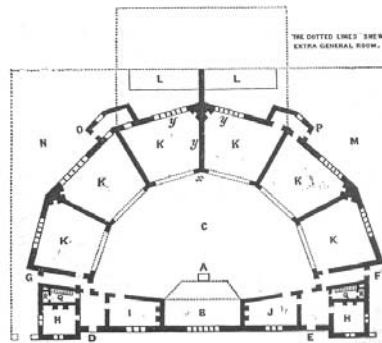
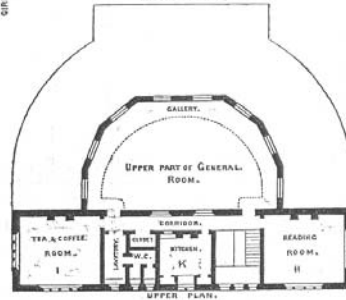
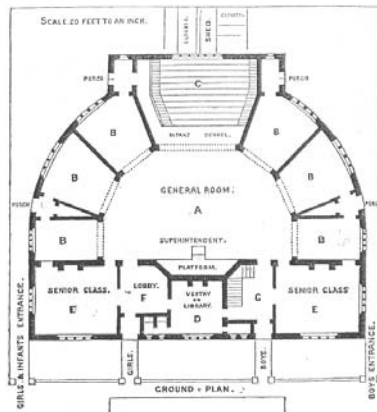
Innocent provided three plans for the competition. It was the plan A that resembled the

Panopticon model the most and was selected by the committee. Like the Edinburgh Bridewell, the school is a semi-circle shaped building. The central hall is surrounded by 12 classrooms on the periphery while the center point is occupied by the head teacher's platform. It was noted that "this arrangement brings all the classrooms within the shortest distance of the principal's desk, enables them to be fully inspected therefrom."⁸⁹ The empty central hall suggests that Robson's idea of having half classes in the hall was not adopted, but the direct connection with adjacent classes indicates the utilization of pupil teacher system. To achieve flexibility, many partitions in the design are movable. Those between the classroom and the central hall consisted of a wood dado at the bottom and two glazed sections at the top. The glass sections could be opened to turn the whole school a big auditorium. The clear mark of the head teacher's platform makes the power structure of Innocent's design more prominent than other schools of the central hall type. The architect wrote: "the head teacher is able, from his desk in the central hall, to overlook the whole of ten classrooms and more than half of the remaining two." To enforce central control "a bell is provided in each classroom to be rung from the principal's desk."⁹⁰ Such a bell system resembles Bentham's plan of installing pipes from each cell to the central tower in Panopticon. In both cases the communication instrument can send the order of the central governor to the unit under surveillance, hence the strict order can be kept at a high efficiency.

There is no direct evidence to show that Innocent was influenced by Bentham's Panopticon, but the deep similarity between the two designs can not be denied. Even the movable partitions between classrooms were anticipated by Bentham's similar idea in the Panopticon to make the size of the cells flexible. In earlier analysis it has been shown that the Panopticon can be seen as a special case of central hall model. Here Innocent's plan proves that there is no obstacle to transplanting the Panopticon layout into school architecture. In some ways it supported Bentham's judgement that the Panopticon model can be used in any place where surveillance is required.

⁸⁹ "School Planning, Sheffield School Board Competition," *The Builder* XLII, no. 2035 (1882): p. 130.

⁹⁰ Ibid.



Plan suggested by Mr. Maylard.

- | | | |
|---|--|--|
| <p>A Superintendent.
B Platform.
C General School.
D Girls' Entrance.
E Boys' Entrance.</p> | <p>F G Senior Scholars' Entrance.
H Bible-class-rooms.
J Committee-room.
K Radiating Class-rooms.
L Rheed for Coals, and W.C., &c.</p> | <p>M Boys' Yard.
N Girls' Yard.
O Porch to Girls' Class-rooms.
P Porch to Boys' Class-rooms.
Q Staircase to Balcony over Lobby.
R W.C. and Lavatory.</p> |
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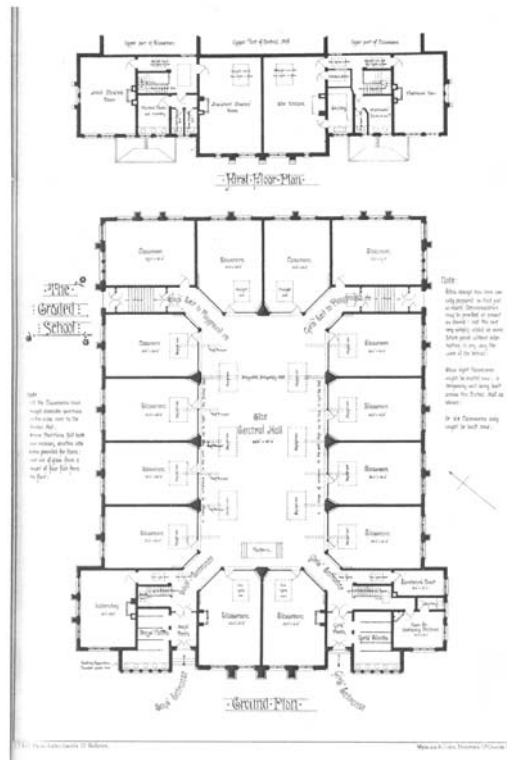
Plan of Sunday Schools suggested by Maylard

Source: *The Builder*, June 1880

Another interesting proof of this argument was that the Panopticon model was even suggested for Sunday-schools run by the Church, which was generally hostile to Benthamism and was, in its turn, vehemently criticized by Bentham. This suggestion appeared in an article published in *The Builder* in June 1880. It was written by C. G. Maylard, an architect and also a teacher of Church Sunday-school. His proposal to use the Panopticon-like school building was

even earlier than Innocent's. The plan is not unlike Innocent's except the central gallery provided for parents to sit to attend meetings and observe prize giving. Maylard also emphasized that the partition between classroom and central room was movable, so that all rooms could be turned into a single large one for religious purposes.⁹¹

Compared to Robson's plans, Innocent's plans represented a stronger surveillance structure and uniformity of spatial arrangement. It soon aroused strong interest and was imitated by other architects. It was reported that in a competition held for a new school for Finchley School Board in 1883, many competitors borrowed the idea from Innocent's three plans published in *The Builder* in the previous year. The rectangular one seemed more favorable to the Board. Since it was required that the school be constructed in two phases, the rectangular plan can be more conveniently divided than the semicircular model. It was also noted that some plans adopted the shape of polygon, which might resemble the Panopticon even more than the semicircular one.⁹²



Plan for the Finchley School Board

Source: *The Builder*, Vol.XLIV, No. 2095, March 31st 1883, p.416

⁹¹ C. G. Maylard, "The Special Planning and Arrangement of Sunday-School Buildings," *The Builder* (1880): p. 755.

⁹² "Finchley Board School," *The Builder* XLIV, no. 2084 (1883): pp. 38,39.

Compared to the plans that appeared in Robson's book published in the early 1870s, these new plans designed in the 1880s showed the increasing importance of classrooms in elementary schools. Not only the number of classrooms increased, but the central hall was no longer used for class teaching as Robson had suggested. In most situations it was used to assemble all students together, which is routine for English schools. In layout, these plans resembled the Jonson Street School more than other early London Board Schools. An idea that seemed too advanced ten years previously had become a common measure. The higher status of class teaching was due to the increase of governmental input and also the development of teacher training which made stable provision of qualified teachers possible. Nevertheless, the surveillance function was not abandoned but rather intensified in these new plans. Not limited to the monitorial or pupil-teacher system, effective supervision was the fundamental organizing principle of English schools till the end of 19th century. Its efficiency was so impressive to the 19th century mind that it was described as "an incomparable machine ... a vast moral steam engine" even by Coleridge, a humane writer.⁹³ It was also regarded as a realization of the principle of division of labour described by Adam Smith in his *The Wealth of Nations* in the sphere of education.

But in the history of English elementary education, the hierarchical supervision was not just an efficient management instrument; as discussed before, its historical importance for the institutional development of English education was that it established the basis of a new governmentality, which was formed by the integration of centralized power, bureaucratic organization and specific power mechanism. It was this governmentality that brought English education into the modern era and placed all children in England within a unified disciplinary training system. In England, this governmentality was first developed by the two voluntary societies established on the basis of monitorial system and later continued and expanded by the government. In the second part of 19th century, hierarchical supervision became the corner stone of the newly-built national education system including the teacher training system.

North of the border, the story of Scotland is somewhat different, because governmental involvement in Scotland had a much longer history than in England and elementary education

⁹³ Markus and Mulholland, *Order in Space and Society: Architectural Form and Its Context in the Scottish Enlightenment*, p. 216.

was much better. But with respect to the emergence of modern education, the itinerary was not that different. The existence of hierarchical supervision was also the most important factor of the whole process. Scottish education reform will be discussed in the next section.

7 Education Reform in Scotland and Edinburgh Board Schools

7.1 Scottish Education before 19th Century

For many 19th century education reformers, the elementary education system of Scotland was superior to that of England. The most distinctive difference between the two nations was that while national government began to involve itself in English educational issues only from early 19th century, the history of governmental intervention in Scottish education can be traced back to as early as the 12th century. This continuous governmental provision strongly supported the formation of a national education system which covered most areas of Scotland and provided fundamental education to a large proportion of Scottish children.

In his book, *The History of Scottish Education*, James Scotland provides a clear story of the development of education in Scotland.¹ The history of Scottish education started with the monasteries of the Celtic Church. The landing of St Columba in 563 may be taken as the beginning of effective Scottish education. The Celtic Church he described established monasteries in many areas of Scotland such as Skye, Inchcolm, St Andrews, Kirkcaldy and Deer. Attached to these monasteries, some schools were formed to train the monks. From the 7th century on, these schools began to open doors to youths from the world outside. People from Ireland, England and even Scandinavia came to Scotland to pursue education in these monastery schools. Each school was governed by a master or a rector who was a man of some importance and dignity. The curriculum was mainly religious, but some teaching of the literatures of ancient world was also carried out.²

The place of the Celtic Church in Scotland was taken by the Roman Church after 1069 under the rein of Queen Margaret and her sons. The country was divided into parishes under a number of bishoprics. By the end of the 12th century there were 11 dioceses, and the third Lateran Council decreed that each cathedral should provide a teacher for the local clergy and the poor. Roman Catholic monasteries also built their schools. The record shows that there

¹ James Scotland, *The History of Scottish Education*, 2 vols., vol. 1 (London: University of London P., 1969).

² *Ibid.*, pp. 3-5.

were schools in Abernethy (about 1100), St Andrews (1120), Kelso (1128), Lanark (1183) and Linlithgow (1187). Like the former Celtic Church schools, these Roman Church schools also accepted lay scholars. It was mentioned that in the 14th century the nobles were boarding their sons at St Andrews for education.³

Gradually, education extended outside the wall of monasteries. Schools were formed to educate the children of burgesses, this was the origin of the Grammar School of Edinburgh and the Canongate Grammar School. At first these schools were supervised by the abbeys, but they gained more and more independence and became the basis of later burgh schools. Meanwhile the monastery schools declined and finally disappeared after the Reformation. Various types of new schools appeared. Before the Reformation, few burgh schools were established directly by town councils, but in due course the councils undertook more and more of the expense of their maintenance. Therefore they gradually gained the right of appointing the master or teachers. In smaller towns, one town school taught all grades from the rudiment “three Rs” to Latin grammar. But in bigger towns there was a tendency to separate elementary education from higher education given in grammar schools. Probably by the end of 15th century, there was a grammar school in nearly every town of considerable size in Scotland. The term “grammar school” first appeared in Aberdeen in 1418, and became common by the time of 1496 Act (see below). The curriculum was mainly Latin grammar, but Greek was also taught in some places such as Montrose where the learned Pierre de Marsiliers was brought by John Erskine to teach Greek in 1534.⁴

By teaching Latin and Greek, grammar schools prepared students for further study in the universities. Higher education in Scotland also originated in the monasteries, where Scholastic research and teaching was carried out. The main task for such a theological and educational system was to show “in detail how particular subordinate conclusions could be derived by valid deductive inference from appropriate intermediate principles that could in turn be justified by deduction from first principles”⁵-- a theme that formed the character of Scottish higher education until the 18th century. It was in this culture that Scotland supplied the world with several great thinkers in late Middle Ages. The most famous of them was John Duns Scotus, who was one of the most important philosopher- theologians of the period. The earliest Scottish university was established in St Andrews in early 1410s after getting

³ Ibid., pp. 6,7.

⁴ Ibid., pp. 11-21.

⁵ Alasdair C. MacIntyre, *Whose Justice? Which Rationality?* (London, UK, Notre Dame, Ind.: Duckworth; University of Notre Dame Press, 1988), p. 220.

confirmatory bulls from Pope Benedict XIII. The next one was Glasgow University, established in 1451, which was a result of the cooperation of Pope Nicholas V, King James II and William Turnbull. The bull for a new university at Aberdeen was issued by Pope Alexander VI on 10th February 1494/5, as a result of the great efforts of William Elphinstone.

The 15th century saw a quick increase in governmental contribution to Scottish education. In addition to the three universities, lots of burgh schools were set up, and the first Act of Parliament enjoining attendance at school was passed in 1496. The Act required that “all barronis and frehaldaris, that ar of substance put thair eldest sonnys and airis to the sculis.” Although this failed to have any real effect, the act was one of the earliest education acts in the history of Europe and initiated the idea of compulsory education motivated by the state power.⁶

The Reformation led by John Knox in the 16th century deeply changed Scotland and also caused a transformation in education. Having destroyed the old Roman system, the Presbyterian Church, which was established in 1560, needed to build a new system. This requirement gave birth to the *Book of Discipline* (1560) written by the “six Johns” with Knox as a member. This document includes one chapter about education. Stressing the significant function of education as spreading religious knowledge and promoting morality, the *Book of Discipline* requires that “every several Kirk have one school master appointed, such as one at least as is able to teach grammar and the Latin tongue, if the town be of any reputation; if it be upland where the people convene to the doctrine but once in the week, then must either the reader or the minister there appointed, take care of the children and youth of the parish, to instruct them in the first rudiments, especially in the Catechism...in every noble town, and specially in the town of the superintendent, there be erected a college, in which the arts, at least logic and rhetoric, together with the tongues, be read by sufficient masters, for whom honest stipends must be appointed.”⁷ To expand the coverage of education the document also enacts that “the children of the poor must be supported and sustained on the charge of the Kirk.”⁸ Thus the *Book of Discipline* envisaged an education system that not only covered the whole area of Scotland but also covered a wide range of population no matter if they were rich or poor. Although this document was never formally and fully accepted by the

⁶ Scotland, *The History of Scottish Education*, p. 37.

⁷ John Knox and William M'Gavin, *The History of the Reformation of Religion in Scotland*, 3rd ed. (Glasgow: Blackie, 1841), p. 498.

⁸ *Ibid.*, p. 499.

civil authorities, its appeal for a complete system of education set the goal for later development.

After the Reformation governmental intervention in education continued to increase. In the one hundred and forty years after 1567 a series of parliament acts appeared at regular intervals. An important one passed in 1616 directed that “in every parish of this kingdom, where convenient means may be had for entertaining a school, a school shall be established, and a fit person appointed to teach the same upon the expense of the parishioners, according to the quality and quantity of the parish.” However, the Act was not fully complied with due to the poor economic conditions. A supplementary act issued in 1646 enacted that in addition to the school, each parish should provide a house for the master. Both these expenses were to be borne by the landowners, or “heritors.” In 1696, the “Act of Settling Schools” reemphasized this issue. These continuous acts, of nearly the same contents, showed that the implementation of these polices was not satisfactory. Nevertheless, the insistent effort of government gradually brought about a national parish school system which covered a large portion, if not all, of Scotland.⁹

The parish school system was the distinction of Scottish education. Although developed slowly and facing the problem of deficiency in many places, it did help largely to spread elementary education in Scotland, especially in the distant and poor country areas. Its function in improving the moral quality of the Scottish people was recognized from an early time. As mentioned in the last chapter, the English prison reformer, John Howard, identified the parish school education as a key reason for the low rate of criminal cases in Scotland.

In early times, few parishes built a special schoolhouse; sometimes the church was used and sometimes an innkeeper’s house or a barn could be used for teaching. Where a special building was provided by heritors, the architecture never extended beyond a low quality house. It is recorded that at Peterculter a house was built in 1700 at an expense of only £16.11.4; in Monymusk the “school (were) all poor dirty hutts, pulled in piece for manure, or fell of themselves almost every alternate year”; in Stirlingshire, a minister complained that the old parish school was far too small, “beside being badly lighted, and in every respect a most ill-aired, wretched hovel.” In most cases a house was provided for the master. It usually consisted of one or two small rooms. Thus the most common parish school consisted of a

⁹ Scotland, *The History of Scottish Education*, pp. 51-53.

schoolroom with the residence of the master attached to it.¹⁰

In the towns, grammar schools gradually developed into secondary schools governed by town councils rather than the church. Some of them, such as the High School of Edinburgh, became quite famous and even attracted students from England. The civil authority also extended their hand into higher education. The most important fruit of this was Edinburgh University, which was founded in 1583 by the city council.

Voluntary organizations played an eminent role too. The most influential was the Society in Scotland in Propagating Christian Knowledge (S.S.P.C.K.). The organization was inspired by a similar society founded in England in 1698. Its goal was to realize the “further promoting of Christian knowledge and the increase of piety and virtue, within Scotland, especially in the Highlands, Islands and remote corners thereof.” It shows that their main concern was the countryside, where the parish schools system was not developed very well. Therefore the work of S.S.P.C.K. formed a significant supplement to the parish schools. From 1709 on, the society built many ordinary schools and industrial schools. By the end of 18th century it had over 400 schools altogether, most of them in poor areas of Scotland.

From this brief description it can be seen that in Scotland, both central and local authorities has a positive role in the development of public education. Their main contribution was to provide financial aid directly by the town council or indirectly by the heritors. In a rather poor country like Scotland, these measures made it possible to include the children of the lowest class in general education. Compared to England in the same period, the Scottish system was more systematic and stable. But on the other hand, these governmental provisions were not adequate. Not only did many areas still lack schools, even in the case that parish schools were built, the quality of both the building and the teaching were questionable. There was still a huge gap between the old system and the modern education system established in late 19th century. Similar to England, a monitorial system entered the scene as a bridge to connect the two sides of the gap. One of its earliest appearances was in the High School of Edinburgh.

¹⁰ Ibid., pp. 63-65.

7.2 Monitorial System in the High School of Edinburgh

In the *Chrestomathia* Bentham included two letters as supportive evidence of the advantage of monitorial system. The letters were written by two teachers of the High School of Edinburgh.¹¹ One of them was James Pillans, the Rector of the school, and the other is James Gray, a master of the school. These two letters introduce the successful utilization of monitorial system in the High School.¹² Bentham quoted these letters to prove not only that monitorial system is good but also that it is good for a higher level education that his *Chrestomathia* School intended to provide. At a time when the monitorial system began to establish its own influence, the Edinburgh High School stood as a strong justification of its utility in secondary education. It was the earliest application of the monitorial system in Scottish schools.



Old building of the High School at Blackfriars Wynd

Source: William Steven, *The history of the High School of Edinburgh*, 1849

The example of the Edinburgh High School was especially persuasive because it was the

¹¹ The name of "High School" was later changed to "Royal High School," it appeared in the map of the Edinburgh Directory of 1833-34, but the exact date of this change is still uncertain. See William Charles Angus Ross, *The Royal High School*, 2nd ed. (Edinburgh: Oliver and Boyd, 1949), p. 2.

