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British Pestalozzianism in the nineteenth century : Pestalozzi and his influence on British education.

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BRITISH PESTALOZZIANISM IN
THE NINETEENTH CENTURY:
PESTALOZZI AND HIS INFLUENCE
ON BRITISH EDUCATION

by

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Philosophiae Doctor
of the
University of Wales

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SUMMARY

The study examines the contribution of Pestalozzianism to British nineteenth century education. It begins by detailing the life of Pestalozzi and the importance of his ideas on education. The emergence of British Pestalozzianism through the efforts of Irish pioneers and those having been in residence in Yverdon is assessed. The work and influence of Pestalozzian supporters in Britain is considered and emphasis is placed on Cheam School and object lessons. The study evaluates the Pestalozzian contribution to particular subject areas and the influence of the Home and Colonial School Society to improvements in infant teacher training and early childhood education in England and Wales. The study concludes with an appraisal of the development of Pestalozzian ideals and the associated controversy and subsequent respectability that surrounded the efforts of the British Pestalozzians.

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PREFACE

In the history of British education the advancement of Pestalozzian ideas might be given a minor place. The developments associated with the British Pestalozzians, however, are important, for they represent one of the earliest Continental influences on British nineteenth century education. Their contribution to progress in early childhood education and infant teacher training offers an interesting account, highlighting the Pestalozzians' involvement in British educational innovations in the nineteenth century. Despite this, the British Pestalozzians' influence is only mentioned in the appendix to Kate Silber's Pestalozzi, The Man and his Work, the accepted leading account on Pestalozzi, and only receives relatively brief attention elsewhere, as in Stewart and McCann's The Educational Innovators and Pollard's Pioneers of Popular Education.

The study is, therefore, an attempt to overcome the conspicuous absence of a detailed evaluation of the contribution and influence of Pestalozzi and the British Pestalozzians on British nineteenth century education. In particular, the study has benefited from the examination of a large collection of manuscript material including various manuscripts passed on to me by the late Dr. Silber and now deposited with the Silber papers in Zürich central library.

Due to the complexities surrounding a study of Pestalozzianism the opening chapter provides an introduction to the ideas and methods of Pestalozzi, which allows for a greater appreciation of the distinctive direction and form that British Pestalozzianism was to take during the nineteenth century. The principles and aims of these Pestalozzian supporters need to be re-examined and an assessment made of their contribution and importance to nineteenth century British educational developments.

ACKNOWLEDGEMENTS

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I am most grateful for the help afforded me by Dr. Germann and the staff of the Zürich Central Library during my research visit to Switzerland. I am also indebted to the French and German departments of the University College of North Wales, Bangor, for their assistance in the translation of various documents.

My thanks are due to the British and Foreign School Society Archives Centre, the Incorporated Froebel Educational Institute and the Froebel Institute College all of which provided useful manuscript material.

Among the large number of departments and libraries which have assisted me, I wish to acknowledge my gratitude to the county record offices of Buckinghamshire, Glamorgan, Hampshire, Surrey and West Sussex, to the library staff of Pembroke Dock Public Library, Sutton Public Library, the British Library, and to the staff at the libraries of Cambridge, Hamburg, Keele, London, Oxford and Swansea Universities.

In particular I owe considerable debt to the staff of the School of Education Library in Bangor and to those at the Public Record Office in Kew.

Finally, I wish to express my gratitude to Mrs. M. M. Bolger for her conscientious typing of the manuscript.

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I. HEINRICH PESTALOZZI - HIS LIFE AND THEORY

1. Educational Practice

The birth of Johann Heinrich Pestalozzi in Zürich on 12th January 1746 represents the beginning of a life that was to be dedicated towards the education of the young and the improved welfare of the poorer classes. His early life was dominated by financial problems that beset his family.¹ The anxious need to care for clothes and shoes prevented him from playing and mixing with other children. Pestalozzi writes of this period:

I was guarded like a sheep that was not allowed to leave the barn. I never contacted boys of my own age on the street. I knew none of their games, their exercises, their secrets; naturally I was awkward in their midst and the object of their ridicule.²

This sheltered and isolated childhood was to shape Pestalozzi's future ideas on the importance of the home and the relationship developed between mother and child.

Having progressed through school and the Collegium Caròlinum, Pestalozzi had a brief involvement with agriculture before turning his attention to education through home industry. His first experiments in home industry, initiated towards the close of 1773, attempted to give the local children of the poor an education whilst they were actively engaged on manual tasks, such as spinning and weaving.³ The experiments were conducted in Pestalozzi's own house, the Neuhof, and the children ranged in age

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1. For an account of Pestalozzi's early life see Silber, K., Pestalozzi, The Man and his Work, 1960, pp. 3-18.
 2. Quoted in Walch, Sr., M. R., Pestalozzi and the Pestalozzian Theory of Education, 1952, p.4.
 3. See letters from Pestalozzi to Tschärner, in Pestalozzi, Sämtliche Werke, (ed.), Seyffarth, L. W., 1899, Vol. III, pp.237-241.

from six to eighteen years.⁴ Despite his confidence in the possibility of the venture being financially self-supporting, it failed to attract sufficient funds and was forced to close in 1779.⁵ To Pestalozzi it represented a personal failure, but the experiences gained in attempting to educate pauper children provided important lessons from which he was to develop his educational principles.