¹² Bentham, Smith, and Burston, *Chrestomathia*, pp. 130-39.

most important secondary school in Scotland in the early 19th century. Its reputation even extended south of the border. The early history of the High School can be traced back to the school attached to the abbey of Holyrood which was donated by David I. Even in its early history, the school was open to the nobility for secular education along with religious instruction. In 1519 it appeared as the Grammar School of Edinburgh in the town-council record, in which the “civic authorities enjoined all parents and guardians, under pain of incurring a heavy fine, to place their youth under the master of the principal school.”¹³ Although the school was financed by the town council, it seems that at that time the Holyrood abbey still controlled the right of appointing the master of the school. In the middle of the 16th century, the school was accommodated in Archbishop James Beaton’s town-residence at the foot of Blackfriars’ Wynd. In 1555 the school was moved to the east side of the Kirk of Field, where a house was built by the town for the school. After the Reformation, the civil authority obtained full control of the school. In March 1566, the magistrate obtained from Queen Mary the patronage and endowments that formerly belonged to the Dominican and Franciscan monasteries including the Grammar School.¹⁴



Building of the High School finished in 1578

Source: William Steven, *The history of the High School of Edinburgh*, 1849

After the failure of the first attempt to establish a college in Edinburgh, the town council decided to input more for the High School. A decision was made in 1577 to construct a new building for the school. It was located in the garden of Blackfriars’ monastery, and was finished in 1578 at an expense of 250 pounds. The size of the building indicates that the

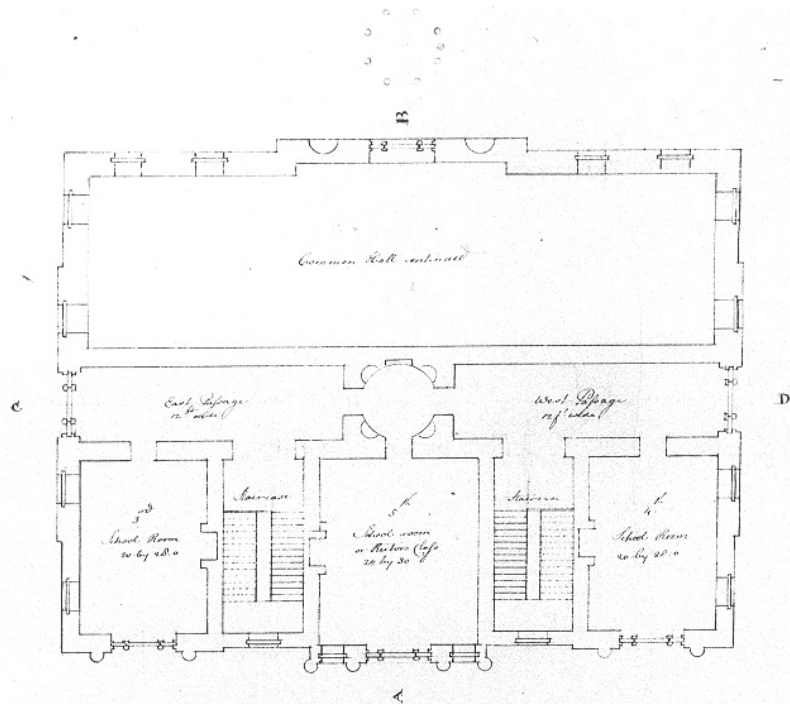
¹³ William Steven, *The History of the High School of Edinburgh* (Edinburgh: Maclachlan & Stewart, 1849), p. 3.

¹⁴ *Ibid.*, p. 13.

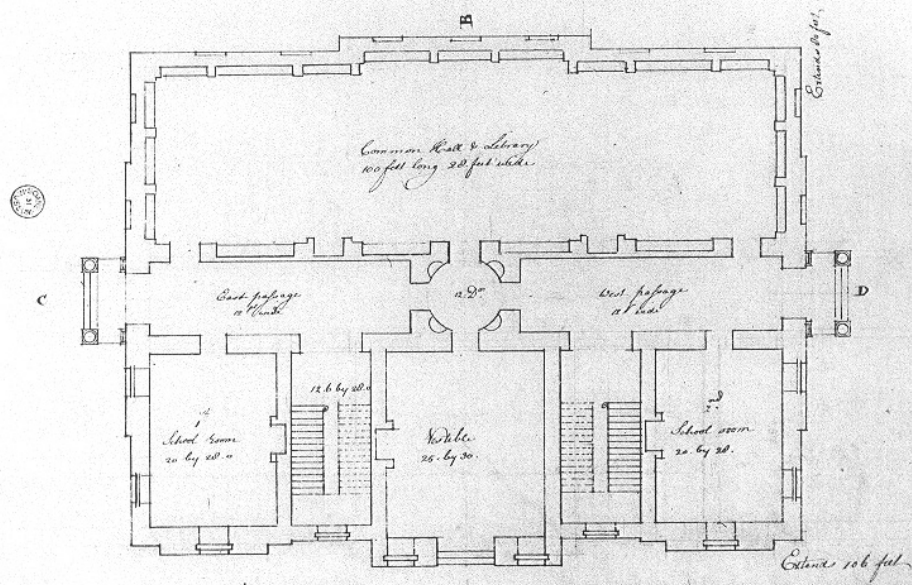
school was already of a scale much larger than before. The school stayed on this site until the end of the 18th century. Town council records dated to 1798 illustrated the course structure of the school. The curriculum was dominated by Latin. There were four Regents taking charge of four classes, and the Regent of class four was also the Rector. The Regent did not teach one class for four years, but was assigned any class that was available. In later times, the number of classes was extended to five with four Regents and one Rector as teachers. Each Regent taught his class for four years and after that his class was transmitted to the Rector for the last year. The time of this transformation was not clear, but it was probably around 1614 when a fifth class was formed.¹⁵ These records show that ever since its early history, the Edinburgh High School was organized on the basis of separated class teaching; each teacher only took charge of students of the same level rather than various grades. This arrangement is indicative of the high standard of the school and the strong support from the town council which paid salaries to the teachers. Corresponding to this teaching method, the building erected in 1578 seemed to have had five classrooms altogether and a big hall at the ground floor for public use.

In late 18th century, the old building became inadequate for the increased number of students. An expansion project was carried out under the support of voluntary subscribers and the town council. The new school was on the same site and a piece of land from the adjacent Royal Infirmary was obtained for the new sections. A design competition was held around 1777 for the project, and a plan designed by Alexander Laing was finally adopted.

¹⁵ Ross, *The Royal High School*, p. 43.



Plan of the second floor of a New Design for the High School of Edinburgh.



Plan of the Ground floor of a New Design of the High School of Edin.

Aug. 1. Oct. 8. 1776

Plan of Adam's first design of the High School

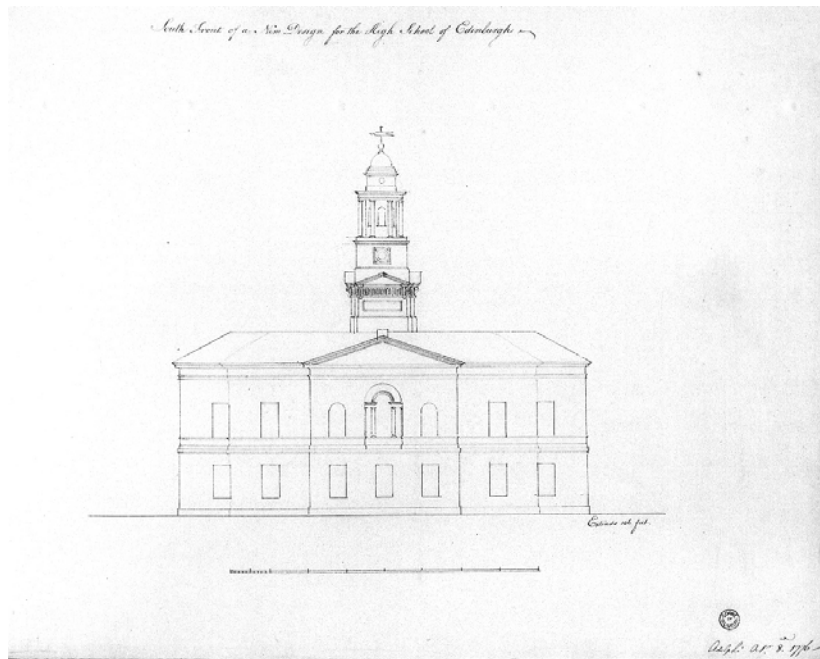
Source: RCAHMS

North View of a New Design for the High School of Edinburgh



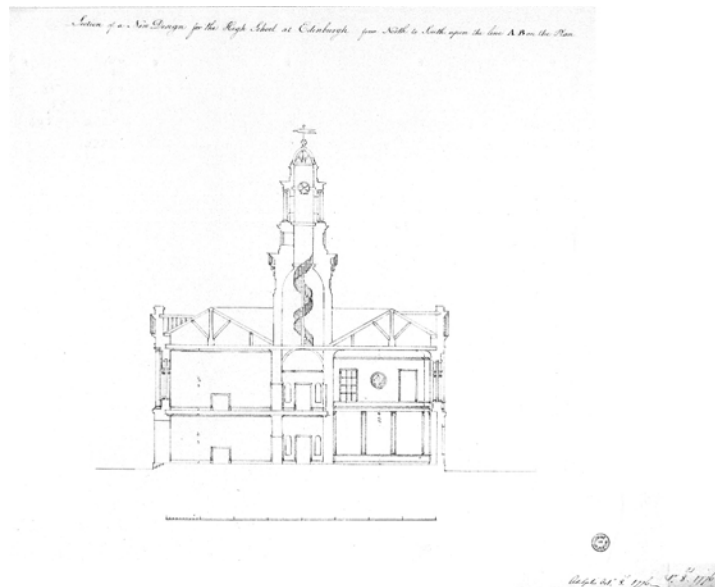
Sept. 21st 1770

Elevation of Adam's first design of the High School
Source: RCAHMS



Sept. 21st 1770

Elevation of Adam's first design of the High School
Source: RCAHMS

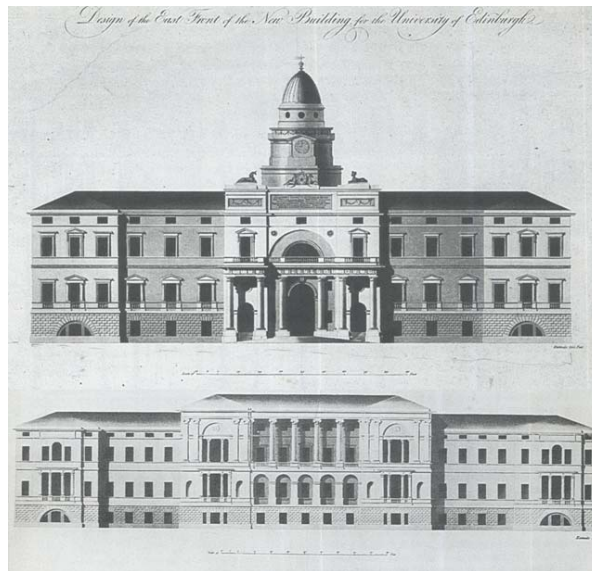


Section of Adam's first design of the High School

Source: RCAHMS

Robert Adam also provided two plans for this competition. The one dated 1776 has five class rooms and a big common hall of two stories high. Two staircases lie beside the main entrance hall. The architectural form represents Robert Adam's typical Roman revival style. As John Lowrey points out, although Edinburgh was called the Athens of the North because of its classical architecture, at the end of 18th century, the dominant current was in fact a revival of Roman style.¹⁶ Robert Adam was the most important representative of this current. The general shape of the building is close the Renaissance palace with a simple and solid basis and a more complicated and decorative part lying above. The design of the upper section is rather grandiose. Columns of different sizes are used in the central section and the two side wings. The conspicuous pediment signifies the school's status as one of the most important classical education centres in Scotland's secondary education system. The Palladian motif of the Venetian window is used extensively on all four facades. It directly indicates Adam's debt to his Italian experience. The strictly symmetrical plan also has strong Palladian character, and the round central hall may be an echo of Palladio's Villa Rotunda. One of the most distinctive elements of the design is the central tower. Adam places a slim but complicated tower above the round central hall. Without any indispensable function the tower is only used to signify the dignity of the institution. Adam's commitment to this symbolic element was strong and the tower remained nearly unchanged in his simplified second design.

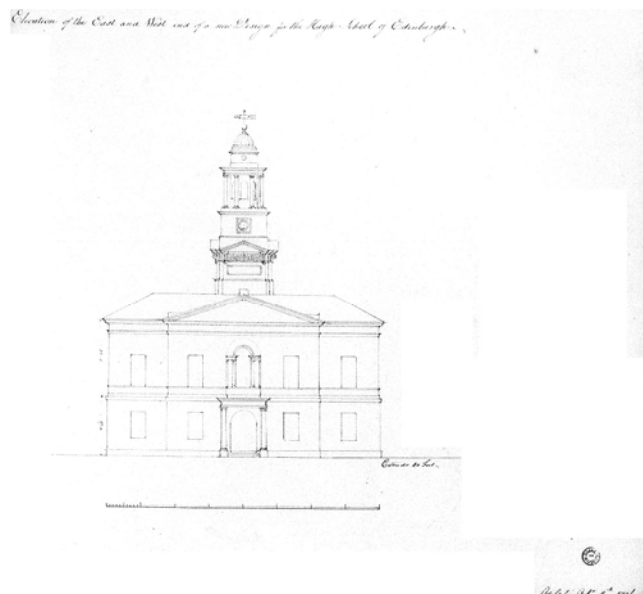
¹⁶ See John Lowrey, "From Caesarea to Athens: Greek Revival Edinburgh and the Question of Scottish Identity within the Unionist State," *The Journal of the Society of Architectural Historians* 60, no. 2 (2001): p. 144.



Robert Adam's design of the Old College, 1791

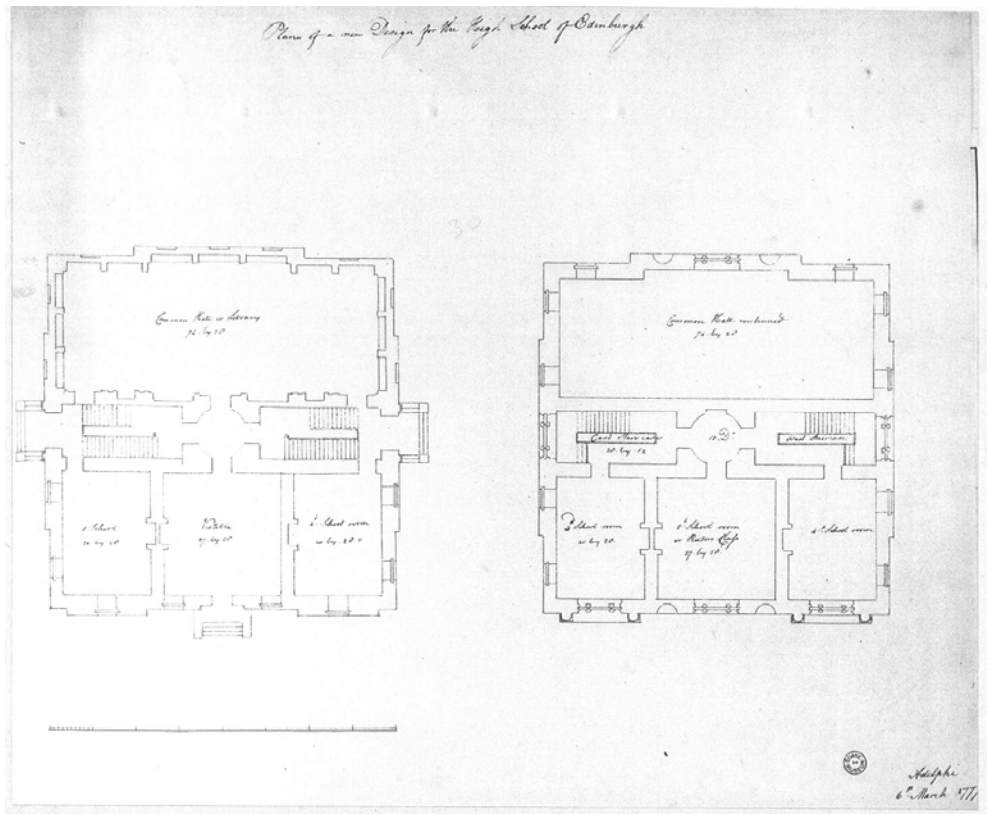
Source: Andrew G. Fraser, *The building of Old College : Adam, Playfair & the University of Edinburgh*

Adam's design of Edinburgh High School clearly illustrates his design pattern for educational institutions. Many elements of the design, such as the ABABA rhythm of the main façade, the use of Palladian motifs, the design of a tower above the entrance dome and the symmetrical plan, were later transplanted to his design of the Old College of Edinburgh university. In some respects, the design of the High School of Edinburgh can be seen as the preliminary version of the design of the Old College.



Elevation of Adam's second design of the High School

Source: RCAHMS



Plan of Adam's second design of the High School

Source: RCAHMS



Elevation of Adam's second design of the High School

Source: RCAHMS

But this ambitious design clearly met objections because of the high expense that it threatened. In the second design finished in 1777 Adam reduced the size of the building by making the plan more compact. The number of rooms was the same and the tower was kept while the elevation was clearly simplified. But even at this stage Adam's plan was not economical enough compared to the realized design. Apart from the basic requirement of five class rooms and common hall Adam did not provide any other rooms for other use. Meanwhile the common hall occupied half the volume of the building, in a condition where land was very limited, this arrangement could not be welcomed by the town council. Finally, of course, the central tower seemed like an unnecessary and costly extravagance.



Building of the High School founded in 1777

Source: William Steven, *The history of the High School of Edinburgh*

Alexander Laing's design was much simpler and more functional than Adam's. The new building was connected to the old building, of which the east side, including two classrooms, was demolished to make way for the new building. The building does not have much distinction except the classical pediment in the main entrance. No original plan was left, but there was detailed description of the layout of the building: "the total length of this building is 120 feet from south to north; the breadth at the middle, (exclusive of the stair cases,) is 36 feet, at each end 38; all over walls. The great hall, where the boys meet for prayers, is 68 feet by 30. At each end of the hall, there is a room of 32 feet by 20, intended for libraries. The height of this story is 18 feet. From the great hall, there are ascents to the second floor by three different stair-cases, each 15 feet by 14 over wall. This floor is disposed into five apartments, for the five classes, besides from small rooms for the conveniency of the masters.

Their dimensions are; of the rector's class, in the centre, 31 feet by 25; of the class on each side, adjoining to the rector's, 31 by 21; of those at the two ends of the building, 33 by 20 feet 6 inches. The height of this floor is 17 feet."¹⁷ The building was put into use in 1778 at an expense of £4000 for the construction.

This description shows that Laing's design mainly consisted of an assembly hall and separated classrooms; it is similar to the central hall model that became prevalent in England in late 19th century. However, it differs from schools of the later period in that Laing's design did not emphasize the supervisory relationship between the hall and classrooms. In the High School the four masters and the Rector were in a comparatively equal position as to the authority in teaching. Surveillance was not significant in routine operations. Laing set the five classrooms of similar size, but by the end of the 18th century, this raised a problem because the Rector, Dr. Adam, brought a change to the regulation of the school: students, after four years of study under a master's instruction, would stay in Rector's class for two years rather than one year. He also initiated the teaching of basic Greek despite criticism from a professor of Edinburgh University who insisted that Greek should only be taught in the university. The direct consequence was that the Rector's class was larger than the masters', and students were of different levels within his class. How to organize such a big class efficiently was a problem common for schools organized on a schoolroom model and it was against this background that James Pillans, the successor of Dr. Adam as the Rector, introduced the monitorial system to the High School of Edinburgh.

Pillans was appointed Rector in 1810 and he stayed in this position for ten years. Due to the recognition of his success in this job, he was promoted as the professor of Humanity at Edinburgh University in 1820. In his book *Contributions to the Cause of Education* published in 1856 Pillans recorded his utilization of the monitorial system in the High School. Pillans was himself a former student of the High School and studied in Dr. Adam's class for two years. He was quite unsatisfied by the teaching method as he wrote: "I had myself been such with the unmanageable nature of such discordant elements."¹⁸ When he entered the school as a teacher, the Rector's class had 144 students, but when he left 10 years later, the number of students had increased to 288, Pillans explained that it was the monitorial system that guaranteed the efficient functioning of such a big class.

¹⁷ Hugo Arnot, *The History of Edinburgh* (Edinburgh: 1779), p. 422.

¹⁸ James Pillans et al., *Contributions to the Cause of Education* (London: Longman, Brown, Green, & Longmans, 1856), p. 313.

Pillans was quite aware of the close relationship between his method and that of Bell and Lancaster's. He generalized the character of a monitorial system as "the employment of the scholars to teach one another," and rightly pointed out that the pupil-teacher system promoted by the government after 1846 was not a replacement but a modification of the monitorial system. Pillans also stressed the uniqueness of his method. Since Bell and Lancaster only regarded this method as an economic measure, "neither of these gentlemen seems at this time to have dreamed of applying the monitorial system to the higher branches of knowledge, or to schools of the wealthy."¹⁹ But Pillans believed that his experiment had proved that monitorial system could be used in higher education and its benefits were more than economical: the system was in itself good for teaching quality. In fact, Pillans even adopted a similar method in his classics class at Edinburgh University. Although the common opinion was that the monitorial system was more suitable for the education of lower social classes, Pillans's conclusion was very different: "the monitorial method is more applicable, and may be applied with a greater certainty of good results, in schools of larger numbers, where the higher branches of knowledge are taught to advanced pupils, than it is to the immature, unformed, and often ill-conditioned minds of the offspring of the humbler classes."²⁰

In practice, Pillans's method is close to Bell's model in group teaching and similar to Lancaster's model in the size of the division. After prayers at nine in the common hall, Pillans's class was divided into groups of ten students in the same room, with one pupil of superior scholarship as the monitor. "Three benches, placed triangularly, with open corners, were allotted to each division, (for the standing posture after the first twenty minutes is irksome to boys and distracts attention,) so that, sitting thus compactly and facing each other, all might be heard distinctly in their own division, without interfering with the divisions adjoining."²¹ The monitors organized the teaching of each group. After that, all groups moved to the class room, in which the teacher could give instruction to all students. Pillans then proceeded to ask if there were any appeals, normally 4 to 12 boys would raise their hands to point out the monitor's mistake in a previous session. If the appeal was right the student who made it took the monitor's place and the monitor lost his place. This place-capturing principle as a reward and punish method was later imitated in Bentham's *Chrestomathia*.