During the period 1780-1798 Pestalozzi was given no further opportunity to continue educational experiments. Nevertheless, these years represent his greatest period of literary activity and enabled him to secure the wider audience that was necessary for the promotion of his educational ideas. It was during this period that he wrote the aphorisms entitled The Evening Hours of a Hermit published in the Ephemerides of Mankind in 1780,⁶ which contain many of the ideas that were later to be associated with his name. These were followed in 1781 by the important work Leonard and Gertrude, A Book for the People. In this book Pestalozzi set his educational ideas in the context of a story based on village life in eighteenth century Switzerland. The popular appeal of this book helped establish Pestalozzi as a respected educational thinker.⁷

Pestalozzi's written works were influential in allowing him to

4. Silber, K., op.cit., p.23.

5. Green, J. A., Life and Work of Pestalozzi, 1913, p.50.

6. A translation of these aphorisms is contained in Green, J. A., and Collie, F. A., Pestalozzi's Educational Writings, 1912, pp.15-32.

7. During the period 1780-1798 Pestalozzi wrote several other important works, including significant revisions of the book Leonard and Gertrude. For an analysis of the works produced see Silber, K., op.cit., pp.32-105; Green, J. A., op.cit., pp.60-65.

return to educational experiments. The chance to express in practice his increasingly popular educational ideas presented itself with the invitation from the federal government for Pestalozzi to preside over a poor-school in Stans.⁸ On his arrival in Stans on 7th December 1798, Pestalozzi soon realised the enormity of his task. He writes in a letter to Rengger, the Minister of the Interior:

Most of them on their arrival were very degenerated specimens of humanity. Many of them had a sort of chronic skin-disease, which almost prevented their walking; or sores on their heads, or rags full of vermin; many were almost skeletons with haggard, careworn faces and foreheads wrinkled with distrust and dread; some brazen, accustomed to begging, hypocrisy and all sorts of deceit; others broken by misfortune, patient but suspicious, timid, and entirely devoid of affection.⁹

Pestalozzi was not, however, to be discouraged. J. A. Green describes his exertions as 'almost superhuman'.¹⁰ Despite having no school materials and being distrusted by the local people, he enthusiastically began to educate and care for the pupils.

The Stans school was initiated and designed for destitute children. The Pestalozzian ideal of educating pauper children in a home environment based on love and trust was the school's primary objective. The months spent at Stans provided Pestalozzi with an opportunity to demonstrate how a true spirit of love and affection applied to the poor could win over even the coldest and unsympathetic

8. Pestalozzi's experiences in Stans are discussed in numerous publications including Klafki, W., Pestalozzi über seine Anstalt in Stans, 1971; Silber, K., op.cit., pp.111-118; Green, J. A., op.cit., pp.69-88.

9. Pestalozzi, J. H., Letter about my time in Stans, 1799, cited in Holman, H., Pestalozzi: An Account of his Life and Work, 1908, pp.73-74.

10. Green, J. A., The Educational Ideas of Pestalozzi, 1905, p.42.

of hearts. It gave him a chance to experiment with such innovations as the school slate for writing and drawing, and to appreciate the fundamental value of the child's natural environment as the main textbook for learning. Although the school lasted only five months, the time was sufficient for Pestalozzi to convince influential friends of the success of his 'method' in dealing with the problems of pauper children.¹¹ It is here at Stans, rather than later at Burgdorf or Yverdon, that Pestalozzi came closest to joining his educational ideals with actual practice.

On the 8th June 1799, the retreating French army forced the abandonment of the Stans poor-school. The interval was but a short one, and by the end of July 1799, Pestalozzi was again at work in another poor-school, now in the small town of Burgdorf.¹² His break from the traditional instruction in the Heidelberg Catechism and his belief in a new method did not win him the immediate support of the community. As a result of local suspicion and distrust Pestalozzi was moved into the local dame school, where his duties were centred on an infant class. Here at last he found his real vocation, achieving his greatest success as both a teacher and educationist.¹³ After only eight months' teaching, the Burgdorf School Commissioners were able

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11. In particular, P. A. Stapfer, the Minister of Education, played an important role in arranging the teaching posts for Pestalozzi at Stans and Burgdorf. See Silber, K., op.cit., pp.109, 111 and 119.
 12. For an account of the Burgdorf school see Kuhlemann, G., Pestalozzi's Erziehungsinstitut in Burgdorf und Yverdon, 1972; Downs, R. B., Heinrich Pestalozzi: Father of Modern Pedagogy, 1975, pp.43-49.
 13. The Burgdorf school attracted a number of young teachers who were to assist Pestalozzi in the development of his ideas. See Pestalozzi, J. H., How Gertrude Teaches Her Children, 1801, translated by Holland, L. E., and Turner, F. C., with introduction and notes by Cooke, E., 1904. (3rd edition) pp.42 and 223-224. During this period in Burgdorf Pestalozzi was visited by Pèrè Girard who was later to reform education in French Switzerland. For an account of his contribution to education at the time see Pressland, A. J., Education and Social Welfare in Switzerland, 1927, pp.35-44; Pollard, H. M., Pioneers of Popular Education 1760-1850, 1956, pp.111-124. Pollard also discusses the Nature School Movement and the main educational forces influencing European education during Pestalozzi's lifetime.