¹⁹ Ibid., p. 315.

²⁰ Ibid., p. 324.

²¹ Ibid., p. 318.

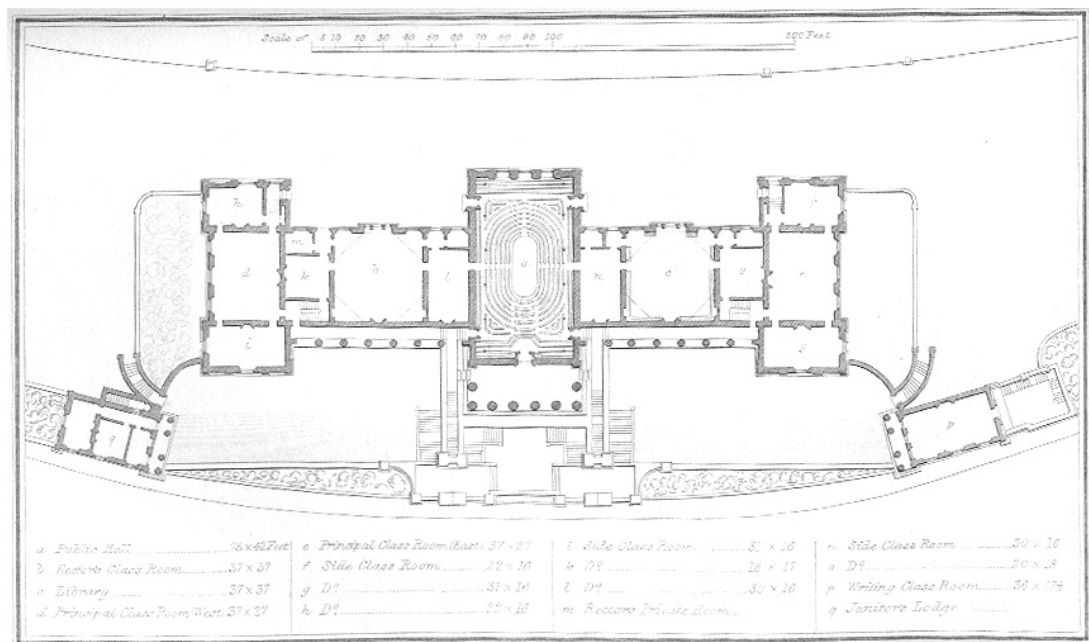
One interesting point is that Pillans also made use of invisible inspection to enhance discipline. At first, he made several holes on the ceiling to promote ventilation, but later he discovered their function for surveillance. He was aware that “the temptation to idleness was doubtless greatest in the rooms where the master was not present at the time, and idleness was more difficult of detection there, as on the least hint of the master’s approach all was silence and apparent attention.”²² Pillans then used these holes to inspect the situation of the classroom, as he wrote: “mounting to the garrets, with which these apertures communicated, I was enabled to view what was passing in the room below, without being visible myself.” He then recorded all the misconducts and informed the students minutely. After that Pillans publicly announced the means he used. The effect was immediate as he wrote: “this invisible agency had so powerful and permanent an effect, that I had seldom or never occasion to employ it again.”²³ Pillans example was a good illustration of how invisible inspection could turn the inspected into self-disciplined individuals. What he had done was the same as what the governors did in the central surveillance tower of Bentham’s Panopticon. He inspects the subordinates and records any case that violates the discipline. Based on it the individuals are warned or punished. The hole of Pillans had the same function as the Panopticon’s central tower, which put the discipline on the mind, rather than the body, of the subordinates. Again it can be regarded as a support for Bentham’s idea that the Panopticon can be used in any situation where surveillance is needed. Such utilization of invisible inspection was the unique character of Pillans method. In this case his class in the High School accommodated in a normal building resembled the Panopticon no less than Bentham’s Chrestomathia School with a special circular shape.

Although generally based on class teaching, Pillans’s class, with two grades, in fact resembled the Bell or Lancaster’s school with various grades in one schoolroom. The operation of the monitorial system happened in the big hall which resembled the schoolroom rather than classroom. After 1816, the common hall was divided into two classrooms as the number of students increased and the former classroom on the first floor became too small. But the space left by the two classes was incorporated into Pillans’s classroom. Therefore he could operate the monitorial system in his enlarged classroom. But the absence of an assembly hall was regarded as a loss and Pillans suggested that one should be included in the next new building erected for the High School. In 1829, the new building designed by Thomas Hamilton on Calton Hill was put into use, a big assembly hall, as Pillans suggested,

²² Ibid., p. 328.

²³ Ibid.

was put in the middle.



Plan of the High School on Calton Hill, 1829

Source: RCAHMS

In the ten years between 1810 and 1820 Pillans's monitorial system became quite influential. The number of students kept increasing, and in 1820 the school had more than 800 pupils, in which there were students from Russia, Germany, Switzerland, the United States, Barbadoes, St Vincents, Demerara, the East Indies, besides England and Ireland, as described by one student.²⁴ The method also impressed an American visitor, Professor Griscom, who spent several days in Edinburgh in 1819. He later established a classical seminary at New York on a similar monitorial system. In Edinburgh, Pillans's method was quickly imitated by other masters in the High School and other grammar schools. But without the support of a powerful institution as with the two voluntary societies in England, Pillans's method remained as an independent experiment. It did not establish itself as an authority. In this case, it was a later experiment in the Edinburgh Sessional School that, under the support of the church, contributed largely to the formation of a modern education system in Scotland.

²⁴ Steven, *The History of the High School of Edinburgh*, p. 192.

7.3 Edinburgh Sessional School and the Teacher Training System

The Edinburgh Sessional Daily School was founded by the Church of Scotland “for the instruction of the children of the lower classes of society in the arts of reading, writing, and arithmetic.”²⁵ It was one part of the role of the Edinburgh Parochial Institutions established by the church in 1812 to enhance religious education through various Sunday schools. It was reported that large numbers of students at these Sunday schools could not read. Then it was decided to build a daily school to solve this problem, “five scholars should be admitted into the school, from each session, gratis; and that ten more, nominated by each session, should have a preferable right of admission, on payment of the school fee, which was fixed at 6d a month.”²⁶ The school opened in 1813 at Leith Wynd.

In 1819, John Wood, the Sheriff of Peebles, began visiting the school to check on some unemployed apprentices who had been sent to the school. His visits became daily and he began to take classes himself. His enthusiasm was appreciated and he soon became an effective head of the school. Under his charge, the school was successfully organized on a monitorial system. In his book *Account of the Edinburgh Sessional School*, Wood recorded the teaching method of the school in detail.

Since its earliest time, the school had been heavily influenced by the monitorial system. Lancaster visited Edinburgh in 1812, and probably due to his influence the Sessional School first followed his rules with some modification. But in 1815 the secretary of the Director of the school reported that “a narrow inspection of the Central School, Baldwin’s Gardens, London, had convinced him, that many parts of the system of teaching practiced by Dr. Bell might be introduced with great advantage into the school in Leith Wynd, and, as Dr. Bell was then in Edinburgh, he moved that the Directors should apply for his advice in arranging that school.”²⁷ Bell provided many suggestions which, were afterwards carried into execution in the school. In 1818 Bell also made an urgent request that the teacher of the Sessional School should be sent to St. Andrews to inspect a school operated on his principles.²⁸ Through these efforts, the Sessional School was transformed into Bell’s method

²⁵ John Wood, *Account of the Edinburgh Sessional School, and the Other Parochial Institutions for Education Established in That City in the Year 1812; with Strictures on Education in General*, 2nd ed. (Boston: 1830), p. 61.

²⁶ *Ibid.*, p. 27.

²⁷ *Ibid.*, p. 28.

²⁸ *Ibid.*, p. 29.

rather than Lancaster's.

In 1824 the school moved to new premises in Market Street, where a single schoolroom 83 ft by 35 ft accommodated all students. The number of students was between 500 and 600. All students were taught by one master on the monitorial method similar to the National schools in England. As Wood described: "The tables (as in the Madras or National school system) are placed round the walls of the school-room, and the remainder of the floor is left quite unoccupied by furniture, except the master's desk and such seats as may be necessary for the use of visitors. One half of the scholars always sit at the desks with their faces to the wall, employed in learning to write or cipher, while the other half stand on the floor; either reading or practicing the rules of arithmetic. Thus, it will be observed, seats are required only for one half of the scholars, and convenient accommodation is afforded to a far greater number, than could be obtained under any other arrangement. The classes on the floor are ranged in segments of circles behind each other, fronting the master's desk, which is at the head of the room and, in front of each class, are placed the teaching monitor and his assistant, whose duty is to preserve order and attention."²⁹

In the Sessional School the monitors were hired from outside rather than chosen from students as Pillans did. Each of them was provided with an assistant, whose duty was to preserve order and attention in the class, while the monitor was occupied in teaching. Each group under the charge of one monitor had about 30 students. Woods explained that a bigger group was better because it reduced the noise in the schoolroom and also because of the shortage of qualified monitors. The Place Capturing principle was also used in the Sessional School.

The publication of Wood's book made the teaching model of the Session School well known in Britain. One of its admirers was Kay-Shuttleworth, who was working on the organization of industrial schools in workhouses.³⁰ He was so impressed by Wood's book that he recommended that Guardians of poor law unions should purchase copies of it. In the summer of 1837 Kay and his colleague Tufnell made a journey to Scotland to see the Scottish education system. In Edinburgh they visited Wood's Sessional School. After that they spent several days in Glasgow visiting Stow's model schools. Kay was so excited with his experience that he wrote to one of the Poor Law Commissioners: "the brutish ignorance

²⁹ Ibid., p. 62.

³⁰ For Kay's contact with Scottish education system, see Ross, "Kay-Shuttleworth and the Training of Teachers for Pauper Schools."

of our rural and city population in England badly demands immediate interference and ... many most valuable hints may be obtained from the schools in Glasgow and Edinburgh.”³¹ He then introduced three Scottish teachers to English industry schools and asked them to demonstrate the Scottish teaching method in other schools. These experiences finally led Kay to the decision to build a teacher training school, the result was the Bettersea school. It was through Kay, the former Edinburgh University student, that Scottish education system was connected with the beginning of English teacher training practice.

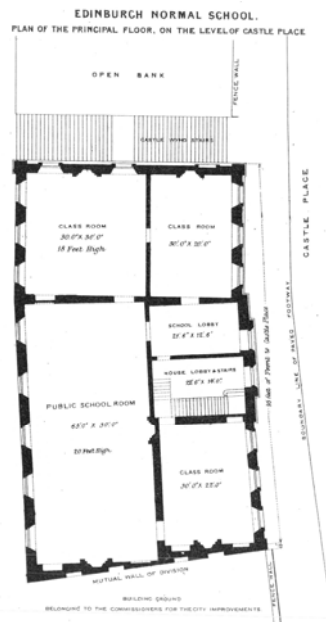
It is not a surprise that the Edinburgh Sessional School also became a significant teacher training centre of the Church of Scotland. Early in 1824 the Church had launched an appeal for “Assembly” schools in the Highlands and Islands to supplement the parish school system. Many teachers of Assembly Schools, before starting their job, were required to spend a brief period in the Edinburgh Sessional School to observe and study the teaching method while practising as monitors. By 1835 nearly half of all 50 assembly teachers had attended the Sessional School.³² They received certificates after spending a time not longer than 6 month in the school. In this way, a teacher training department was added to the Sessional School and it became the General Assembly’s Normal Seminary in Edinburgh. In 1837, the Sessional School was transferred to the Committee of the General Assembly, and was renamed as the Normal and Sessional School. It consisted of a model school of about 300 pupils and a teacher training department of about 100 students who spent one year in the institution.

By establishing its own teacher training institution the Church of Scotland took a similar path to the two voluntary societies in England. They all intended to build a big elementary education system based on monitorial principles. A central authority was vital in these projects. To regularize the running of subordinate schools and also spread the monitorial teaching method, they all established teacher training departments which were attached to the model schools. As pointed out before, it was in these voluntary rather than governmental bodies that a highly organized education system including special pedagogic discipline and teacher training mechanism was first developed. In Scotland, although the civil authority had a long history of positive contribution to education, the first step to a systematic teacher training must be attributed to the Sessional School.

³¹ Cited from *Ibid.*: p. 277.

³² Marjorie Cruickshank and Scottish Council for Research in Education., *A History of the Training of Teachers in Scotland* (London: University of London Press, 1970), p. 40.

After the transformation to the Normal and Sessional School, the old building in Market Street became quite inadequate. In 1841 a government grant was obtained for a new school to be built at Johnston Terrace. This was the starting point of governmental intervention in the training of teachers in Scotland. A proposed design for the new building is recorded in the *Minutes of Committee of Council in Education*. A schoolroom of the size of 65 ft by 30 ft accommodates the model school, to which three smaller classrooms are attached.



Principal plan of Edinburgh Normal School 1841
 Source: *Minutes of the Committee of Council on Education*



Elevation of Edinburgh Normal School 1841
 Source: *Minutes of the Committee of Council on Education*

The 1843 Disruption split the Church of Scotland together with its education institutions. Almost all staff and students of the Edinburgh school became Free Church members and had

to leave their institution. The Free Church was enthusiastic about its own education scheme; within 6 years a capital sum of over £40,000 was raised for education, sufficient to build 500 schools. A further £3,500 a year was contributed for teachers' salaries.³³ A new teacher training college was also established by the Free Church. Moray house in the Canongate was purchased to accommodate the normal school. In 1848 the Moray House College opened its door to new students. By that time, the pupil-teacher system had been established as official policy. The college then was integrated into the new national teacher training system. Scottish elementary education moved along the same route as the English system.

7.4 New Board Schools in Edinburgh

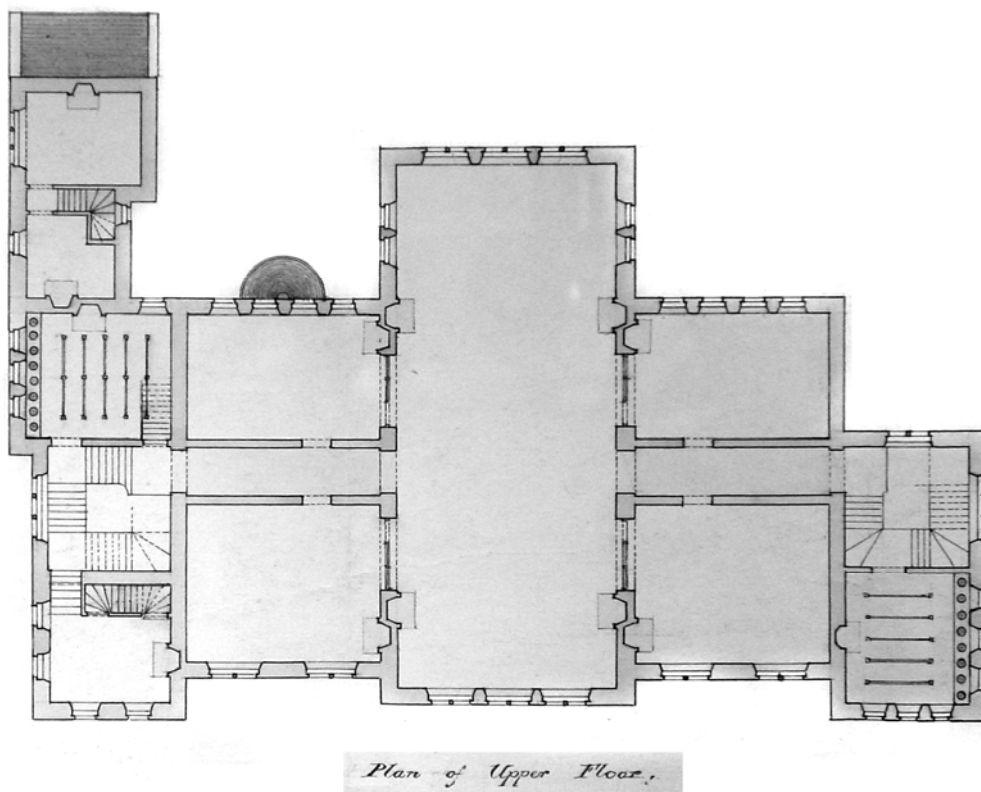
The largest transformation of Scottish elementary education came in 1872 when the state took full responsibility for education. Unlike the 1870 Act for England, the 1872 Act for Scotland made elementary education compulsory. Every Scottish child had the absolute right to be educated for at least 10 years for free. Secondary education was also made free, and bursaries were provided for students to pursue a degree or a diploma. Through the 1872 Act, the old Scottish system which was mainly a combination of governmental and voluntary contribution was turned to a new national system of schools under the control of school boards, which were themselves coordinated and controlled by a central authority, the Scotch Education Department. A unified and bureaucratic machinery was hence founded and turned Scottish education into a standardized disciplinary system.

After 1872, all the old parish schools and voluntary schools founded by the two churches were gradually transmitted into the hands of the School Boards. This enabled the Scotch Education Department to push the primary education system into a standardized model. Board Schools built by the government all followed a set of principles which determined the spatial organization of the schools and other aspects such as ventilation and average area per student. Meanwhile, a general transformation also can be detected in these Board Schools as new developments were brought on stream because of increasing governmental input. These aspects were clearly represented in the schools built by Edinburgh School Board after 1872.

Established on the 29th of March 1873, the Board of Edinburgh soon made a statistical survey of the condition of primary education in Edinburgh. It concluded that in Edinburgh

³³ Ibid., p. 51.

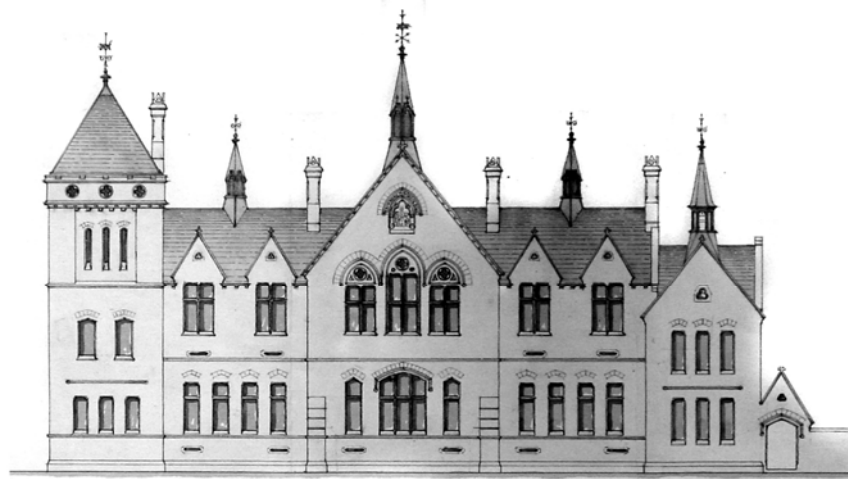
7500 children who were regarded as belonging to the middle and upper classes had sufficient provision in education. But for the children of poorer classes there was a deficiency in the school accommodation to the extent of 4161 children at the end of 1873. To solve this problem the Board resolved to build 7 new schools providing accommodation for about 4200 poorer children.³⁴ These were the earliest board schools in Edinburgh; their architecture clearly represented the characteristics of the pupil-teacher system supported by the Education Department.



First floor plan of Bristo Public School 1876

Source: Edinburgh City Archives

³⁴ "Summary of the Work of the First School Board of Edinburgh, Laid before the Board at Its Meeting, 1st March 1876," ed. Edinburgh School Board (1876).