to write to Pestalozzi:

the astonishing progress made by all your pupils, in spite of their many differences in character and disposition, clearly shows that every child is good for something, when the master knows how to find out his talents and cultivate them in a truly psychological manner.¹⁴

The Burgdorf period allowed Pestalozzi to develop his ideas and experiments initiated at Stans, and to illustrate the effectiveness of reducing knowledge to its elements. With this renewed understanding he formed the principle that Anschauung should become the pure base for all knowledge; the child being firstly exercised in the sensory examination of objects and then led on to their names and parts. In working at this simplification of observation, a new 'method' of instruction was created. Here, at Burgdorf, lies the pedagogy which was to find expression at Yverdon and from there inspired in Britain the development of object lessons and the training pursued by the Home and Colonial Infant School Society.

On the 22nd August 1804, having reluctantly moved from Burgdorf to Münchenbuchsee, Pestalozzi was persuaded to enter into a partnership with Philipp Emanuel von Fellenberg, whose agricultural school at Hofwyl was only a few miles away.¹⁵ The arrangement, however, was not a success. The strict disciplinarian qualities of Fellenberg and Pestalozzi's liberal attitudes to child activity proved incompatible. By July 1805 the Pestalozzian 'family', formerly split into two sites at Münchenbuchsee and Yverdon, was at last reunited under Pestalozzi at Yverdon Castle.

14. Quoted in Guimps, R. de, Pestalozzi, His Life and Work, 1890, (2nd Edition), pp.177-178.

15. For further details see Hunziker, O., Pestalozzi und Fellenberg, 1897.

Yverdon provided a most suitable location for the establishing of a Pestalozzian school. Situated less than half a mile from the lake of Neuchâtel and surrounded by beautiful countryside, it offered great scope for Pestalozzi to use 'nature' as his textbook. In the Castle itself, the large halls and wide corridors were readily convertible into ideal classrooms and activity areas. Within two years of arriving in Yverdon, the school had doubled its numbers, having by 1807 some two hundred and fifty residents.¹⁶

The curriculum of the school included the teaching, through the medium of French or German, of arithmetic, geometry, literature, geography, natural history, religious instruction, drawing, writing and singing.¹⁷ In later years lessons in Latin and Greek were also available in the school. Apart from these academic subjects, the children received vocational education in such areas as carpentry, and considerable emphasis was placed on games and other physical activities to improve the health of the pupils.¹⁸

The teaching method at Yverdon was based on Pestalozzi's ideas concerning the importance of Anschauung or observation. As Silber points out,¹⁹ children were not given the products of learning, but were guided to find them for themselves. They were taught to use their own eyes, hands and minds. The Pestalozzian 'method' as discovered at Burgdorf is clearly in evidence. As Vulliemin in his recollections of Pestalozzi and his Yverdon school days writes,

16. Silber, K., op.cit., p.206.

17. See Pestalozzi, J. H., 'Report to Parents and the Public upon the present work and condition of the Institute at Yverdon', 1808, in Sämtliche Werke, op.cit., Volume X, pp.331-361.

18. Ibid.

19. Silber, K., op.cit., p.207.

our studies were almost entirely based on number, form and language. Language was taught us by the help of sense-impression; we were taught to see correctly, and in that way to form for ourselves a just idea of the relations of things. What we had thoroughly understood we had no trouble to express clearly.²⁰

Through adoption of the 'method' there was an encouragement of children's natural gifts and abilities and an emphasis on individual progress.

The home atmosphere based on love, which had been so successfully achieved by Pestalozzi alone at Stans, was recreated at Yverdon despite the presence of other teachers. Indeed, the contribution of the Yverdon teachers to the success of the school was a significant one. Schmid in mathematics, Ritter in geography, and Nägeli and Pfeiffer in singing taught their subjects according to Pestalozzian principles.²¹ The effectiveness of the teaching at Yverdon demonstrated the importance of skilled teachers and helped focus attention onto the possible advantages of teacher training courses.

Despite the success of some of the Yverdon teachers, it is clear that in devoting an ever-increasing amount of time to the literary exposition of his ideas, Pestalozzi allowed his assistants too much freedom in the interpretation of his own theories.²² Downs has commented:

because of their sketchy education and experience, in most instances, the young teachers were incapable of applying

20. Holman, H., op.cit., p.97.

21. Silber, K., op.cit., pp.207-208.

22. For example, see Schmid, J., Die Elemente des Zeichnens nach Pestalozzischen Grundsätzen, 1809, in which Schmid extends Pestalozzi's drawing method from solely straight to curved lines.