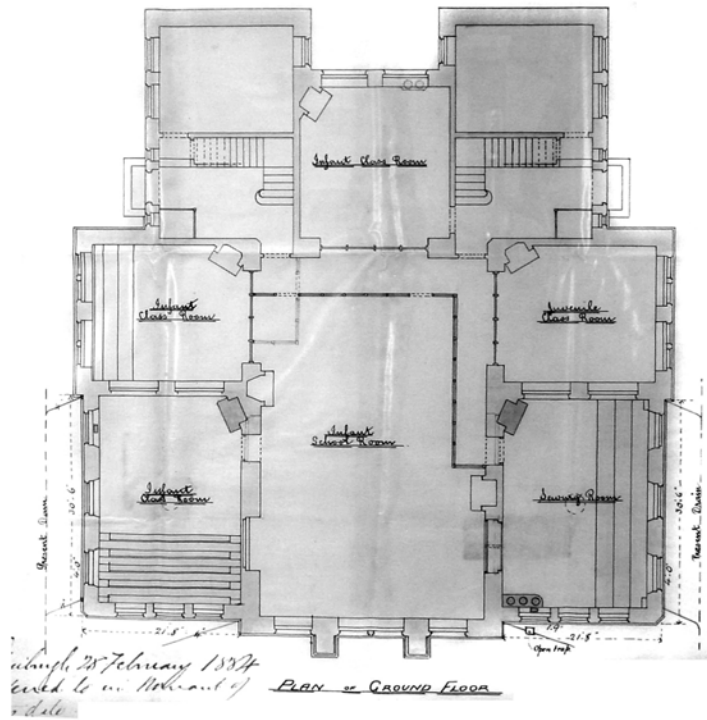
Elevation to Marshall Street.
NB. The level of this Street is not yet settled.

Elevation of Bristo Public School 1876

Source: Edinburgh City Archives

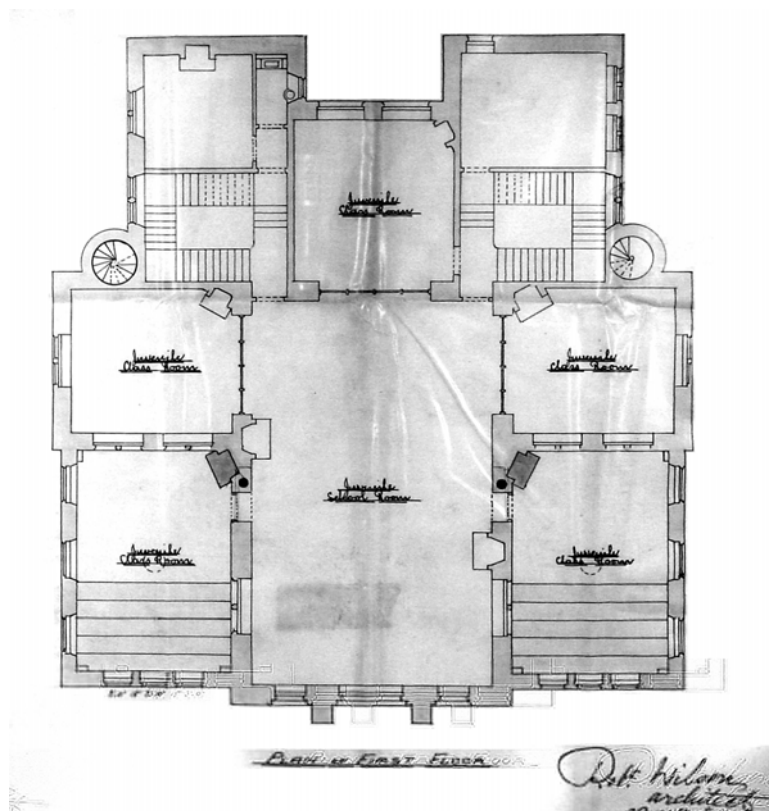
A typical example is the Bristo Public School, one of the seven earliest board schools. The school was designed to accommodate 600 students, and was located at Bristo Street. The building was designed by Edinburgh architects William Lambie Moffatt and James Aitken, who had been busy with Board Schools projects for a number of years since the 1872 Act. Clearly they were quite familiar with the current teaching methods and the new trends in Board School designs. The plan they provided follows the general principles of the model plan of a school for 700 student provided by the Education Council in 1830s under the direction of Kay.³⁵ In the center is a big schoolroom. Four smaller classrooms are placed on the two sides of the central hall, but the separation between the hall and the classroom is movable. As mentioned earlier, this arrangement is used to enhance the master teacher's supervision over the pupil-teachers in the classrooms. Following the regulation separating boys from girls, two staircases, together with other facilities, are set on the two sides. The play ground is also divided into two parts. Following the tradition of church schools, Gothic elements were manifest in the façade design.

³⁵ For the model plan, see p.265-68.



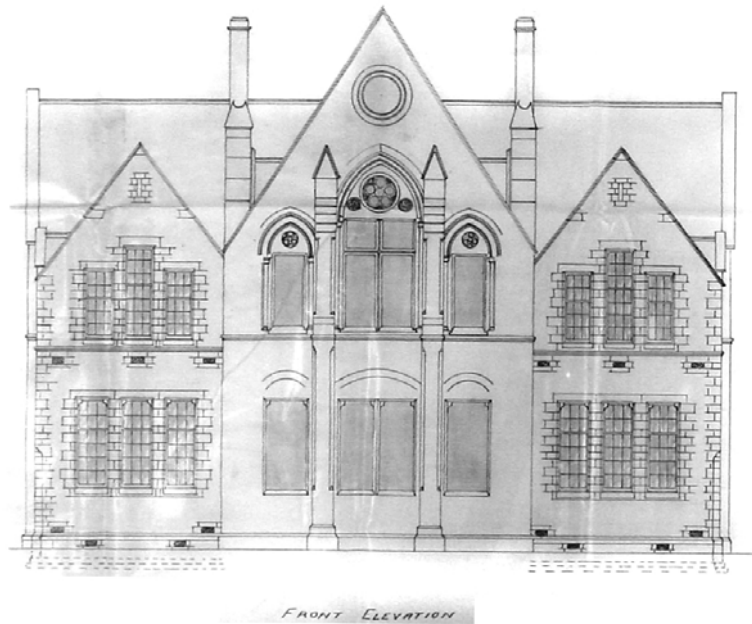
Ground floor plan of Cousewayside School 1873-76

Source: Edinburgh City Archives



First floor plan of Cousewayside School 1873-76

Source: Edinburgh City Archives



Front elevation of Cousewayside School 1873-76

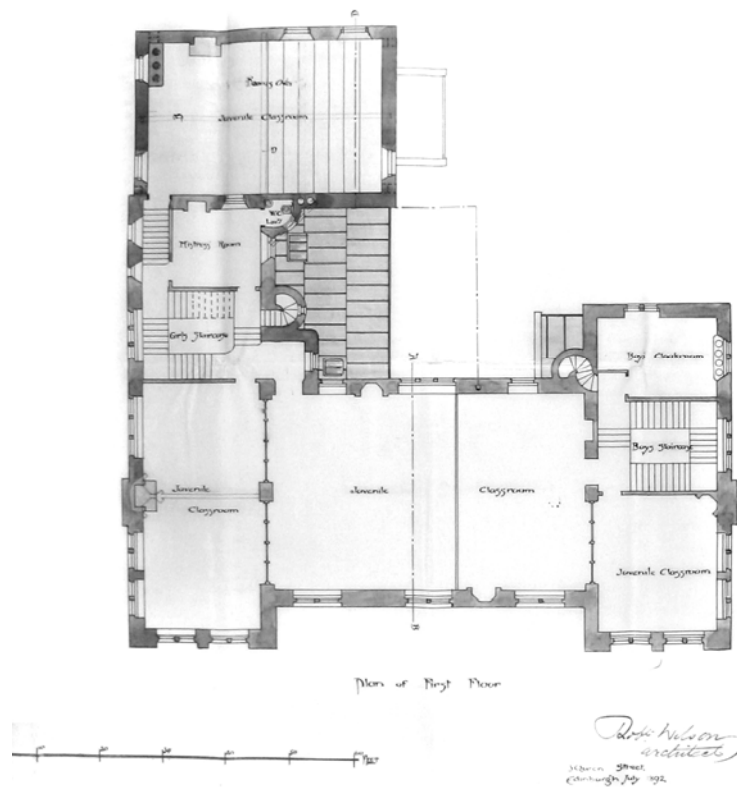
Source: Edinburgh City Archives

Another school built in the same period showed similar characteristics. It was the Causewayside School, another one of the seven schools, designed by Robert Wilson. In its original plan three small classrooms surround the central hall, and the same movable partitions are used. Several years later two more classrooms with galleries were added and made the plan even more similar to Kay's model plan. In this design, Wilson chose the Gothic style for the earliest design, but in the additional part the Gothic elements disappeared. It shows that Gothic style was discarded after its first adoption in board schools as a usual style for school buildings.

It can be seen that both Moffatt and Wilson followed the guidance of the model plans published more than 30 years before. They were less self-confident than Robson, the architect of the London School Board, who developed his own ideal plan. London School Board was a paradigm at that time. Following in its footsteps, Edinburgh School Board appointed its own architect to take charge of the designs of the new schools rather than holding competitions continually. Robert Wilson was appointed by the Edinburgh Board sometime between 1873 and 1876, and for more than twenty years he designed nearly all new board schools in Edinburgh and was responsible for numerous alteration and maintenance projects. As a promoter of a highly regulatory institutional system, the School

Board was less interested in unique designs than standardized designs in accord with the strict rules. Hence to commission all projects to its own architect was more efficient and economical for the School Board. This case shows how the architectural profession was institutionalized and incorporated into the new education system in the forms of its bureaucratic structure.

As the population kept increasing while the number of church schools declined after 1873, the School Board had to build new schools continually to cope with the problem of school deficiency. Most of these new schools were designed by Wilson. As time went on, new features appeared in Wilson's designs as a response to the general transformation of primary education in Scotland.

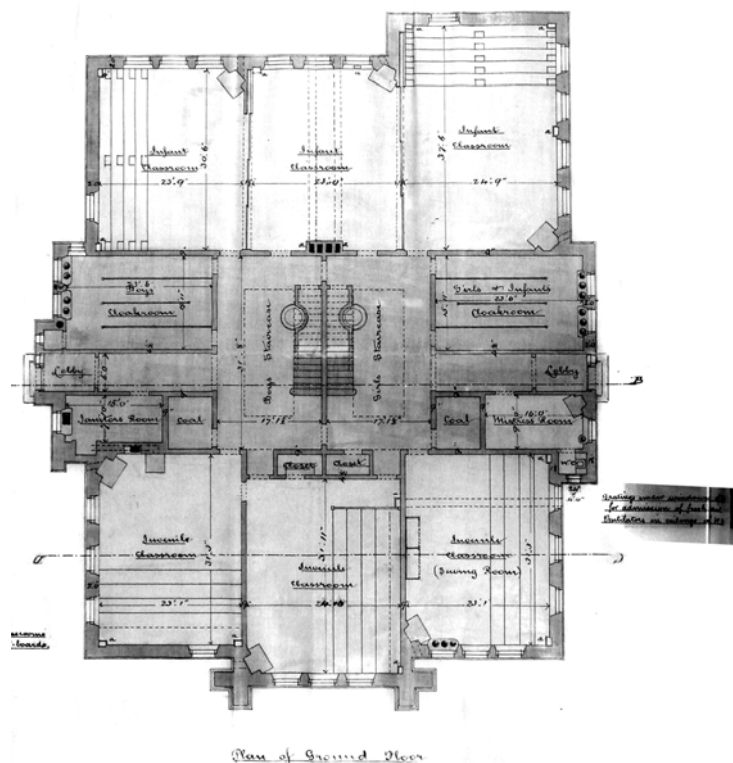


First floor plan of Hamilton Place School 1873-76

Source: Edinburgh City Archives

Hill School and North Merchiston School all had the same layout with a big schoolroom in the centre and various classrooms surrounding it: two separated stairs for boys and girls were placed on two opposite sides. Under the circumstance of insufficient number of qualified teachers, pupil-teachers were widely used, and such a layout was very appropriate. As discussed in last section, the transformation from schoolroom to classroom developed while the teacher training system began to supply more and more trained teachers. This also happened in Edinburgh. Class teaching became more and more popular and led to the change of spatial layout of school architecture.

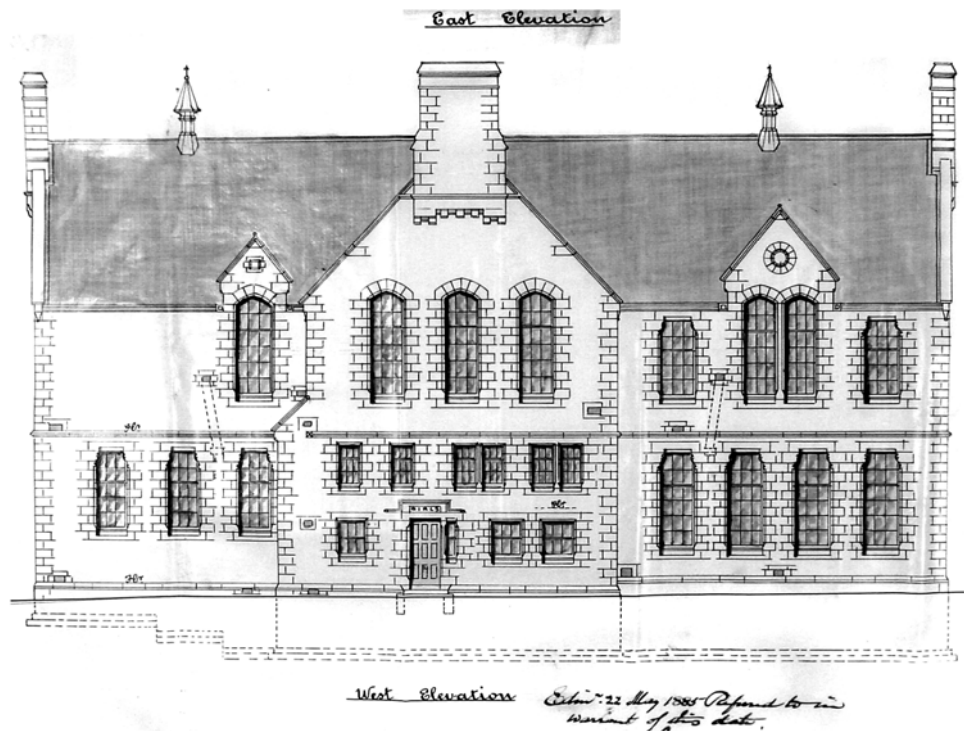
In the report of the second School Board (1876-9) it was reported that “experience has shown that the work of Schools would be facilitated by the division of the large halls, in the older Schools, into two classrooms.”³⁶ Guided by this principle, the schoolroom in Leith Walk School, juvenile department, West Fountainbridge, infant department, and New Street School, juvenile department were all divided into classrooms. These alterations exemplified the general transformation from schoolrooms to classrooms.



Ground floor plan of South Bridge School 1885

Source: Edinburgh City Archives

³⁶ "Summary of the Work of the Third School Board, Elected for the City of Edinburgh, 1879-1882," ed. Edinburgh School Board (1882), p. 16.

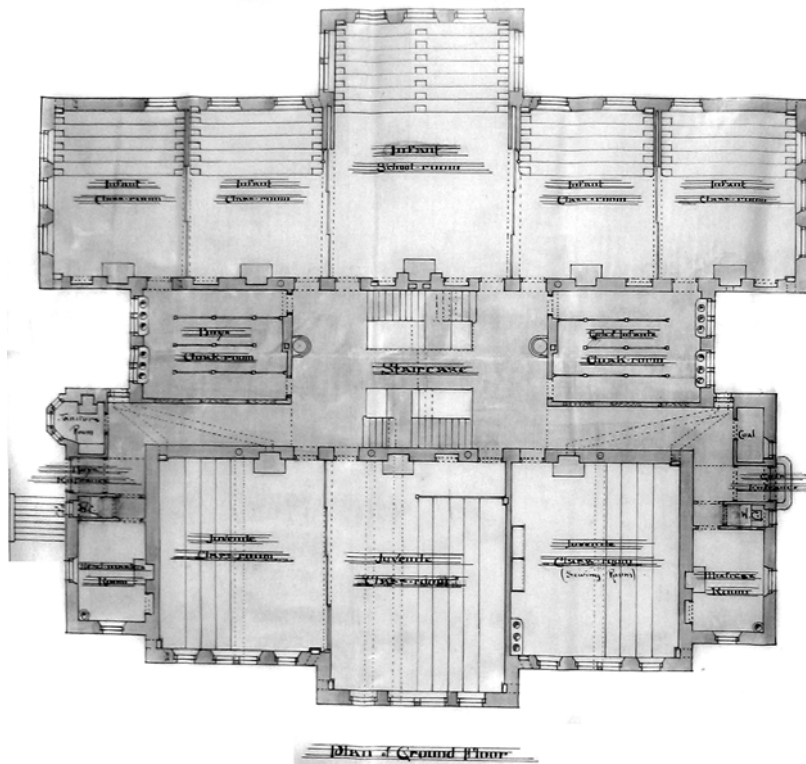


Elevation of South Bridge School 1885

Source: Edinburgh City Archives

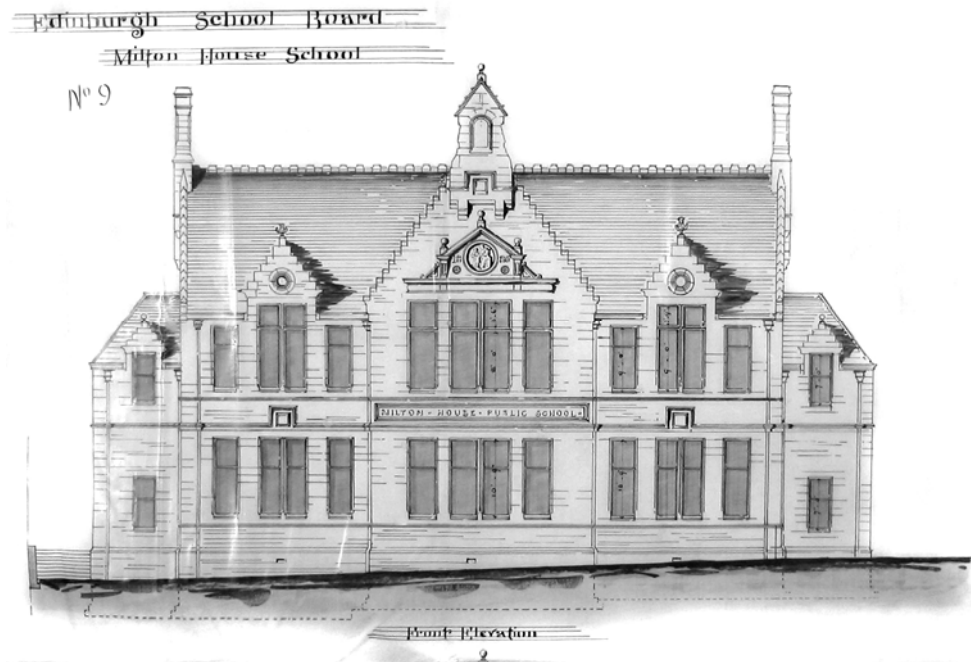
As the Board's only architect, Wilson responded to this trend by adopting a new model of school design compatible with the increasing importance of classrooms. The earliest appearance of this model was in the project for South Bridge School in Infirmary Street. The school was designed in 1885. Its principal difference from earlier board schools was the disappearance of the big schoolroom, whose central place was substituted by stairs and service rooms which were previously placed in peripheral areas. On the ground floor, the plan was divided into three rows, the upper and lower rows consisted of three classrooms and the stairs and services form the central row. On the upper floor two more classrooms took the place of the service rooms and form a circle of classrooms surrounding the stairs. Hence the school provided 14 classrooms, much more than early schools which normally had 8 or 9. However, the schoolroom did not completely vanish. The three classrooms in the upper row were separated only by movable partitions, which enabled the three classrooms to be connected into a big hall. As the pupil teacher system was still running, such an arrangement was quite necessary. But in other parts, while the classrooms gained more complete separation and independence, the surveillance function has been largely diminished. Central surveillance was no longer regarded as the dominant principle of school design, as separate class teaching gained more and more weight.

Compared to his earlier designs, Wilson's South Bridge School used even fewer Gothic elements in the elevations. Only the windows of the upper floor adopted the shape of flat pointed arch on its top. Apart from this, the only indication of its predecessors in the form of the church schools, the building was getting closer and closer to common civil architecture. This development was extended in the design of Milton House Public School in which the pointed arch shaped windows were completely discarded, a move that signified the final break with the Gothic style in board school designs.