Pestalozzian principles in uniform ways
or with true understanding.²³

The resulting diffusion of ideas amongst the staff further intensified personal antagonisms, and although Pestalozzi attempted to keep control of educational practice through regular evening discussions, the school drifted into the control of Schmid and Niederer.²⁴

There remains at Yverdon, however, a considerable amount of continuity between the education practised there and the earlier experiments carried out by Pestalozzi at Stans and Burgdorf. By 1809 Yverdon had established itself as 'the centre of Europe's educational culture'.²⁵ Such international recognition gave Pestalozzi only a hollow satisfaction, for his life-long vision of establishing a self-supporting poor-school was still far from being realised. Although Compayré remarks that

Neuhof, Stans, Burgdorf, Yverdon are the four
stages of Pestalozzi's pedagogical apostolate,
we may almost say the four stations of his Calvary,²⁶

23. Downs, R. B., op.cit., p.71.

24. Joseph Schmid and Johannes Niederer had joined Pestalozzi at the Burgdorf school. They were both destined to play an important part in the success at Yverdon. However, their forceful personalities made them incompatible. As a result Schmid resigned from Yverdon in 1810, but decided to return in 1815. His reappearance eventually led to Niederer's departure in 1817. For an insight into the discord in Yverdon see letters between Mrs. Hillyar and C. F. Wurm (1823-1827), in Wurm Papers, Cod. hans. IV, 76, Hamburg State and University Library. Extracts from these letters are to be found in Silber Papers, Box 4, Central Library, Zürich.

25. Silber, K., op.cit., p.218. It should, however, be noted that because of the Napoleonic Wars and the Continental Blockade, it was not until 1814 that the first of the pioneers of British Pestalozzianism were able to visit Yverdon.

26. Compayré, G., Pestalozzi and Elementary Education, translated by Jago, R. P., 1907, p.19.

this is not reflected in Pestalozzi's own appraisal of his later years. He seems to convey a sense of mounting desperation that a poor-school on the lines of the Neuhof had not been established. Consequently, it was with great joy and enthusiasm that Pestalozzi opened a poor-school in Clindy in 1818.²⁷ It was a form of teacher training college of the type he had long envisaged since his Neuhof days. At first the school consisted of twelve children. In his opinion, these children were not there for their own benefit, but were, as he describes in his New Year Address of 1819,

to become benefactors of mankind, fathers of the poor and mothers of their children . . . You are destined to unfold, strengthen, and revive in the poor, the destitute and the weak, those powers for self-help which God has laid universally in human nature. Children, your destiny is great.²⁸

Unfortunately, at seventy-two years of age, he could no longer match his boundless enthusiasm with youthful determination. Within a few months he found that his control over the school and its curriculum was being eroded away. In particular, James Pierrepont Greaves, later to be a leading figure in the promotion of British Pestalozzianism, persuaded Pestalozzi to allow him to experiment, in order to test the effectiveness of the 'method' in the teaching of English to the Clindy pupils. Soon the curriculum was extended to include French and Latin, and the emphasis on the specific training of neglected children was replaced by instruction in precise school subjects and disciplines. Although not accomplishing Pestalozzi's initial aims and desires,

27. See Pestalozzi's opening speech to celebrate the institution for the poor in Clindy on 13th September 1818 in Pestalozzi, Sämtliche Werke, (ed.), Buchenau, A., Spranger, E., Stettbacher, H., 1927— . Volume XXVI, pp.19-24. Hereafter referred to as Werke.

28. Quoted in Silber, K., op.cit., p.244. For a full account of the New Year Address see Werke, ibid., Volume XXVI, pp.157-169.

it was another success in the eyes of his followers. It again demonstrated the importance of Pestalozzi's pedagogy and the contribution that such a poor-school could make towards the establishing of elementary education on a national scale. Its very success, however, led to its early transfer from Clindy to Yverdon.

The Yverdon school itself was now in rapid decline. Torn by financial problems and internal friction between its staff, it eventually was forced to close in 1825. It was an unheroic end to a Pestalozzian school which had for nearly twenty years been at the forefront in demonstrating the effectiveness of Pestalozzi's method.

This final and crushing personal disappointment proved too much for the now seventy-nine-year-old Pestalozzi. Agitated and grieved by further written disputes, he died in Brugg on 17th February 1827. He had been a living example of his theory, educating the children with such love and devotion as though they had been his own sons and daughters. It was this very demonstration of affection and understanding of children which sets Pestalozzi apart from his contemporaries. His theories and method highlighted a child-centred awareness and gave inspiration to an ever-increasing number of British Pestalozzians. An examination of Pestalozzian theory is, therefore, essential if one is to consider particular applications of his theory to the British educational scene in the nineteenth century.

2. Pestalozzian Principles

Intellectual disagreements are all too frequent when it comes to an analysis of Pestalozzian theory. Translation difficulties; the sometimes vague literary style of Pestalozzi's own writings; and the uncertainty about which theories are only the work of his assistants, have all contributed to a variety of critical interpretations. The

following analysis, far from being an exhaustive one, merely attempts to illustrate and simplify the major elements in Pestalozzian theory, serving as an introductory background to their eventual adoption and modification by British Pestalozzians.

However tentatively, Pestalozzian theory can be divided into five major areas, namely: Moral; Intellectual; Practical; Industrial and Experimental education.

a) Moral Education

This area represents Pestalozzi's initial concern with the nature of God and Man. His earlier writings concentrate on this theme and convey his whole philosophy of life and education. In the Evening Hours of a Hermit, 1780, Pestalozzi writes:

What is man in essence? Apart from differences of station - king and cottager - what is the nature of the manhood which king and cottager alike enjoy? Why do not our wise men examine this question?¹

Throughout his life Pestalozzi searched for an answer to this question. In his quest for the 'purity of our common nature' he began to view God's love for man as the cornerstone on which man himself could improve his human virtues. By emphasizing the humanitarian element in Christianity, Pestalozzi aimed to awaken the divine in man. This was to be, above all, the fundamental aim of education.