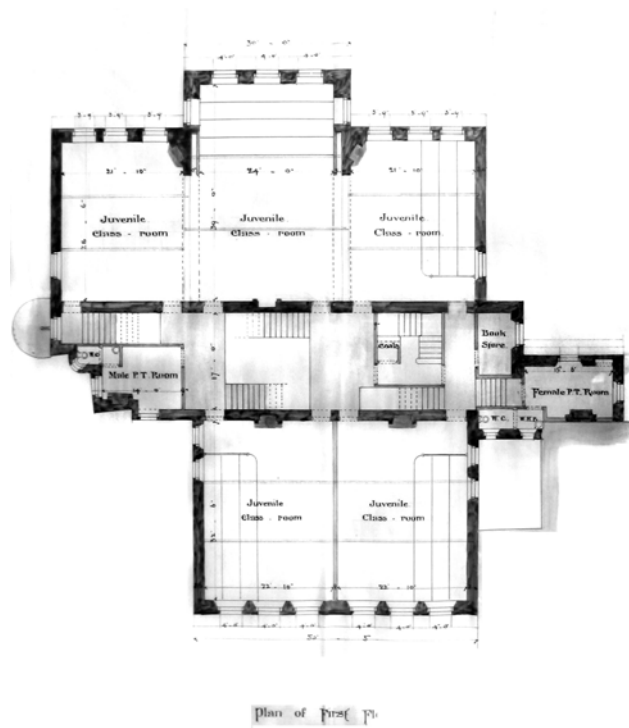
Ground floor plan of Milton House School 1886

Source: Edinburgh City Archives



Elevation of Milton House School 1886

Source: Edinburgh City Archives



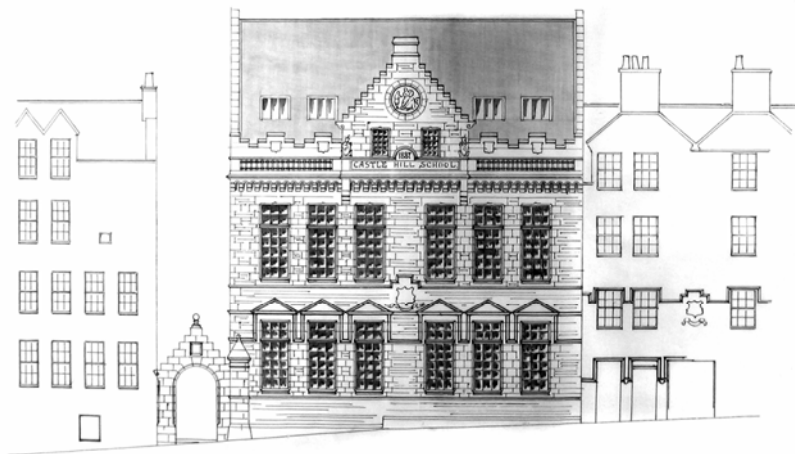
First floor plan of Castle Hill School 1887

Source: Edinburgh City Archives

EDINBURGH SCHOOL BOARD

CASTLE HILL SCHOOL.

Nº 6.



Elevation of Castle Hill.

Elevation of Castle Hill School 1887

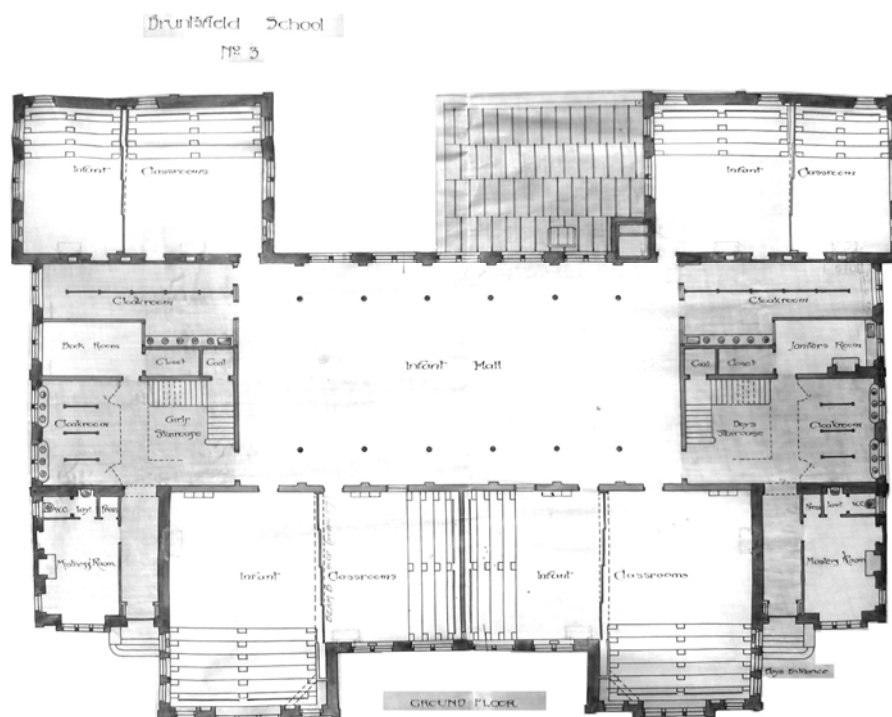
Source: Edinburgh City Archives

The design of Milton House Public School, finished in 1886, used the same model as South Bridge School, as did Castle Hill School. The three rows layout was reinforced and only the number of classrooms varied according to the condition of the sites. This kind of layout was continuously used by Wilson for most of his school designs after 1885.

A change in the middle of 1880s was that the central authority, the Scotch Education Department, began to take stronger control of school designs. At first, there is no record of any intervention by the Department on specific school design in the Board's minutes. But from 1886 there appears a record that the design of Torphichen Street School was sent to the Department for approval, the feedback from the Department was: "the plans, though defective in that the rooms are lighted from one side only, thereby rendering the light and summer ventilation doubtful, are, apart from this point, skilful and good."³⁷ The new procedure of obtaining approval from the Department clearly imposed a pressure on Wilson and the Board. Whereas they no longer had full control of the school designs, it became quite common to adjust the new school plans according to the opinion of the Department's own

³⁷ "Minutes of the Edinburgh School Board 1886," ed. Edinburgh School Board (1886).

architect. For example, in 1887 the Department requested that the Edinburgh Board alter the design of London Street School with regard to its lighting provision. The Board then sent Wilson to London to discuss the plan with the Department's Architect, Robson, the former architect of London School Board. As seen before, in his ideal design, Robson emphasized that both schoolroom and classrooms should have cross ventilation which was almost impossible in Wilson's model plan. As a consequence, the Department's suggested alterations mainly concentrated on the aspects of ventilation and lighting. Similar issues were raised in the designs of Sciennes Public School, Bruntsfield School and Broughton Public School.



Ground floor plan of Bruntsfield School 1893

Source: Edinburgh City Archives

Probably due to the effect of the Department's intervention, Wilson no longer stuck completely to his own model plan and began to adopt existing English plans. A good example was Bruntsfield School at Montpelier. The plans were clearly based on the design of Jonson Street School in London, one of the earliest board schools built by London School Board. The design of Jonson Street School had been too advanced in its provision of a large number of classrooms, but now it had become appropriate for a system with the emphasis on classroom teaching. Wilson commented that "the central hall will be found useful for the

infant department in Musical Drill, Kindergarten games, and other Infant exercises, and for Musical and other entertainments. In severe winter weather the Hall may be used as a play-room for the Infants. It will also be serviceable on occasions for the Juvenile Department.”³⁸ The functional transformation of the central hall from schoolroom to open space for public uses signified an important stage in the transformation from schoolroom to classrooms.

The adoption of the plan of Jonson Street School in Edinburgh and other cities also exemplifies the influence of central authority on local boards. Even though the Edinburgh Board and its architect Wilson favoured a strong local character, this case shows that the pressure of the central authority pushed local boards to use some designs which were more regular and had received recognition from the central authority. Although the educational bureaucratic system established after 1870 did not follow in the footsteps of the Poor Law Commission in issuing model plans, it was still able to impose control on local board.

Edinburgh’s example clearly shows how a national primary education system was established, evolved and regularized into a standard form by the new governmentality. Compared to prison reform and poor relief reform, the influence of education reform is even deeper and wider, as nearly all modern citizens are influenced by it directly. Education has been widely recognized as a systematic instrument to cultivate individuals to fit modern society. The modern governmentality enables the central authority to control this process and produce the disciplined subject in large numbers to facilitate the larger social project towards some predetermined goal. Educational governmentality has become one of the most significant constituents of the general modern governmentality which has passed deeply into every corner of everyday life. In some respect the national education system has the same function as the Panopticon, they both inflict discipline on the mind rather than the body of the individual. In this sense, educational reform was a typical Utilitarian project. It is also the most influential and successful reform that Utilitarians even engaged in.

³⁸ "Minutes of the Edinburgh School Board 1892," ed. Edinburgh School Board (1892), p. 471.

8 Conclusion

In previous sections we have seen how architecture played its role in the social reforms of Utilitarianism. The wide influence of these reforms can easily be detected from the large number of 19th century prisons, workhouses and primary school buildings, many of which are still in use. More important than these buildings are the institutions. Prisons had become one of the corner stones of the modern legal system. As Bentham envisaged, imprisonment proportionate to the crime had been accepted as the basic principle of the contemporary penal system. Nowadays this kind of measurable punishment is the indispensable constituent of modern society, in which mathematical calculation plays an increasingly important role in social mechanics. The workhouse system in Britain has been replaced by the modern welfare state. From its predecessor the new system inherited not only the old buildings but also a national bureaucratic structure. However, the problems that the workhouse system aimed to solve are not completely gone. Reconciliation of public assistance and a free economy, a goal Bentham believed his Panopticon workhouses could achieve, is still a big challenge for western welfare states. Bentham's practical proposals have been discarded, but his rationale still appears in various forms in contemporary debate on welfare system reform. Utilitarian belief in the function of education in forming good citizens has become common sense. More importantly, a national education system coordinated by a central authority guarantees the efficient production of normalized labour: standard education has become the most important factor in the basic infrastructure of contemporary society.

The close relationship between these contemporary institutions and their predecessors established by Bentham and his followers indicates how deeply Utilitarian reform influenced the formation of modern society. Considering the central function of architecture in these reforms, it is not too wide of the mark to call these institutional buildings early "modern architecture," if modern is referring to modern society. But in the style-centered history of architecture, most of these 19th century buildings would not be considered modern because of their historical styles. These buildings of Utilitarian reform are generally omitted in the history of modern architecture, even though modern architecture itself is seen as having a strong Utilitarian character. This contradiction will be discussed first.

One main criticism of Utilitarian reform derives from a justified moral ideal. This leads to the view of these Utilitarian institutions as repressive power machines. So it is necessary to consider the validity or limitation of Utilitarianism as an appropriate theory of how we should live, which is the basis of the question of how we should build. This problem will be discussed in the second half of this chapter

8.1 Two Kinds of Functionalism: General Functionalism and Essential Functionalism

In the style-centered discourse of architectural history, the character of 19th century architecture is generally labeled as eclecticism. Various historical styles, such as Classical, Gothic, Elizabethan and Queen Ann, are borrowed to clothe all kinds of architecture. One main criticism of this eclecticism is that the relationship between style and function is arbitrary. Architectural form becomes a random choice of styles, all equally unjustified. It is arbitrary personal taste rather than rational necessity that decides how architecture should look. Form and function are two different problems without inherent connections, hence Pevsner's criticism of this architecture as lacking "essential unity."

But such criticism may not apply for Utilitarians. For them the final aim is human pleasure. Any means that helps to reach this aim can be justified. We have seen that the function of architecture is significant in the enhancement of social utility. But this does not detract from the pleasure caused by historical styles. In Benthamite calculation the relationship between the pleasure produced by architecture's function and appearance is mathematical: they can be added together to produce a larger amount. The lack of unity is not a problem in Bentham's calculation because they can be finally "unified" in the mathematics of pleasure. Moreover, the disconnection between style and function is beneficial in some sense, because if they are not affected by each other, the failure of one factor would not cause the failure of the other. It makes the pleasure calculation simple and clear. There is no problem in borrowing historic styles as long as people find them pleasant and they do not jeopardize the function of the building. Utilitarianism does not necessarily require the rejection of stylistic ornament if their utility of creating a pleasurable experience is recognized. Although in some cases such pleasure is omitted for economic reasons, Utilitarianism itself does not lead to any rejection of the existence of such stylistic pleasure. Whether it should be considered depends on how much it weighs against other factors. As

the greatest happiness principle does not provide a clear theory of weighing these pleasures, it cannot give any clear decision about using historical styles or not. In other words it does not provide an adequate theory of architectural form. This is clearly represented by the buildings of Utilitarian reform, in which can be found the traces of nearly all 19th century historic revivals, as well as the total ignorance of any stylistic consideration such as Samuel Bentham's design of a factory-like workhouse.

Due to this indifference to the problem of architectural style, it was not the architects of the Utilitarianism buildings of 19th century but their critic Pugin who was regarded as a forerunner of modern functionalism. In many aspects Pugin anticipated later developments in the Modern Movement. These include the rejection of eclecticism, structural rationalism, and the connection between architecture and social morality. The main difference between them is not theory but architectural form; while 20th century architects supported the modern style Pugin supported Gothic. In fact, Pugin provided two different justifications for Gothic style, which appear in *Contrasts* and *The True Principles of Pointed or Christian Architecture* respectively. They represent the characters of two different functionalisms which illuminate the discussion of the relationship between Utilitarianism and functionalism in modern architecture.

In *Contrasts*, Pugin's functionalism is more general and complete. In our earlier discussion of Aristotle's teleology we have seen that the concept of function is related to teleology. A function implies an end, aim and *telos*. To fulfil a function means to reach a specific goal or get the expected result. Aristotle also indicates that there exists some hierarchy in different functions, some are more fundamental than others and some are only means to other ends. The functionalism in *Contrasts* is more complete because it connects architectural function with the final end of human being - the next life after death. Here Pugin is restating the orthodox teleology of Christianity. He writes: "If we believe the great principle of Christian truth, that this life is merely a preparation for a future state, and that the most important occupation of man in this world is to prepare for the next, the multiplicity of religious establishments during the ages of faith, may be accounted for on far nobler motives than have been generally ascribed to them."¹ Pugin insists that only this far nobler motive, i.e. the final goal of the next life, not something else such as "pecuniary reward, or even the applause and admiration of mankind," should be seen as the fundamental criterion in any judgement of architecture. All elements in architecture must work towards this

¹ Augustus Welby Northmore Pugin, *Contrasts*, 2nd ed. (Leicester: Leicester U.P, 1969), p. 6.

paramount end, and this is the most complete function of architecture.

But the function of architecture referring to the final goal is indirect. At least it is not clear whether architecture is needed in the ideal after-life in heaven. Its function is rather a preparation in this life, and this is through observing Christian faith. For Pugin the validation of the after-life as a final goal of human life is revealed by Christian truth and the only way to reach the final goal is through Christian faith, which is mystical and divine. Thus to achieve the final goal, the real function of art and architecture is to serve Christian faith in any possible way. It is this teleology, plus his view that the test of architectural beauty is “the fitness of the design to the purpose for which it is intended,” that leads to his conclusion that Gothic architecture - its plan, structure and ornament - represents the true principle of architecture, because “in it alone we find the faith of Christianity embodied, and its practices illustrated.”² In this general functionalism of architecture, whose validity is based on the final goal of human life after death, Pugin gives a much larger role for ornament, – whose symbolic meaning is significant in architecture’s function of serving Christian faith – than later modern functionalists who do not acknowledge symbolic meaning as a proper function of architecture. In Gothic architecture, Pugin finds a real unity, a unity of ornament and use, a unity of the structure and the beauty of architecture, a unity of the builders and artists. And the essence of this unity is the teleology which connects human being, architecture, Christian faith, and the life after death into an interrelated whole. As Pugin put it, it is a “unity of purpose.”³ Pugin’s general functionalism of architecture is completely justifiable as long as his Christian teleology is accepted.

This unity of purpose also explains the connection between architecture and social morality. Pugin maintains that the revival of “Pagan and Protestant principles” are both caused by “the decayed state of faith throughout Europe in the 15th century, which led men to dislike, and ultimately forsake, the principles and architecture which originated in the self-denying Catholic principle, and admire and adopt the luxurious styles of ancient Paganism.”⁴ As faith is what the function of architecture aims at in Christian teleology, it is quite natural that the decay of faith would lead to the decay of architecture. Both have moved away from the right goal. Conversely, by returning to the “true principles,” architecture can help to cultivate the true faith and get people back to the right *telos*. In such a teleological chain, architecture has moral significance in the sense that it can promote the pursuit of the

² Ibid., pp. 1,3.

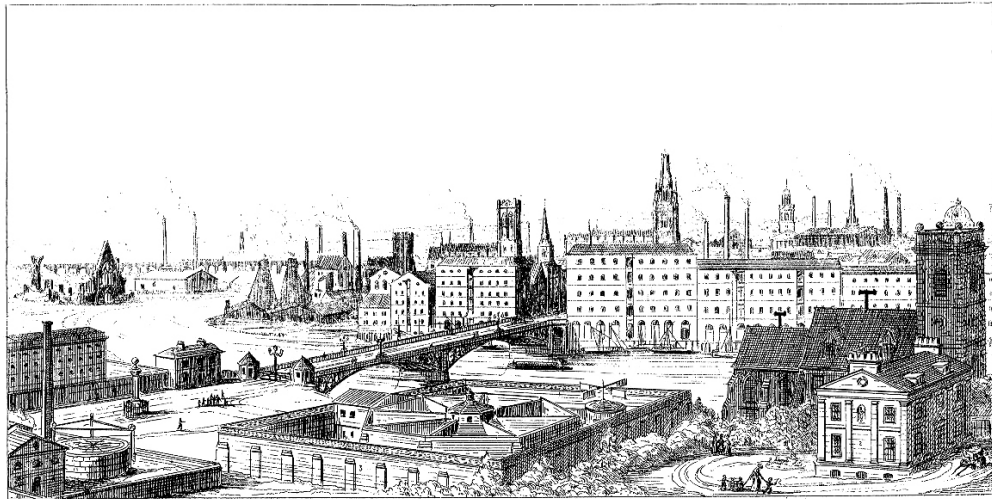
³ Ibid., p. 6.

⁴ Ibid., p. lii.

final end.

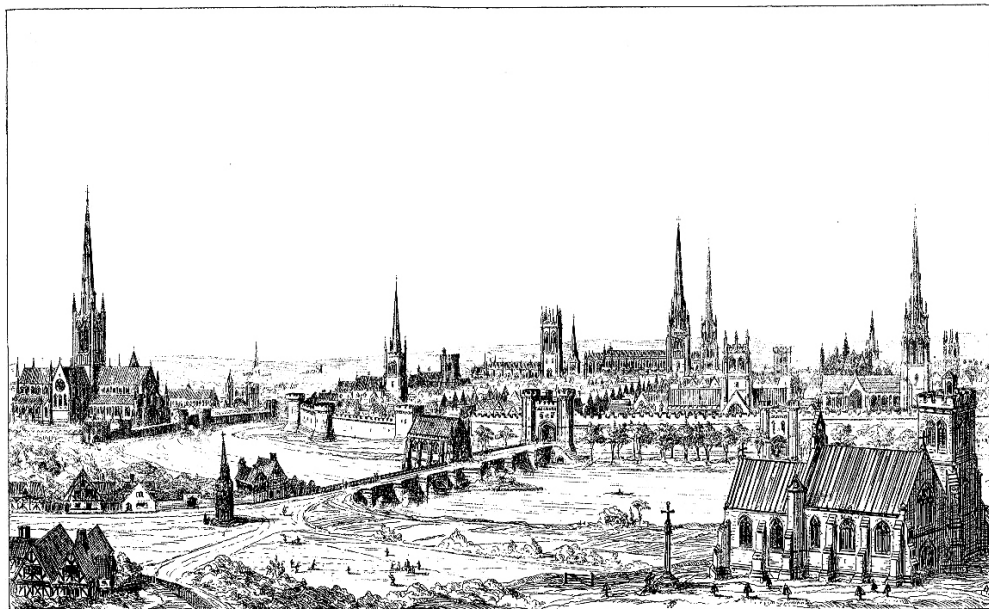
In *The True Principles of Pointed or Christian Architecture* Pugin proposes another justification of Gothic style based on a narrower functionalism. Here appear his two principles for design: “1st, that there should be no features about a building which are not necessary for convenience, construction, or propriety; 2nd, that all ornament should consist of enrichment of the essential construction of the building.”⁵ In these two principles Pugin is more specific about the function of architecture. Instead of a whole chain of Christian teleology, he limits the main functional consideration of architecture to “convenience, construction, propriety and the enrichment of decoration.” He then provides many examples showing how the Gothic style fulfils these requirements. In this way Pugin condenses architectural functions into several specific ones which he considers essential. The problem of this essential functionalism is that Pugin does not show why only these functions are the most significant in architecture. In his general functionalism, the central function of Gothic architecture as serving Christian faith is justified by the teleological chain ended by the ideal life after death. But in the essential functionalism, the teleological chain is incomplete: no final end is provided as the justification of “convenience, construction, propriety and enrichment of structure.” Pugin simply made the judgement that these are the essential functions of architecture, but questions, such as why this is the case, why other functions are not included, are unanswered. Without these answers, Pugin’s essential functionalism is incomplete, compared to his more general functionalism in *Contrasts*, because a different final end may cause quite a different judgement of the principal function of architecture, other than convenience, structure and so on. Although these are the most familiar and particular functional considerations in architecture, it does not necessarily follow that they are the only significant ones.

⁵ Augustus Welby Northmore Pugin and Marina Henderson, *The True Principles of Pointed or Christian Architecture* (London: Academy Editions [etc.], 1973), p. 1.



THE SAME TOWN IN 1840

1. St. Michael's Tower, rebuilt in 1750. 2. New Parsonage House & Pleasure Grounds. 3. The New Jail. 4. Gas Works. 5. Lunatic Asylum. 6. Iron Works & Ruins of St. Mary's Abbey. 7. St. Evans' Chapel. 8. Baptist Chapel. 9. Unitarian Chapel. 10. New Church. 11. New Town Hall & Concert Room. 12. Wesleyan Centenary Chapel. 13. New Christian Society. 14. Quakers Meeting. 15. Socialist Hall of Science.

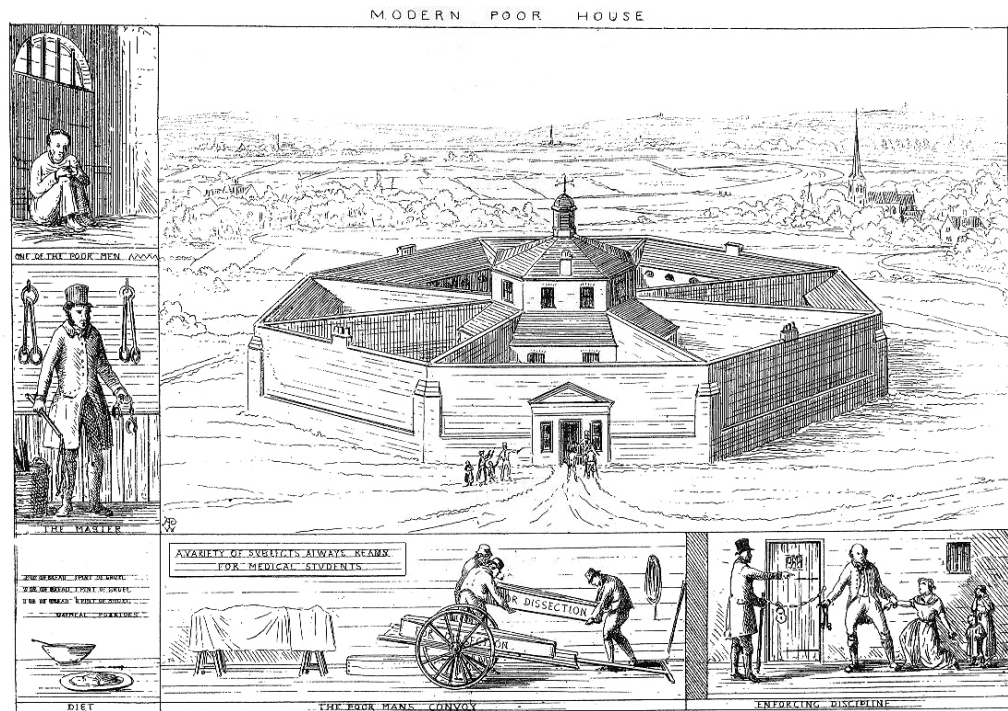


Catholic town in 1440.

1. St. Michael's on the Hill. 2. Queen's Croft. 3. St. Thomas's Chapel. 4. St. Mary's Abbey. 5. All Saints. 6. St. John's. 7. St. Peter's. 8. St. Andrew's. 9. St. Maria. 10. St. Edmund's. 11. Grey Friars. 12. St. Cuthbert's. 13. Guild hall. 14. Trinity. 15. St. Olaus. 16. St. Brice's.

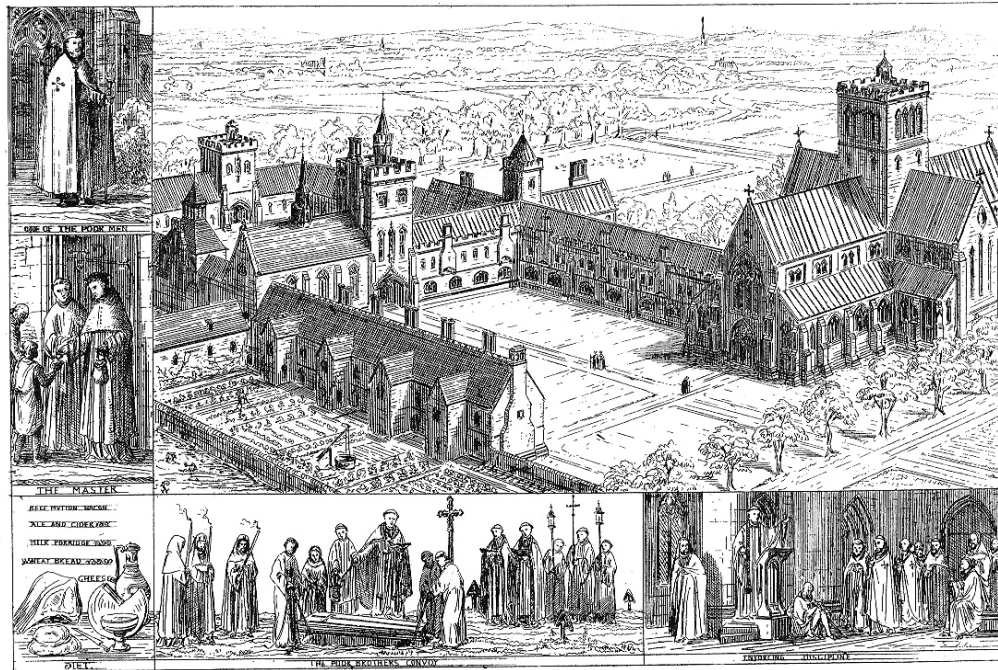
Contrast of new and old town, A new jail of a radial plan is shown in the bottom of the new town. In many aspects the towns shown in this picture are close to the transformation of Edinburgh: a bridge connecting two parts of the city, a new radial prison built on the opposite side of the old town and the buildings of classical style on the same side.

Source: Pugin, *Contrast*



CONTRASTED RESIDENCES FOR THE POOR

ANTIENT POOR HOUSE.



Contrast between new and old poorhouse

Source: Pugin, *Contrasts*

The difference between the two functionalisms, one more generally complete and less specific, the other less complete and more specific, is clearly represented in his criticism of buildings built in the Utilitarian reform. While in *Contrasts* Pugin clearly put the new jail

and new poorhouse in opposition to Gothic architecture, he does not mention them in *The True Principles*. This is not just a careless omission; more important is that his two principles are perfectly compatible with many Utilitarian buildings. Consider the model workhouse designed by Kempthorne since it is very close to Pugin's illustration in *Contrasts*. It has been shown how it is designed for the specific system of the new workhouse. It is quite reasonable to say that such a building accords with Pugin's first principle better than most other 19th century buildings. With regard to decoration, it also generally fits Pugin's second principle, since only a little ornament is added. Many Utilitarian institutions of the 19th century are positive exemplifications of Pugin's two principles. These functional requirements are perfectly compatible with Utilitarianism's social purpose, based on Bentham's teleology of the greatest happiness of the greatest number. Thus Pugin's principles justified both Gothic architecture and Utilitarian architecture because the essential functions he proposes are neutral to both Christian teleology and Utilitarian teleology; they can be combined with different final ends.

Contrary to this ambiguity, Pugin's general functionalism expounded in *Contrasts* provides a complete rejection of Utilitarian architecture. This rejection is not through criticism of style or the specific requirement of function, but through these architectures' contribution of the system's architecture to the final end, i.e. their function is not compatible with Christian teleology. This incompatibility is perfectly illustrated in the contrast of the old and new poorhouse. What Pugin represents here are not two styles of architecture but two institutions. The modern poorhouse is represented as an oppressive institution distinguished by cruelty against the poor, who are treated badly and dissected after death. Contrary to this, the medieval poorhouse, managed by the church, is represented as a benevolent institution; poor people are given good clothes, food, disciplinary instruction and a decent funeral in the end. The message is clear: while the ancient institution really relieves the poor and helps them to enjoy life and meet death as a Christian, the modern institution only tortures them and uses them as material. It is the difference between the two teleological chains that constitutes the largest distinction between the two institutions. From Pugin's view of Christian teleology, Utilitarian institutions are pure evil and infinitely inferior to their Gothic predecessors. Although these buildings are efficient in fulfilling their function in the New Poor Law system, such "good functioning" is not recognized as a justification for these buildings, because in the teleology chain there is no neutral function: all functions must aim at the final end, and the ones incompatible with the final end must be rejected. In this way, Pugin's more complete teleology provided a firm basis for the rejection of Utilitarian

institutions.

One may question whether it is appropriate to compare the two kinds of functionalism. Essential functionalism concerns only the most particular characteristics of architecture such as convenience and structure. As these factors only exist in architecture, not in painting or sculpture, they are regarded as the embodiment of architecture's essence, distinguishing it from other arts. A functionalism only concerning these special characteristics is universal for all architecture. It is thus a genuine architectural theory because it is based on the internal property of architecture. Contrary to this, the more general functionalism is much less "architectural" because it is based on a complete teleology, not derived within architecture but imposed from outside. Moreover it is not peculiar to architecture. For example the symbolic meaning of Gothic ornament can also be found in painting and sculpture. Even though they are good constituents of the overall teleology, doubt still remains that they belong to the peculiar essence of architecture. On the other hand, such full teleology is not part of a genuine universal architectural theory, because it is quite possible that different people have different views of final ends. One kind of teleology may justify one building but may not justify another. As a consequence of not originating from an intrinsic quality of architecture, general functionalism limits its field of validity. In this sense general functionalism is less universal although it provides a fuller interpretation of architectural function, and essential functionalism is more universal even though its value basis is incomplete. If we accept that an architectural theory must discuss something universal to architecture, the former seems unqualified and the latter justified.

This view is based on the identification of the essence of architecture with its peculiar functions that other arts cannot fulfill. But this identification is not as self-evident as it appears. In fact it is very close to Aristotle's metaphysical teleology. As has been discussed earlier, in Aristotle's theory each being has its own prefixed *telos*. What exactly this *telos* is can be detected from the peculiar function of this being, i.e. the function that distinguishes it from other beings. This rationale takes him to the conclusion that the highest good for human beings is excellence in the peculiar function of a human being –rational thinking, and the ideal life, a rational contemplative one. For Aristotle, the *telos* is the indispensable factor in a real understanding of the essence of a being. It constitutes the Final Cause, one of the four causes in the full explanation of a being. Any explanation lacking this part, such as that of Atomism, is inevitably inadequate. This view is derived from Aristotle's metaphysical teleology, as he believes that every being has its own peculiar *telos* which fixes its position

in the chain of beings ended by the unmoved mover. Such a priori *telos*, which can be derived from the peculiar function of that being, can provide a stable and rational foundation for any theory deciding what the ideal state of that being should be. Moreover such theory is also necessary: since every being inevitably pursues its *telos* it constitutes a necessity rather than one choice out of many.

Although not clearly stated, essential functionalism is based on the similar rationale. It hopes to deduce a necessary theory from the essence of architecture, i.e. its peculiar functions. This is fully represented in Lodoli's dictum that "in architecture only that shall show that has a definite function, and derives from the strictest necessity."⁶ It is also behind Laugier's structural rationalism exemplified in his famous primitive hut. Both intend to give architecture a rational and necessary foundation derived from some peculiar functional element in buildings. Harries Karsten points out that such a thing as a primitive hut, "has played in architectural theory much the same part that the social contract has played in political theory. Whether there ever was such a hut matters as little as whether there ever was such a contract, both are imaginative constructs informed by reason and meant to legitimate a certain practice."⁷ At the bottom of all these is a teleology seeing architecture as serving some purpose, but it is also an Aristotelian teleology because it defines the essence of architecture with certain functions peculiar only to it. This similarity between essential functionalism and Aristotelian teleology also explains the connection between Aristotelian biology and formal functionalism in the Modern Movement represented by Sullivan's dictum "Form follows function." For Aristotle the *telos*, which is exemplified by the peculiar function of an organ of an animal, is the Final Cause that decides the property of that organ. There is a necessary relationship between form and function. This rationale was smoothly transplanted to the formal functionalism of architecture. It is argued that there is a necessary connection between form and the essential function of architecture. At the base of this formal functionalism is essential functionalism which identifies the peculiar function of architecture as its essence.

But this essential functionalism is not acceptable for the teleology of Utilitarianism. It is not surprising that neither the theory of social contract nor Aristotelian functionalism are not acceptable to Utilitarians. In Utilitarian teleology there is no need for any fictitious contract or metaphysically prefixed *telos* to provide a rational basis for social or architectural practice.

⁶ Cited from Emil Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy and France* (Cambridge, Mass.: Harvard University Press, 1955), p. 96.

⁷ Harries, *The Ethical Function of Architecture*, p. 114.

All activities must aim for the same end, i.e. the greatest pleasure of greatest number. All the values of the different functions of institutions are subject to this final end, conditioned by it and obtaining justification from it. Aristotle's concept of an a priori *telos* does not exist for Utilitarians, nothing is a priori except the final end of greatest happiness; other ends are flexible and changeable depending on their utility in serving this final end. This also applies to architecture. The peculiar functions of architecture are important, but it does not mean that they alone can constitute the essence of architecture. Their values rely on the paramount value, the greatest happiness. Anything contributing to this end can be welcomed. In architecture it is not the case that only the peculiar functions can serve the final end. Other functions, such as the symbolic meaning supported by Pugin in *Contrasts*, can also be accepted as long as they also serve the final end. In the mathematical calculation of Utilitarianism it does not matter whether pleasure is created by the peculiar function of architecture or not, – what matters is the sum of all pleasure. Not just for Utilitarianism, once put in the context of any full teleology the peculiar functions of architecture are inevitably under the command of the final end, no matter what that end is; they are no longer the last words of the most essential foundations of architecture while they themselves are conditioned by other ends. Their solidity as the hard core of architectural theory melts down. This is clearly represented by Pugin's general functionalism. When a full teleology is given, the peculiar function of architecture such as construction and convenience is no longer the ultimate criterion in judging architecture.

As Pugin's example shows, a full teleology not only gives the value basis of the more peculiar function of architecture, it also enables the connection of architecture and the progress of society. As Adrian Forty points out, to establish such a connection "it was necessary to have both a theory of society, and a theory of social causes and effects."⁸ Teleology clearly provides one of the most popular theoretical approaches in explaining social mechanism and the ideal of social progress. Moreover it puts both architecture and society into the same teleological frame and makes it easier to explain their connection in a "unity of purpose." For Pugin it was Christian teleology, including Christian faith, church organization and the final *telos* of life after death that accomplishes this task: for the Utilitarian it was the whole tradition of empirical sociology from Hobbes, Locke, Hume, Adam Smith to Bentham and John Stuart Mill. We have seen how deeply social concern is inherent in the design of Utilitarian institutions. Forty argues that it was just this social concern - the idea that a "building fulfilled, in a mechanical sense, the requirements of the

⁸ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, p. 190.

society within which it was produced,” that distinguishes modern notions of “function” from classical concepts of “convenience.”⁹ But on the other hand he refuses to recognize 19th century ideas of function, such as those of the Utilitarian reformers, as a modern notion, despite their close relationship with social reform. His reason for holding this view is that such social concern in modern terms is only embodied in the belief that human “behaviour could be modified by the form of a building.”¹⁰ Forty’s argument is probably influenced by the strong trend of formal functionalism in the Modern Movement. But for Utilitarian’s general functionalism, it is strange that the social utility of architecture is only confined to architectural form. Moreover it is hardly the case that all notions of “function” in the Modern Movement require form as the sole connection between architecture and society. At least when Le Corbusier claimed “Architecture or Revolution. Revolution can be avoided,” he was also talking about the positive effect of the “healthy and useful and productive” environment created by architecture, besides the effect of architectural form.¹¹ If Forty’s emphasis on form can be ignored, general Utilitarian functionalism, with regard to its relationship with society, is not outside the modern notion of “function” but properly in the centre of it. When considering CIAM’s discussion of minimum living standards, it is hard not to recall Bentham’s detailed discussion of the room and living provisions for prisoners in his Panopticon prison. In this sense, Utilitarian reform is not the end of the classical notion of “function,” but just the beginning of the modern notion of “function.” It may not be too exaggerate a claim to say that it is one of the beginnings of Modern Movement.

To conclude, the two functionalisms – general functionalism and essential functionalism – differ in their view of the *telos* of architecture. While essential functionalism believes the *telos* of architecture is defined by its peculiar functions, which then decide other aspects such as its structure and form, general functionalism holds that the *telos* of architecture can only be decided by the final end: peculiar functions are means towards some other final end. Hence they are not the real dominant essence of architecture; it is the final end that is most decisive. And according to different views of the final end, the peculiar functions of architecture may have a different significance. This does not mean general functionalism overlooks the peculiar functions of architecture. On the contrary these functions can be integrated as significant constituents in the project of reaching the final end. It only refuses to see these functions as the a priori essence of architecture.

⁹ Ibid.

¹⁰ Ibid., p. 192.

¹¹ Le Corbusier and Frederick Etchells, *Towards a New Architecture* (Oxford: Architectural Press, 1987), pp. 289,277.

8.2 The Significance of the Theory of Pleasure in Utilitarianism

Despite the difference between the two functionalisms and the formal difference between 19th century Utilitarian institutional architecture and 20th century modern architecture, it is still widely held that modern architecture is Utilitarian; and many critics of modern architecture concentrate on its Utilitarian character. In what sense is modern architecture Utilitarian? How is Utilitarianism responsible for the problems of modern architecture? And does it indicate the inherent defect of the theory? This section will discuss these questions.

Modern architecture is called Utilitarian mainly because of the same teleological character of the two functionalisms discussed in last section. In both cases, to fulfill some function, to work towards some end, is the paramount basis of practice. Even though they may have different views on the exact content of the end, the same stance of rejecting a non-teleological explanation is embraced by both. Once the end is determined, both have the same concern how to achieve the end in the best way. One aspect of the best ways which is emphasized by both Utilitarian reformers and the proponents of modern architecture is efficiency, i.e. to reach the end at the lowest cost. At least in this aspect modern architecture is quite Utilitarian.

Writing in 19th century, Ruskin had already described the “prevalent feeling of modern times” as a desire “to produce the largest result at the least cost.”¹² But he firmly held that the essential character of architecture, which distinguishes it from building, is the “most unreasoning and enthusiastic, and perhaps best negatively defined, as the opposite of the prevalent feeling” of economic efficacy.¹³ As Karsten Harries points out, Ruskin holds a typical aesthetic approach to architecture.¹⁴ The aesthetic quality of architecture is by nature contrary to the Utilitarian character of architecture because beauty belongs to a different domain. Hence he insists on a sharp distinction between architecture with beautiful decoration and functional buildings such as factories, warehouses and railway stations. He declares it “a general law, of singular importance in the present day, a law of simple

¹² John Ruskin, *The Seven Lamps of Architecture* (New York: Noonday, 1974), p. 7.

¹³ *Ibid.*

¹⁴ Harries, *The Ethical Function of Architecture*, p. 28.

common sense, - not to decorate things belonging to purposes of active and occupied life.”¹⁵ It is not that these things are by nature beautiful, but that they belong to a purposive area concerning work and economic imperative, and such an area should not be mixed with leisure and beauty.