To establish such feelings in man, Pestalozzi realised that efforts must be concentrated on the moral development of young children. He was aware that the feelings of love, trust, security, gratitude and obedience were first formed in the relationship between mother and

1. Pestalozzi, J. H., Evening Hours of a Hermit, 1780, in Green, J. A. and Collie, F. A., Pestalozzi's Educational Writings, 1912, p.15.

infant.² This germ of love, developed in the child, could then be incorporated with the love for God - the Creator. Consequently, he held family life in reverence, regarding it as the sole external situation that God had provided for the education of man.³ Above all, Pestalozzi was convinced that the success of the education of the people depended on the good state of the family circle.⁴ In such circumstances the mother provided the only genuine basis for popular education.⁵

This constant reiteration of the importance of the mother within family life, fostering love for God and fellow-man, clearly demonstrates the extent to which Pestalozzi believed that emotional security was lacking in poor families. Thus, he realised the school itself must begin to play a supporting role in supplementing the quality of life in the home. Although he considered this was very necessary, his thoughts on this question penetrated even deeper. He felt there were certain dangers in allowing school life to intrude into the living-room environment of the family. He expressed his caution as to the future role of schoolmasters:

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2. See How Gertrude Teaches Her Children, op.cit., pp.190-197.
 3. Green, J. A. and Collie, F. A., op.cit., p.163.
 4. Pestalozzi, J. H., The Address of Pestalozzi to the British Public, 1818. For an analysis of Pestalozzi's ideas on the importance of family life see Wolfe, A. J., "Domestic Union"; The Migrant Family in Early Nineteenth-Century England In the Light of J. H. Pestalozzi's Concept of Family Community, Ph.D., University of Dundee, 1982.
 5. Pestalozzi, J. H., Letters on Early Education Addressed to J. P. Greaves, 1827, p.125. Letter XXV, dated 5th March 1819, indicates that Pestalozzi considered the education of mothers to be of fundamental significance.

those, therefore, who undertake to replace the possible lack of parents must do so in the parental spirit, and try to resemble what they really are not.⁶

Pestalozzi's greatest problem, however, rested on convincing his followers of the importance of his 'love concept' in their own teaching. The classroom environment of the early nineteenth century was one of rigid mechanism and strict discipline, as such maternalistic attitudes towards pupils seemed an intolerable proposition to many teachers. Such formal teaching, although widespread, did not prevent the growth of Pestalozzianism.

His efforts in moral education aimed to produce a 'whole man'. He wished to eradicate man's weakness and limitations, and to teach him how to help himself. As Pestalozzi emphasizes in his Enquiries Concerning the Course of Nature, 1797, men have the 'power to bend circumstances in large measure to their will'.⁷ This self-help attitude towards moral education was not, however, centred on the materialistic improvement of the poor; it was again based on religious assumptions towards moral perfection. Pestalozzi's concern was focused on the idea that the poor should be educated for poverty, to lead useful lives, no matter what their station in life.⁸ Thus, it was not poverty as such which distressed him, but more the spiritual degradation of those around him.

In the same way, the love between mother and child - so fundamental in Pestalozzi's philosophy of moral education - was conceptualized in religious terms, as a symbol of the relationship between Man and God. This religious aspect of Pestalozzian theory was to play

6. Green, J. A. and Collie, F. A., op.cit., p.162.

7. Ibid., p.58.

8. Pestalozzi, J. H., Letters on the Education of Poor Country Children, 1776, in Sämtliche Werke, op.cit., Volume III, pp. 243-246.

an influential part in the future promotion of Pestalozzian ideas in Britain. Although his educational ideas were essentially religious, he was not prepared to place any special importance on the teaching of religious instruction in his schools.⁹ As Compayré points out,¹⁰ Pestalozzi conceived the universal school, open to all children and distinct from the Church. Religious awareness and the divine nature of Man were to be comprehended by the pupils through the loving atmosphere of the Pestalozzian school itself. This lack of emphasis on religious instruction caused difficulties. At the outset, such pioneers on the British Pestalozzian scene as Charles Orpen consistently pleaded with Pestalozzi to declare categorically that his religious feelings were of a Christian nature.¹¹ Likewise, John Synge repeatedly sought to refute any anti-Christian allegations against Pestalozzi and declared

that the Bible is, and ever has been,¹² the
guide of every thought of Pestalozzi.

Despite these efforts, doubts about the religious foundation of Pestalozzi's methods persisted, causing the slow and fragmentary development of British Pestalozzianism.

b) Intellectual Education

Although 'moral education' provided the underlying philosophy of Pestalozzi's social attitudes, it was 'intellectual education' which

9. Pestalozzi, J. H., Report to Parents, 1807, in Samtliche Werke, Volume X, pp.331-361, does, however, indicate Pestalozzi's concern that a spirit of religion should be developed as well as the encouragement of pupils' attendance in church on Sundays.