Ruskin’s view is a special example of the general criticism of “instrumental reason,” which is defined by Charles Taylor as “the kind of rationality we draw on when we calculate the most economical application of means to a given end.”¹⁶ Many people criticize this rationality because of the fear that “things that ought to be determined by other criteria will be decided in terms of efficiency of ‘cost-benefit’ analysis, that the independent ends that ought to be guiding our lives will be eclipsed by the demand to maximize output.”¹⁷

In fact such criticism has two levels: the first rejects the teleology of instrumental reason, and the second accepts its teleology but refuses to accept the end of teleology as maximized output. The first level, which insists that “things ought to be determined by other criteria,” has its best representation in Kantian ethics in which human behaviour is determined by law, not by the pursuit of certain end. As shown before, it is very hard to apply this level of criticism to architectural problems. Not only is it hard to transplant human principles onto architecture, but also architecture is widely recognized as serving certain practical needs. We have mentioned Aristotle’s use of architecture as an illustration of teleology. Earlier than that, in *The Statesman* Plato had already distinguished “science of action” (praktike) and “science of mere knowledge” (gnostike), and architecture is seen as one of the most important representatives of practical knowledge serving some ends. The difficulty faced by rejecting this practical character of architecture is probably insurmountable.

The second level of this criticism is more defensible. It only holds that the real end does not equal “maximized output.” The critics believe that there are some “other ends” outside these measurable qualities which should be pursued unconditionally, or at least should not be completely controlled by “cost-benefit” calculation.

In fact the second criticism is not completely incompatible with the Utilitarian principle of greatest happiness. If these “other ends” can also create pleasure, there is no reason why they should not be pursued for the greatest happiness. They can be rejected only if their

¹⁵ Ibid., p. 115.

¹⁶ Charles Taylor, *The Ethics of Authenticity* (Cambridge, Mass.; London: Harvard University Press, 1992), p. 5.

¹⁷ Ibid.

pursuit is incompatible with other ends, such as “maximized output,” and causes the decrease of general happiness. The greatest happiness principle itself does not indicate any such incompatibility. This is best illustrated by the eclecticism of Utilitarian institutions. While Ruskin insisted on erasing decorations from these buildings, for Utilitarian reformers and institutional architects it is not a problem to dress them in Gothic or Classical style.

But it does not mean Utilitarian institutions can be completely acquitted of the charge of ignoring other ends. Although the theory does not necessarily require such ignorance, it nevertheless existed in the scheme of Utilitarian reformers and the institutional building they produced. It is true that many Utilitarian institutions are decorated in a specific style, but such formal considerations were quite marginal in the deliberations of Utilitarian reformers. In their writings, such as those of Bentham’s, there may be several sentences mentioning the formal effect of the buildings, but compared to their discussion of the more specific functions of architecture, these sentences appear completely insignificant. Most of the stylistic characteristics came from the individual architect, not from Utilitarian reformers and officials. They could tolerate these decorative elements, but they were never central to their scheme of reform. A large portion of the Utilitarian institutions are quite barren in their formal effect, and the designs derived from Bentham’s projects are the best representative of the disregard for stylistic considerations, which is the embodiment of Ruskin’s respect for the “other end.”

To generalize, while the original theory of Utilitarianism, i.e. the greatest happiness principle, is not necessarily subject to the criticism of the fallacy of “instrumental reason,” the practice of Utilitarian reform in 19th century can rightly be accused of ignoring “other ends” in a large part. Why is there such a difference? And what causes such a gap between theory and practice? The answer is “the theory of pleasure,” which is crucial for Utilitarianism, but was inadequately discussed by Bentham and Mill.

Bentham’s neglect of other ends beside the “maximized output” is not based on refusing the possible pleasure caused by other ends, but on the minute weight he gives to these pleasures. In his pleasure calculation they are not important enough to be seriously considered and more importantly they are replaceable by other more concrete pleasures. This standpoint can be seen in his theory of pleasure recorded in *An Introduction of the Principles of Morals and Legislation*. After introducing the principle of greatest happiness, he goes on to discuss pleasure and pain. From Locke he inherits the distinction between simple ideas

and complex ideas, and transforms it into the difference between simple or complex pleasures or pains. Following the empirical tradition he holds that simple pleasures or pains are the most concrete atom-like constituent which can be combined to form more complex pleasures and pains. Hence all human pleasures and pains can be reduced into the fourteen simple pleasures and twelve pains Bentham lists.¹⁸ Clearly this theory largely reduces the complexity of human feelings, and enhances the feasibility of comparing different pleasures and pains.

Here lies one of the most central premises of Bentham's theory – the belief that all pleasures and pains can be compared and calculated mathematically. Although Bentham does not directly state this view, his writing nevertheless takes it for granted. He writes: “to a person considered by himself, the value of a pleasure or pain considered by itself, will be greater or less, according to the four following circumstances: 1. the intensity; 2. its duration; 3. its certainty or uncertainty; 4. its proximity or remoteness.”¹⁹ Implicit in this argument is the premise that all pleasure or pain can be weighed by the same standard of “greater or less;” all their values can be measured by the same ruler of quantity. It also implies there is no qualitative difference preventing the mathematical comparison of one pleasure or pain from another. With regard to quantity they are all homogeneous; there is no one that is completely distinct from others and there is no one that is irreplaceable by others. This view is clearly illustrated by one of his most widely quoted phrases: “Prejudice apart, the game of push-pin is of equal value with the arts and sciences of music and poetry.”²⁰ As all pleasures or pains can be evaluated by the same measure, “greater or less” is only about different quantity of homogeneous pleasure, and the “greatest happiness” for Bentham simply means the greatest quantity of pleasure.

Bentham's flattening of pleasures into one single measure of quantity is of great importance. It entails that in the pursuit of “greatest happiness” no end has absolute value because no one is indispensable. This explains why the “other ends” can be neglected in Bentham's calculation, while it is unacceptable by the believers in the distinct value of these “other ends.” Nevertheless this homogeneity of pleasures only provides a possibility; what really decides Bentham's neglect of the “other ends” is the evaluation he gives to each kind of pleasure. In fact Bentham only gives a rough idea of comparing pleasures. The main factors are the four “circumstances” mentioned before and two other factors: 5. its fecundity;

¹⁸ Bentham, *An Introduction to the Principles of Morals and Legislation, Etc. Ms. Notes [by the Author]*, p. xxx.

¹⁹ *Ibid.*, p. xxvi.

²⁰ Jeremy Bentham, *The Rationale of Reward* (London: Robert Heward, 1830), p. 206.

6. its purity, considering the further effect of a pleasure or pain in future actions.²¹ But these vague principles are far away from a complete theory, and Bentham does not discuss how these factors can be applied universally in the practical comparison of two pleasures. What it shows is only a general tendency. About this tendency Bentham's idea is manifest, – what he values the most are the concrete pleasures with high intensity, duration, certainty and proximity. And with regard to the various circumstances affecting people's evaluation of these pleasures, Bentham also insists that legislator and executive magistrate should only consider those whose existence “is capable of being ascertained, and the degree in which they take place is capable of being measured.”²² These statements show that, although Bentham does give a complete criterion for judging the values of different pleasures, he nevertheless has a determined view in his mind of which ones are most important. What he values the most are the most familiar pleasures, such as those related to health and strength, because their value is most ascertained and can be measured in degrees. It is this private “taste” for some specific pleasures rather than the “greatest happiness principle” that explains the concentration of Bentham's institutions on “maximized outputs,” whose values are ascertained and can be measured mathematically.

Now we can have a clearer view of the criticism of Utilitarianism and its relationship with the defects of modern architecture. They are criticized because of the complete concentration on the “maximized output” and the neglect of “other ends,” such as Kantian aesthetic values. But this defect cannot be attributed to a Utilitarian principle because the principle does not necessarily require such bias on different pleasures. It is rather the Benthamite “theory of pleasure” that leads to the choice of a more concrete “output” than unascertained “other ends.” This is also the case in modern architecture. The view that architecture should serve functions does not necessarily cause modern architecture's neglect of other ends, like symbolic meaning or the historical continuation of architecture and city. It is rather the more specific “theory of function,” which decides the different values of various functions, that should be subject to criticism. As discussed in the last section, the view that architecture should serve functions is a “general functionalism”. As Pugin's example shows, it does not exclude symbolic meaning and historical continuity. But essential functionalism, which has an implicit “theory of function” and limits architecture to certain peculiar functions, does induce the larger reduction of architecture's capability of serving different ends. In both cases, it is not the Utilitarian principle and general functionalism, but the Benthamite “theory of pleasure” and essential functionalism, that should be responsible for

²¹ Bentham, *An Introduction to the Principles of Morals and Legislation, Etc. Ms. Notes [by the Author]*, p. xxvi.

²² *Ibid.*, p. lxiii.

people's dissatisfaction that some important ends have been ignored. It does not mean that the more specific pleasures and functions are not good; the crucial point is to be aware that their value must be judged against the final end. It is quite possible that these pleasures and functions are not adequate for the achievement of the final end, and the blind concentration on them may even produce more obstacles on the journey towards that end. The most fatal criticism for Benthamite Utilitarianism and modern architecture is not their teleological character, but their narrow understanding of pleasure and function, which is not compatible with our expectation of the end of life.

In fact this is also the character of the Benthamite reform schemes in the 19th century. To a large extent, it was decided by Bentham's more specific theory of pleasure, rather than the greatest happiness principle. For example, one main criticism of these reforms is their infringement of individual freedom. For modern people, this infringement is completely unacceptable since freedom is regarded as the most important value of human life. But in Bentham's theory of pleasure, freedom is much less significant than the more concrete pleasures of health or security. Thus it is no problem for him to sacrifice freedom for the maximized output of the health and security of prisoners or poor people in the workhouse. At a time when the life of these people is difficult, it is not surprising that Bentham's evaluation of pleasures can be accepted. It is also not surprising that such evaluation is no longer acceptable, when many of these difficulties have been solved and our expectation of the happy life has reached a new level.

No one illustrates the gap between Bentham's theory of pleasure and the ideal life, or the life of greatest happiness in Utilitarian terms, better than John Stuart Mill. His notorious mental crisis can be seen as a crisis of Benthamism. As he states in his *Biography*, the crisis derived from a simple question: supposing that all Benthamite pleasures have been achieved, would it really fulfill his desire for an ideal life? For him the answer is no, because he felt something significant was missed in Bentham's structure of pleasures. When he finally recovered from this crisis, he did not abandon the Utilitarian principle of greatest happiness, but rather rejected Bentham's theory of pleasure and fabricated another kind of Utilitarianism out of his own theory of pleasure.

Central to Mill's theory is the qualitative distinction of pleasures. Recognizing the loose connection between the greatest happiness principle and Bentham's more specific theory of pleasure, Mill claims: "it is quite compatible with the principle of utility to recognize the fact,

that some kinds of pleasure are more desirable and more valuable than others. It would be absurd that while, in estimating all other things, quality is considered as well as quantity, the estimation of pleasures should be supposed to depend on quantity alone.”²³ For Mill this qualitative distinction is more crucial than quantity in some cases. He argues that of all pleasures, the qualitatively higher one is the one that people prefer, “even though knowing it to be attended with a greater amount of discontent, and would not resign it for any quantity of the other pleasure which their nature is capable of.” Hence, “we are justified in ascribing to the preferred enjoyment a superiority in quality, so far outweighing quantity as to render it, in comparison, of small account.”²⁴

So in Mill’s construction of greatest happiness, the qualitative difference of pleasures is of extreme importance. “Greater or less” is not only concerned with quantity, but also about quality; and in some cases quality is even the dominant factor which renders quantity distinctions irrelevant. It is natural that in the pursuit of greatest happiness, such high quality pleasures should weigh more than other pleasures. Different from Bentham, who holds that pleasures can be compared by a universal standard, Mill does not give a general principle deciding the qualitative rank of different pleasures. He rather develops the hierarchy of his theory of pleasure from empirical observations. His conclusion is that, for human beings, pleasures related to the higher faculties, such as mental pleasures, are superior to animal pleasures. Following the Enlightenment idea expounded by Rousseau and Kant, Mill believes these higher faculties embody human dignity. Decided by human nature, it is more satisfying to pursue these higher mental pleasures rather than concentrating on lower body pleasures. As he famously says: “it is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied.”²⁵

Considerable differences between Bentham and Mill’s Utilitarian theories are emerged from by their distinct theories of pleasure. This is manifested in their contradictory views of individual freedom. Bentham values ascertained and measured pleasures. Freedom for him is not directly connected with these concrete pleasures. Hence in his calculation, individual freedom is much less important than individual security. But Mill is different. He values the higher pleasures related to the faculties that distinguish human beings from animals. Freedom for him is one of the most important elements of human nature, and is the foundation for the other faculties to realise their full potential. Thus to enjoy the greatest

²³ Mill and Gray, *On Liberty and Other Essays*, p. 138.

²⁴ *Ibid.*, p. 139.

²⁵ *Ibid.*, p. 140.

amount of the higher pleasures, freedom is the paramount condition. Consequently, individual freedom becomes one of the most important factors in Mill's scheme of greatest happiness. The result brought by the difference of the two standpoints is dramatic: while Bentham is widely accused of infringing individual freedom even in 19th century, Mill is recognized as a founder of modern liberalism and ranks among the most important liberal thinkers of western culture.²⁶

Moreover their theories of pleasure have a different character. While Bentham is confident and writes without hesitation on pleasure, its comparison, its deciding factors and the project to enhance it, Mill is much more moderate. His use of empirical observation in deciding the rank of pleasure shows his skepticism with regard to simple universal answer. Contrary to Bentham's complete belief in the truth of his own argument, Mill recognizes the limitation of human understanding and avoids dogmatic judgement. His theory of pleasure is perfectly illustrated by Berlin's words that: "he continued to profess that happiness was the sole end of human existence, but his conception of what contributed to it changed into something very different from that of his mentors, for what he came to value most was neither rationality nor contentment but diversity, versatility, fullness of life - the unaccountable leap of individual genius, the spontaneity and uniqueness of a man, a group, a civilization. What he hated and feared was narrow uniformity, the crippling effect of persecution, the crushing of individuals by the weight of authority or of Custom or of public opinion; he set himself against the worship of order or tidiness or even peace, if they were bought at the price of obliterating the variety and colour of untamed human beings with unextinguished passions and untrammelled imaginations. This was, perhaps, a natural enough compensation for his own drilled, emotionally shriveled, warped childhood and adolescence."²⁷

Bentham's and Mill's example shows how deep their theories of pleasure determine the general character of their Utilitarianism. In fact even Epicureanism can be seen as a kind of Utilitarianism with its own peculiar theory of pleasure, in which the highest pleasure is the absence of all pain. Evaluation of different pleasures is the central question of Utilitarianism. Different evaluations can create extremely different practical guidance for human life. It may not be an exaggeration to say that the real effect of Utilitarianism comes from its implicit theory of pleasure, its unavoidable evaluation of all pleasures, rather than the greatest happiness principle. Although Utilitarianism is known for this principle, its more substantial

²⁶ Isaiah Berlin and Henry Hardy, *Liberty*, 2nd ed. (Oxford: Oxford University Press, 2002), p. 218.

²⁷ *Ibid.*, p. 221.

content is actually the evaluation of different pleasures. A Utilitarian theory without such evaluation remains deeply incomplete and undetermined, and the gap between the greatest happiness principle and everyday practice can hardly be filled.

To expand it further, all functionalism and teleology have their own “theory of pleasure,” i.e. the evaluation of different functions of *telos*, in the core of their theoretical structure. This is why Broome defines teleology by its character of “betterness relation” as is discussed in Chapter One. Aristotle’s evaluation criterion originates in his metaphysical hierarchy of final causes; Epicurus, Bentham and John Mill all have their peculiar rank of pleasure; it is the same case with architectural functionalism. Without a clear idea of the different functions of architecture and the significance of these functions in architectural practice, functionalism can hardly give any guidance for architects. What connects Bentham’s Utilitarianism and the functionalism of modern architecture is just the similarity between their “theories of pleasure or function,” which concentrate only on a limited number of concrete pleasures or functions and devalue a large number of other ends that many people find meaningful. To a large extent the validity of Utilitarianism or any teleology is decided by such a theory of pleasure or function.

Are Bentham’s and Mill’s theories of pleasure valid? And why are they? These questions concern the foundation of their Utilitarianism, especially the reform schemes. They will be discussed in next section.

8.3 The Problem of Bentham’s and Mill’s Concepts of Pleasure

In *After Virtue* MacIntyre argues that the Enlightenment projects of reconstructing ethics after the collapse of Aristotelian teleology, such as those of Kierkegaard, Kant, Diderot, Hume and Smith, were bound to fail because of an ineradicable discrepancy between their conception of moral rules and precepts on the one hand and their conception of human nature on the other.”²⁸ These projects share a belief in what a rational justification of morality would have to be. First, “its key premises would characterize some feature or features of human nature; second, ‘the rules of morality would then be explained and justified as being those rules which a being possessing just such a human nature could be expected to

²⁸ MacIntyre, *After Virtue: A Study in Moral Theory*, p. 52.

accept.”²⁹ This strategy is doomed to fail because both the concepts of human nature and moral rules have their original and mutual coherence in Aristotelian teleological structure. Once such teleological structure is discarded, the connection between the two elements is also destroyed. Without such teleological foundation, Enlightenment theories of morality are incomplete and incoherent.

As discussed in Chapter One, MacIntyre holds that a teleological structure is constituted by three elements: man-as-he-happens-to-be, man-as-he-could-be-if-he-realized-his-*telos* and the moral precepts which enable him to pass from one state to the other.³⁰ Moral precepts are conditioned by the first element and guided by the second; both elements provide a full justification of morality. But in Enlightenment theories the second element, the notion of end or *telos*, is thrown away, and “leaves behind a moral scheme composed of two remaining elements whose relationship becomes quite unclear.”³¹ Actually the situation is even worse. As many moral precepts aim at changing some aspects of “untutored-human-nature-as-it-is,” there is inevitably a tension between the two. Without the justification provided by the final end, such tension remains a strange thing inside Enlightenment ethical theories. Kant’s emphases on both the freedom in human nature and unconditional abidance of moral rules is just one illustration of such tension. Kant himself is not unaware of this problem, and in the second book of the *Critique of Practical Reason* “he does acknowledge that without a teleological framework the whole project of morality becomes unintelligible.”³²

MacIntyre’s analysis does not apply to Utilitarianism because Utilitarianism is a typical teleology theory. But Utilitarianism is also a typical Enlightenment theory and shares strong similarities with other theories. Is it a successful survival of the Enlightenment project of rebuilding human understanding of the world? To answer this question, we need to look at the Enlightenment character of Utilitarianism.

Despite the difference between Bentham’s and Mill’s theories of pleasure, they share the same strategy to build Utilitarianism from the starting point of the unified concept of pleasure. The solidarity of their theory is based on the belief that pleasure is something with determined properties decided by human nature. Behind their confidence in the universal

²⁹ Ibid.

³⁰ Ibid., p. 54.

³¹ Ibid., p. 55.

³² Ibid., p. 56.

validity of Utilitarianism is the Enlightenment tenet claimed by Hume that “it is universally acknowledged that there is a great uniformity among the actions of men, in all nations and ages, and that human nature remains still the same in its principles and operations.”³³

Together with the notion of universal human nature is the notion that such nature is generally composed of rather simple elements, so that it is possible to discuss them rationally. As Lovejoy puts it, Enlightenment thinkers generally agree that “man is a tolerably simple kind of entity to plumb whose nature was well within the cope of the decidedly limited and simple intellectual powers with which he was endowed. Assuming human nature to be a simple thing, the Enlightenment also, as a rule, assumed political and social problems to be simple, and therefore easy of solution.”³⁴ Lovejoy names this trend of thought “*esprits simplistes*” – “minds which habitually tend to assume that simple solutions can be found for the problems they deal with”³⁵ Berlin points out that such optimism about simplicity was ignited by the success of science in 17th century, especially the great achievement of Newtonian physics. It gave 18th century thinkers the confidence that human nature and the society built on it can be also explained by means of relatively few fundamental properties and the universal laws dominating the interconnections among these properties. The mark of the model of Newtonian physics on British empiricism is manifest. The “simple ideas” of Locke are like the atoms of Newton. “Having their origin somewhere in the external world, dropping into the mind...they either continue in isolation, or are compounded to form complexes, in the way in which material objects in the outer world are compounded out of complexes of molecules or atoms.”³⁶ Meanwhile the association of ideas is seen as having the same function of attraction as in Newtonian physics. Hume describes it as “a kind of attraction, which in the mental world will be found to have as extraordinary effects as in the natural, and to show itself in as many and as various forms.”³⁷ Based on this framework, empirical philosophers believed that all mental phenomenal can be explained as simply, orderly and rationally as physical phenomena were deciphered by Newtonian physics.

Utilitarianism nevertheless strongly represents the Enlightenment characteristics discussed above. Bentham’s identification of his theory as Newton’s physics in moral

³³ David Hume, *An Enquiry Concerning Human Understanding*, *Oxford Philosophical Texts* (Oxford: Oxford University Press, 1999), p. 83.