10. Compayré, G., op.cit., p.133.

11. See letter from Dr. Charles Orpen to Pestalozzi, November 1820, Ms. Pest., 54a/272/4. Central Library, Zürich.

12. Synge, J. H., A Biographical Sketch of the Struggles of Pestalozzi to Establish his System, 1815, p.XVII.

demonstrated Pestalozzi's pedagogical theories. His desire to harmonize education with nature necessitated a developmental basis to his intellectual education.¹³ His emphasis lay on imitating nature's own gradual growth and development. In this respect Pestalozzi was not advancing anything new, for his ideas closely resembled those pointed out by Comenius in the seventeenth century.¹⁴ Nevertheless, this theory of education based on the spontaneous self-development of the individual in accordance with the laws of nature resulted in Pestalozzi's attempt to introduce a psychological element into education. This was to be one of his greatest contributions to nineteenth century education.

His efforts towards reducing the elements of intellectual education to psychologically ordered principles led Pestalozzi to an appreciation of the importance of sensory experience in the learning process. He realised that it was such interaction between the mind and the impression that constituted the formation of ideas. Writing of such interaction, Pestalozzi observed that through sensory impressions a child unconsciously absorbed a whole series of more or less closely related ideas. This provides the very nucleus of Pestalozzi's theory of education.

This fundamental process of learning is described by him as Anschauung.¹⁵ The term, however, is rather confusing; not merely because of its want of definition in the English language, but also because of Pestalozzi's tendency to over-use the word in various

13. See How Gertrude Teaches Her Children, op.cit., pp.139-144.

14. See Monroe, W. S., (ed.), Comenius' School of Infancy, 1901, pp.35-36.

15. The term was first used by Pestalozzi in a report written in Burgdorf on 27th June 1800, which was later published by Niederer in 1828. See Appendix to How Gertrude Teaches Her Children, op.cit., pp.199-211.

contexts. As a result, the word Anschauung can be translated as either: experience; sense-impression; sense-perception; observation or even intuition, depending on the context in which it is used.¹⁶

Despite the word defying precise translation, Pestalozzi's own thoughts remain clear. He stresses that a child can never accurately conclude what he sees before him, until he has learnt to assess it properly. Consequently, observation must always precede judgement. Even in his later years Pestalozzi insisted that

Life Educates . . . Nature brings the whole range of our sense-impressions to bear on life. All our knowledge of the outside world is the result of sensory experiences.¹⁷

Having acknowledged Anschauung, Pestalozzi realised that the first distinct ideas a child made of exterior objects were the result of the child's own natural observation of the object's form and number, combined with the knowledge they acquired of their name. As number and form are common to all objects, they can be described as primary qualities. Pestalozzi concluded this was nature's way of commencing an acquisition of knowledge. Therefore, he maintained that Form, Number and Language should serve as the basis for all instruction, as they were the starting points on the way to an acquisition of knowledge. Form served to shape the object, number to isolate it, while language readily identified it. In effect, Pestalozzi was seeking to illustrate the process through which the child moves from vague to definite ideas.¹⁸

16. Jedan, D., Johann Heinrich Pestalozzi and the Pestalozzian Method of Language Teaching, Stanford German Studies, Volume 16, 1981, pp.68-69 indicates how various translators have interpreted the term Anschauung.

17. Green, J. A. and Collie F. A., op.cit., p.290.

18. This is often known as Pestalozzi's law of physical nearness, referring to the importance of direct experience. See How Gertrude Teaches Her Children, op.cit., p.79.

Concerning the importance of language, Pestalozzi wrote:

the final end of language is obviously to lead our race from vague sense-impressions to clear ideas.¹⁹

Language, or in this sense 'the word', served as a substitute for the actual object being spoken or thought about. Similarly, Pestalozzi explains number and form as constituting the natural measure for all those impressions the mind receives from without.²⁰ Consequently, as a child becomes fully acquainted with an object, his knowledge and understanding takes on a permanent and concrete nature. J. A. Green, elaborating on this principle of concreteness, also calls this

Anschauung:

ideas are definite when experience has exhausted its powers of adding to their clearness, ie., when further observation can bring to light no additional qualities, when the work of our sensory activities has been completed, and the necessary abstraction has been thought out.²¹

These three principles, Language, Number and Form, represent the foundation on which Pestalozzi built his elementary method. The latter term, however, remains somewhat loose, and lends itself to more than one interpretation. Pioneers of British Pestalozzianism, such as Dr. Charles Mayo, were not infrequently guilty of gross misrepresentation of the method. Such errors were invariably the result of regarding Pestalozzi's method more as a form of teaching than as 'mediating a new spirit in education which should guide the child to think and act

19. Ibid., p.98.

20. Pestalozzi, J. H., Letters on Early Education Addressed to J. P. Greaves, 1827, Letter XXXI, dated 17th April 1819, pp.154-155.

21. Green, J. A., Life and Work of Pestalozzi, 1913, pp.170-171.

rationally and independently'.²²

Several writers have attempted to define Pestalozzi's method of education.²³ In essence, it can be described in ten parts:

1. Education should be based on religion and moral principles.
2. All instruction should progress in a graduated series of steps, from the simplest to the most complex in a psychologically ordered sequence.
3. Teachers must reduce each subject to its elements before instruction can begin, so that the various steps can be identified.
4. Sufficient time must be allowed for children to achieve complete mastery of one step before proceeding to another.
5. The basis of such instruction should be observation, exercising the child's sensory impressions.
6. The emphasis in learning should be on developing the child's intelligence, rather than on factual memorization.
7. Associated with such learning should be freedom for individual expression and development.
8. The child's own natural environment should become a textbook for learning.
9. Education should be essentially practical and realistic, emphasizing the problems of the real world and the lessons of life.
10. The classroom should be an harmonious setting, expressing the love and trust between teacher and pupil as depicted in the parental spirit in the family environment.