³⁴ Lovejoy, *The Great Chain of Being: A Study of the History of an Idea: The William James Lectures Delivered at Harvard University, 1933*, p. 9.

³⁵ *Ibid.*, p. 7.

³⁶ Isaiah Berlin, *The Age of Enlightenment: The Eighteenth-Century Philosophers* (Oxford: Oxford University Press, 1979), p. 18.

³⁷ Cited from Isaiah Berlin and Henry Hardy, *Concepts and Categories: Philosophical Essays* (London: Hogarth Press, 1978), p. 20.

philosophy, his structure of complex pleasures out of simple pleasures and his firm belief in the simplicity of Utilitarianism, all define his theory as a typical Enlightenment product. John Stuart Mill was more cautious and has less of an 18th century character, but he is “still engaged, as Bentham was, in trying to bring all the objects and goals of human desire under a single concept, that of pleasure.”³⁸ Pleasure for him is still a unitary concept with determined contents which can be probed from universal human nature.

If all these notions and rationales are well established, Utilitarianism can be seen as an exception to MacIntyre’s judgement that all Enlightenment ethical theories failed. But, as discussed before, the essential part of Utilitarianism is its theory of pleasure. Whether Bentham’s and Mill’s Enlightenment understanding of pleasure is defensible needs more discussion.

If pleasure is a property derived directly from human nature, which is believed to be universal and stable, pleasure itself must also be a kind of thing with determined properties. In the empirical tradition it has a similar character in the mental world to the material object in the external world. It is this characteristic that leads G.E.Moore to the argument that this kind of Utilitarian theory is guilty of “naturalistic fallacy,” which assumes goodness - pleasure or happiness in the case of Utilitarianism – as some property of the natural object, capable of scientific analysis.³⁹ Popper also defines this characteristic as naturalism, and Utilitarianism is close to a mix of biological naturalism and psychological or spiritual naturalism that he identifies. He argues that such naturalism is wrong. On the one hand it ignores the fact that human beings already make choices when living according to the “laws of nature.” It means that making a choice is prior to living according to nature. On the other hand to say that something is natural “is so wide and so vague that it may be used to defend anything. There is nothing that has ever occurred to man which could not be claimed to be ‘natural’; for if it were not in his nature, how could it have occurred to him?”⁴⁰

Popper’s second reason for rejecting naturalism is also echoed by MacIntyre and Bernard Williams. They argue that it is empty to say that people pursue pleasure driven by human nature. Such a concept of “pleasure” is so wide that it exists in whatever men aim at. As people sometimes have unethical aims, it proves that pleasure cannot be used to

³⁸ Berlin, *The Age of Enlightenment: The Eighteenth-Century Philosophers*, p. 236.

³⁹ G. E. Moore, *Principia Ethica* (pp. xxvii. 232. University Press: Cambridge, 1903), pp. 40,41.

⁴⁰ Karl R. Popper, *The Open Society and Its Enemies. Vol 1, the Spell of Plato*, 5th rev ed., *Routledge Classics* (Routledge, 2005), pp. 70-75.

distinguish what is ethical and what unethical. Then it becomes useless for “evaluative and moral purpose.”⁴¹ In fact, this critique can be avoided in Utilitarianism by a specific “theory of pleasure,” which places limits on what pleasures should be pursued and how different pleasures are evaluated to form the right end of greatest happiness. But it also includes the question related to Popper’s first reason for rejecting naturalism: if an extra evaluation of the natural pursuit of pleasure is indispensable, where does it come from? Is it also decided completely by human nature?

The question is hard to answer and I do not pretend to have an answer. But at least one thing is much clearer: pleasure is not a unitary notion with determined properties decided by universal human nature as Bentham and Mill believed. It is rather a complex concept that cannot be understood without a context, i.e. the activity in which pleasure arises. Or to put it in another way, there is no psychologically pure pleasure; it is by nature related to a certain practice, and its properties cannot be explained without reference to that practice. The philosophical background for this argument is complex. It is not possible or the intention of this thesis to discuss it in detail. It may suffice to state it briefly as it is familiar for modern researchers of philosophy and social science.

Generally speaking the rejection of a priori human nature is based on the rejection of the dualisms predominant in western philosophy after Descartes. Instead of seeing subject and object as independent of each other, modern thinkers, especially Existentialists like Heidegger and Sartre, hold that such detachment is wrong because the world and human existence are integrated with each other and are only intelligible in terms of one another; a view vividly represented by Merleau-Ponty's dictum, “The world is wholly inside me, and I am wholly outside myself.”⁴² The dualist view regards objects as material entities whose existence and properties are not affected by human consciousness, and subjects as mere spectators whose experience of objects is structured by human faculties, whose properties are naturally born and are independent of the effect of external objects. Such a view of the co-existence of the detached material world and a pure human consciousness, independent of each other, is now generally believed to be an illusion, falsely abstracted from the more fundamental phenomenon of human existence as Being-in-the-World, as Heidegger puts it. It is argued that “the world is essentially human and that human existence is intelligible only in

⁴¹ See MacIntyre, *A Short History of Ethics: A History of Moral Philosophy from the Homeric Age to the Twentieth Century*, p. 236; Bernard Arthur Owen Williams and A. W. Moore, *Ethics and the Limits of Philosophy* (London: Routledge, 2006), p. 15.

⁴² Cited from David E. Cooper, *Existentialism: A Reconstruction*, 2nd ed., *Introducing Philosophy*; 8 (Oxford: Blackwell, 1999), p. 8. My illustration of Existentialism is largely based on Cooper’s interpretation.

terms of an engagement with it.”⁴³

On the one hand dualism ignores the degree to which “the world is a human one, whose structure, articulation and very existence are functions of human agency.”⁴⁴ As Heidegger argues, in a prior and more “proximal” way, objects are encountered as “ready-to-hand,” which means as equipment for certain purpose or potential purpose. Only in a secondary and somehow distorted way are objects stripped of these meanings and seen as pure objects independent of human concern. Such detachment does not describe our original experience of the world, as Harries argues, “such detachment presupposes prior engagement.”⁴⁵ The world is encountered as a human world illuminated by human concern.

On the other hand, the concept of an independent subject equipped with pure consciousness, such as the questioning subject of Descartes, is also wrong. Prior to the imagination of a pure subject with pure consciousness is the simple fact that human beings are Being-in-the-World, are engaged in purposive practice. Contrary to Locke’s idea of simple ideas prior to complex ideas, the concept of pure sensation is secondary to the experience of the sensation of something in certain conditions. As Heidegger argues “what we ‘first’ hear is never noises or complexes of sound, but the creaking wagon, the motor cycle ... It requires a very artificial and complicated frame of mind to ‘hear’ a ‘pure noise’.”⁴⁶ This suggests that our engaged practice is more fundamental than the notion of a pure mental world. There is no reason to suggest a pre-existing human faculty outside practical engagement in the world. It is summed up by Sartre’s notorious dictum that “existence precedes essence,” which rejects the idea that a human being has a fixed, a priori nature existing independent of and prior to his existential practices in the world.

In another way such dualism is also rejected by Wittgenstein with his language-game theory. Starting from the analysis of common language, his theory rejects on the one hand an “all objective,” “transcendent” realm of things and events possessed of “essences” which are quite independent of our particular conceptual schemes, “language games” and “forms of life,”⁴⁷ and on the other hand the notion of an private inner realm that is manifest in pure

⁴³ Ibid., p. 57.

⁴⁴ Ibid., p. 58.

⁴⁵ Harries, *The Ethical Function of Architecture*, p. 85.

⁴⁶ Martin Heidegger, John Macquarrie, and Edward Robinson, *Being and Time, The Library of Philosophy and Theology* (London: SCM Press, 1962), p. 95.

⁴⁷ David E. Cooper, *The Measure of Things: Humanism, Humility, and Mystery* (Oxford: Oxford University Press, 2002), p. 22.

introspection without presupposing a public language, and the holistic practices behind it.⁴⁸

Two points from this theoretical background are of importance for our current discussion. The first is that there is no such thing as a pure human nature, an a priori essence of human being. Then it is impossible to derive the property of pleasure directly out of the discussion of so called “human nature” as Bentham and Mill tried to do. The second is that all notions, object, subject or any thing else, have their foundation in the practical engagement of Being-in-the-World. Any expatiation upon these notions without referring to practical engagement is doomed to be incomplete or even misleading in some aspect. The same applies to the notion of pleasure. It now appears impossible to discuss it completely separately from the practice of which it is a part. A simple illustration of the second point is that in common life when we talk about pleasure, it is always about something or some activity. It is extremely hard to imagine a pure pleasure without a connection to anything else.

So the question of what is pleasure and how different pleasures can be evaluated does not have an answer in universal human nature. It cannot be answered without considering specific activities. This clearly increases the complexity of the concept since human activity has a much larger scope than predetermined human nature. Unfortunately we must accept that such a dream of simplicity must be put away at this moment: complexity seems inevitable. Now Aristotle’s obscurity about the nature of pleasure appears understandable. In fact, contrary to Plato’s simplistic model of explaining of all pleasures with the Form of pleasure, he adopts the more complex connection of the nature of pleasure with activity. Whether a pleasure should be chosen must be discussed together with the consideration of the nature of the activity. His obscurity now seems more reasonable than Bentham’s over-simplicity. A theory of pleasure is not a simple thing; its full scope involves the discussion of nearly all human activities.

From this point of view, the theory of pleasure that is the essence of Bentham’s and Mill’s Utilitarianism is fundamentally inadequate. Their vision of a unitary concept of pleasure as the basis of all morality is proved to be unrealistic. Pleasure is a diverse and complex concept whose nature must be related to the specific activity. This does not reject the goal of greatest happiness, but destroys the power of simplicity and clearness that Utilitarianism was expected to have. Such complexity also rejects Bentham’s and Mill’s

⁴⁸ Ludwig Wittgenstein and G. E. M. Anscombe, *Philosophical Investigations*, 3rd ed. (Oxford: Blackwell, 1968).

evaluation of pleasures because their evaluation criterion does not derive from discussion of various practices but from the determined human nature they assumed. Inevitably the complexity also challenges the foundation of Bentham's reform schemes as those schemes rely on such evaluation. What all these show is not that Utilitarianism is wrong, but that Bentham's and Mill's Utilitarianism is fundamentally incomplete because they failed to discuss pleasure in the context of practice, hence ignoring some decisive aspects of pleasure. This is the most basic explanation of why their, especially Bentham's, theories seem at odds with our expectation of more pleasure, although they claim that this is just their goal – they were wrong, or not completely right, with some aspects of what pleasure really is.

In this sense MacIntyre's criticism is not completely inappropriate for Utilitarianism. It shares with other Enlightenment theories the ambition to build an ethical theory with the simple elements of human nature. The difference between them is that Utilitarianism accepts teleology while other theories reject it. It has been shown that Bentham's and Mill's vision of pleasure as a unitary notion derived from universal human nature is just an illusion. Recognizing the inseparable connection between pleasure and practice destroys the alleged simplicity of Utilitarianism. But this does not affect the greatest happiness principle because simplicity is not a necessary requirement of this principle. More discussion is needed for the principle itself, i.e. its claim that pleasure is the final end of all action.

8.4 Architecture and Ideal Life

Not only is Aristotle's obscurity about pleasure wiser than Bentham's simplicity, his questioning of pleasure as the final end is also illuminating for current discussion. We have seen his view before that "whether we choose life for the sake of pleasure or pleasure for the sake of life is a question we may dismiss for the present. For they seem to be bound up together and not to admit of separation, since without activity pleasure does not arise, and every activity is completed by pleasure."⁴⁹ There are two aspects in these worlds. The first is that a good life, i.e. happiness, must be accompanied by pleasure. The second is that pleasure cannot be separated from life; it cannot be the final end independently. This standpoint is not completely congruent with Utilitarianism, in which only pleasure is regarded as the sole end that all activity should aim at. So which one is more reasonable? According to previous discussion of the inseparability of pleasure and practice, Aristotle's view seems more

⁴⁹ Aristotle, *Nicomachean Ethics*, Book X, 1175a

attractive – if there is no pure pleasure existing independently, how can it be the end in itself?

From another angle we can also see why pleasure is inadequate as the end. To put it simply, in common practice, to say that we aim at pleasure does not really tell us what to do. For example, when making a chair we aim at making one that can produce the greatest pleasure. Does this Utilitarian principle tell us how to make that chair? Clearly not. What is missed between us and the end of greatest pleasure is a concept of a good chair. Not any chair can produce the greatest pleasure: only a good chair can produce more pleasure and the best one produce the greatest pleasure. So what is the best chair? We can define that it is the one that can produce the greatest pleasure - in logic such a definition presents no problem and can sustain the purity of the Utilitarian principle as the sole end for practice. But the problem is that we still don't know what to do. What we really need are the concrete properties of the good chair, such as its shape, its function, its material and so on. Only these substantial contents of the concept of a good chair can give effective guidance for our activity: pleasure itself can hardly accomplish the task. For the same reason, if ethics can give exact guidance for human practice, it is not sufficient to say we aim at pleasure only. What we must know is exactly in what way pleasure can be enhanced. Furthermore, more concrete properties are required to give us a clear target to direct our action. For in common practice it is these concrete contents that are more useful, because everyone can say that a good chair can create greater happiness, but only the one that knows the property of a good chair can actually make it.

Just as the greatest pleasure principle cannot tell us how to make a chair, the greatest happiness principle is inadequate to tell us how to live. To fulfill this target, we must know exactly what kind of activities and what kind of life can produce most pleasure. An abstract concept of pleasure is insufficient. We need a description of the various properties of the kind of life that can produce the greatest happiness. In other words, we need a description of the ideal life. Such an ideal life should be able to produce the greatest happiness. But greatest happiness is not enough to describe all its characteristics and is hence unable to give practical suggestions for everyday life. It is for the same reason that Habermas claims that “the ‘decontextualization’ of norms in practical discourse requires ‘an offsetting compensation’ that can make good on their application;”⁵⁰ and “any universal morality is

⁵⁰ Stephen K. White, *The Cambridge Companion to Habermas* (Cambridge: Cambridge University Press, 1995), p. 130.

dependent upon a form of life that meets it halfway.”⁵¹

This standpoint is also testified by Bentham’s reform scheme. Although he claims that his proposals are based on Utilitarianism, he never really made any mathematical calculations of pleasure, nor did he really prove that his proposals were superior to anything else in producing pleasure. The real basis of his proposal is in fact a specific vision of an ideal society stabilised by his prisons, workhouses and education system. Moreover his choice of these areas to reform is not an original discovery from Utilitarian principles. As shown in previous chapters, there were already reform movements in all three areas, and the targets were pretty much determined even before Bentham joined in. Utilitarians did not create the reform ends, but rather adopted these ends and consolidated them with their theory of pleasure.

On the other hand, the inseparability between pleasure and practice also indicates the indispensability of a concept of ideal life. As the existence of any pleasure presupposes an activity, the greatest pleasure would inevitably presuppose a form of life bringing together all kind of activities. To restate, there is no pure pleasure, there is only pleasure in practice.

All these discussions do not suggest that the greatest happiness is not worth pursuing. They only show that mere greatest happiness is insufficient as a complete description of the end giving effective guidance for common practice. Instead, we need a more concrete vision of an ideal life, which includes all aspects of human activity. This general principle also applies to architecture. The simple notion of greatest pleasure did not tell us how to build a building. It is rather a specific idea of an ideal life, together with the status and purpose of architecture in that life, that provides the foundation of the definition of a good architecture and shows the direction the architectural practice should move toward. In fact this is exactly how architecture principles were decided in Utilitarian reform, in which architecture, as part of the institution, directly served the ideal social system that Utilitarian reformers envisioned. It is also the characteristic of architecture for Pugin, as is expressed in *Contrasts*. Good architecture is the one that contributes best to our Christian faith, and the faith itself is justified by an ideal life after death. It is also shown in the Modern Movement, in Gropius’s dictum that “good architecture should be a projection of life itself,” in Le Corbusier’s slogan that “architecture or revolution,” and in Wright’s words that “a building is not just a place to

⁵¹ Jürgen Habermas, *Moral Consciousness and Communicative Action* (Cambridge: Polity Press, 1990), p. 67.

be. It is a way to be.”⁵²

These three examples also show how various the vision of ideal life can be, and how different its effect on architecture may be. In fact the concept of ideal life is no less general than the concept of greatest pleasure. What is needed is a concrete description of the various aspects of such a life, and the fuller the better because actions have influence on each other. Only in this case is it no longer an empty concept and it can give illumination to a wide variety of human actions. So what exactly should that ideal life be? What is the deciding factor in forming it? And what is the criterion that justifies it as ideal? These questions are the central questions of ethics. Answering them is beyond the scope of this thesis. What can be said now is that Utilitarianism tried to answer them by the simple concept of pleasure, but it does not work as it hoped. Just as pleasure alone does not tell us how to make a chair, greatest happiness does not tell us the concrete content of ideal life. It may have represented one characteristic of ideal life, but our practices need more information which mere pleasure is not sufficient to elucidate.

It is just this inherent limitation of Utilitarianism that decides its inadequacy as a complete ethical theory. On the other hand it also explains the problem of 19th century Utilitarian reforms. These reforms cannot be justified by the greatest happiness principle directly: to judge them relies on the comparison of the vision of ideal life they suggest and the ideal life people expect. Without doubt, Bentham’s vision did represent some significant characteristics of 19th century expectations of ideal life. But it is not universally valid as he holds, according to the Utilitarian principle. When our expectation of the ideal life changes, it is almost inevitable that some aspects of these reforms can no longer be accepted.

Before ending this thesis I want to have one more word about the relationship between architecture and ideal life. Although the teleological structure is quite clear that architecture serves the end of ideal life, their mutual relationship is not simply a relationship between means and end. Once again Aristotle’s view is very helpful. His idea of virtue provides a good model for our understanding of the function of architecture for ideal life. As MacIntyre suggests, the virtues for Aristotle are “those qualities the possessing of which will enable an individual to achieve *eudaimonia* and the lack of which will frustrate his movement toward

⁵² Walter Gropius, *Scope of Total Architecture* (London: G. Allen & Unwin, 1956), p. 22; Corbusier and Etchells, *Towards a New Architecture*, p. 289; Wright’s phrase is cited from the website of Frank Lloyd Wright Foundation, <http://www.franklloydwright.org/index.cfm?section=research&action=theman>

that *telos*.”⁵³ In this sense virtue is a means to the end of a good life. But in Aristotle’s ethics there is an “internal” relationship between the means – virtue, and the end – *eudaimonia*. It is internal because virtue is not just a contingent means, it is rather inside the concept of *eudaimonia*, i.e. *eudaimonia* is characterized partly in terms of virtuous living. The basic reason for such an internal relationship is that *eudaimonia* is about practice, a process rather than a state, a static point. It not only requires action towards an end, but also requires acting well, which means acting virtuously. It is in this sense that virtue is part of *eudaimonia*.

This internal relationship can be transplanted to architecture and the ideal life. Architecture can be seen as a special virtue that functions as a means for the realisation of the end – an ideal life. But on the other hand, this virtue is also part of the end, and without it the characterization of the end is incomplete. In this sense architecture is not just a means, it is also part of the end; it constitutes some significant content of the ideal life. This is compatible with our common experience. Architecture is not just a tool; it is also enjoyed for its own sake. And the enjoyment has been a contribution to the general happiness of life. It is in this sense that architecture is not just a machine but also an artwork that makes our life more colorful.

8.5 Concluding Remarks

Utilitarianism has tried to provide a rational and clear teleology based on the simple concept of pleasure. This project failed because there is no simple concept of pleasure. By nature pleasure cannot be understood without reference to a specific practice. Moreover, to work as an effective guidance for human activity, pleasure or great happiness are both insufficient. A fuller concept of ideal life must be supplemented. For Aristotle, such a concept of ideal life is determined by the metaphysical biology of human being, which already decides the *telos* of the human being. But for modern people who have been freed from such metaphysical theories, the *telos* is left open for human choice. On the one hand we get freedom, but on the other hand we get the responsibility and burden of deciding our own end of life. This is definitely not an easy task. Bentham believed that he had found the answer, but the reality tells us that is not the case. Today the question of the end of life still remains a great challenge for human beings, and much of the uncertainty of architectural theory is caused by that challenge, because we still have no firm idea of what kind of ideal

⁵³ MacIntyre, *After Virtue: A Study in Moral Theory*, p. 148.

life we must aim at. At the centre of the difficulty of contemporary architectural theory and practice is an ethical problem of the indeterminacy of human end.

Utilitarianism is right with the teleological character of human existence, and right in combining architecture with ethics. But the right answer of *telos* is beyond its scope of pleasure or pain. For a complete theory of architecture, the ethical exploration must be continued.

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