Such a summary provides a useful interpretation of Pestalozzi's ideas on education, highlighting the main features that one should have found in Pestalozzi's own schools. His methods, however, because they were such a fusion of ideas and practices, prevent a truly accurate

22. Silber, K., op.cit., p.144.

23. See Monroe, P., A Textbook of the History of Education, 1911, p.620, with reference to Morf's interpretation.

definition. Although Rousseau's influence is clear,²⁴ the fundamental importance of the elementary methods lies not so much in their origin or accurate definition, but in the significance Pestalozzi attached to the natural psychological sequence inherent in child development. Carefully organized sensory experience, therefore, should form the basis of mental progress. Through sensory perception and further response to stimuli, the child will discover for himself information concerning his immediate environment and, in so doing, his intellectual development will progress without the breaks in continuity which are so often the feature of instruction based on words rather than on first-hand experiences. The expression "things before words" demonstrates the true character of Pestalozzi's elementary methods, and shows his contribution in this area of intellectual education to the future emergence of the work of Piaget and educational psychology,²⁵ and Dewey with his emphasis on concrete experience and free activity.²⁶

c) Practical Education

On analysing how Pestalozzi incorporated his theories into classroom practice, one is made immediately aware that he continued to emphasize the importance of guiding and stimulating the child's own self-activity. Through the love and trust fostered between teacher and pupil, the child was to be given all possible liberty in his actions. Pestalozzi believed that such trust would convert the otherwise disruptive tendencies of the pupils.

24. See Gutek, G. L., Pestalozzi and Education, 1968, p.11.

25. See Beard, R. M., An Outline of Piaget's Developmental Psychology, 1969.

26. Garforth, F. W., (ed), John Dewey: Selected Educational Writings, 1966, pp.38 and 40, briefly mentions Pestalozzi's contribution.

While abiding by his elementary method centred on Language, Number and Form, he remained firm in his belief that experience was more important than words; that realities must come before symbolism. Furthermore, Pestalozzi maintained that the relationships between a child's mind and body, his nature and his knowledge, and himself and school conditions, were all necessary factors in any attempt at reforming methods of instruction and curricula. With such ideas Pestalozzi hoped to fulfil his dream of giving children a full all-round training, necessitating the limited use of books and a considerable expansion of the existing curriculum.

In the teaching of all subjects Pestalozzi continually acknowledged the fundamental importance of sensory experience. He stressed the need for pupils to learn and classify observations and to complete the simple before proceeding to the complex.²⁷ Pestalozzi realised the value of creating situations which would stimulate curiosity and activity, and was seldom prepared to rely solely on the natural environment of the child. "Things before words" became the guideline in his schools. Expressing the value of this practical method, he writes in his work, the Swansong, in 1826:

this method of training sense-experience
also stimulates the development of the
powers of speech, inasmuch as, when sensory
impressions are really educative, they give
rise to the need for expression.²⁸

Consequently, speech or language formed the initial subject area from which knowledge could be ascertained, providing the communication

27. How Gertrude Teaches Her Children, op.cit., p.78.

28. Pestalozzi, J. H., Swansong, 1826, in Green, J. A., and Collie, F. A., op.cit., p.292.

between sense-impression and verbal recognition.²⁹ As Holman concluded, Pestalozzi's study of language can be broken down into three distinct areas:

1. the study of sounds, ie., phonetics by which the several organs of speech are developed;
2. the study of words, ie., the means of teaching a knowledge of individual objects;
3. the study of speech, ie., the means of teaching composition, or the correct method of expressing all that is known about objects and their qualities.³⁰

Working as he thought in harmony with the natural course of linguistic development, Pestalozzi arranged for the teaching of sounds to be broken down by their phonetic elements. This he visualized to be initially the work of the child's mother. In his work Instruction for the Teaching of Spelling and Reading, 1801, he set out various sequences of exercises in monosyllables. The child was taught to distinguish and imitate the sounds of language. Pestalozzi abided by the principle that the basis of every syllable was the vowel to which consonants are added, the child learning through oral exercises. With this method progress was slow, each child having to know thoroughly the work he had already covered. To achieve practical success with this method, Pestalozzi established a system of simultaneous recitation, the whole class harmoniously chanting aloud.³¹ Having progressed onto the memorization of model sentences, Pestalozzi made use of object lessons. Objects were brought before the child who would be taught to

29. For a detailed analysis of Pestalozzi's language teaching see Jedan, D., op.cit., Chapter IV, pp.72-128.

30. Holman, H., op.cit., p.199.

31. Pestalozzi also made use of individual mutual instruction. See How Gertrude Teaches Her Children, op.cit., p.18.

express their properties, such as shape, size or colour. In this respect, one can again appreciate the involvement of Pestalozzi's concepts of Number and Form; the child progressed from vague impressions to definite ideas.

Pestalozzi's concepts of Number and Form and their connection to sensory experience are again clearly evident in his treatment of arithmetic. He advocated that the teaching of the principles of arithmetic should be based on real objects rather than rote memorization. Having instructed the mother or teacher to direct the child's attention not just to a tree or a stick, but to one tree and one stick, the child grasped the association between number and object.³² As Pestalozzi writes,

a child can conceive the idea of two balls, two roses, two books; but it cannot conceive the idea of "two" in the abstract.³³

In so doing, the child progressed on to a visual picture of the unit in question, and its relationship to the sum of those units. This method, assisted by the use of three tables,³⁴ proved highly successful; the pupils astounded visitors to Yverdon with their ability at mental arithmetic and their deep understanding of arithmetical processes.³⁵

32. Pestalozzi, J. H., Leonard and Gertrude, in Anderson, L. F., Pestalozzi, 1931, pp.25-26.

33. Pestalozzi, J. H., Letters on Early Education Addressed to J. P. Greaves, 1827, Letter XXXI, dated 17th April 1819, p.154.

34. These three tables were the Tables of Unity, Simple Fractions and Complex Fractions, which became increasingly popular in nineteenth century British schools. Examples of the tables are to be found in Green, J. A., Life and Work of Pestalozzi, op.cit., pp.195, 199.

35. Pestalozzi, J. H., Letters on Early Education, op.cit., Letter XXXI, dated 17th April 1819, pp.156-157.

Another important subject on the Pestalozzian curriculum was the teaching of drawing.³⁶ Pestalozzi's ideas on the teaching of drawing were studied by Christopher Buss, who had joined the teaching staff at the Burgdorf school in 1800.³⁷ With the assistance of Buss an elementary drawing course was devised, leading to the publication in 1803 of the ABC der Anschauung.³⁸ Pestalozzi believed that there must be a few line elements with which all forms could be constructed as easily as words are built up from letters.³⁹

He viewed drawing as a linear definition of form, of which the outline and surface are rightly and exactly defined by complete measurement.⁴⁰ Therefore, he stressed the need to appreciate and understand measurement before attempting drawing. Pointedly he writes,

the usual course of our art-education is to begin with inaccurate observation . . . until at last, and late, the feeling of proportion is matured. Then we come, at last, to that which we should have begun with, measurement.⁴¹

In stressing this 'feeling of proportion' Pestalozzi demonstrates the importance of form in the teaching of drawing. Consequently, such drawing relied on the conversion of precise perceptions into accurate linear statements. Precision of observation was the central theme of the drawing method.

36. The Pestalozzian contribution to the development of drawing is assessed in Ashwin, C., Drawing and Education in German-Speaking Europe 1800-1900, 1981, (revision of University of London, Ph.D. 1980).

37. How Gertrude Teaches Her Children, *op.cit.*, pp.66-68.

38. Ibid.

39. Cooke, E., 'The ABC of Drawing', in Reports from Commissioners, Inspectors and Others, Education Department, Volume XI, 1897, p.137.

40. How Gertrude Teaches Her Children, *op.cit.*, p.117.

41. Ibid.

To achieve drawing accuracy, Pestalozzi relied on his fundamental principle of leading the child from vague sense impressions to clear ideas. Through his emphasis on Language, Number and Form, Pestalozzi attempted to develop the individual's powers of observation. As Ashwin points out,⁴² drawing could play a unique role in bringing together all three, in that it entailed the discrimination of individual forms, the analysis of their shapes, and the use of language to denote them. Pestalozzi believed that through a series of measured subdivisions of the square he could promote accurate observation while at the same time developing hand-drawing skills.⁴³ In particular, he used simultaneous teaching and question-and-answer techniques in the form of a catechism to secure a slow but sequential development.

Although it is clear that Pestalozzi achieved considerable success in the teaching of drawing,⁴⁴ he did not view accomplishment in drawing as an end in itself. His aim was not to develop the special skills of the artist, but to use drawing to facilitate Anschauung through Language, Number and Form. Drawing to Pestalozzi was, therefore, a means of furthering human development.

Pestalozzi also stressed the importance of drawing in promoting hand-writing skills. He argued that 'we use the power given by the art of drawing in the art of writing.'⁴⁵ Therefore, he advocated that all children should learn to draw before they learn to write.

The teaching of writing (which Pestalozzi viewed as a form of linear drawing) was to follow measurement and drawing, and was divided

42. Ashwin, C., op.cit., p.11.

43. How Gertrude Teaches Her Children, op.cit., p.117.

44. Ibid., p.67.

45. Ibid., p.116.

into two stages. The first concentrated on the formation and combination of letters on the slate board, and the second with the use of the actual pen.⁴⁶ With practice on the slate board the child perfected letter writing to their correct proportions. Having mastered this, the exercises were repeated with the use of the pen. In adopting this method Pestalozzi believed he could eliminate the bad habits in children's writing, which had been the result of their early introduction to writing before measurement and drawing.⁴⁷ By such methods Pestalozzi came to view the elementary stages of writing as a form of expression; another way in which the child was learning to talk. Writing was seen, as was drawing, in terms of its contribution to the formal development of the whole person.⁴⁸

Pestalozzi's teaching of geography again relied heavily on the pupil's self-observation, further developing Language, Number and Form. Although Nature itself provided a means of arousing the child's interest and curiosity, Pestalozzi initially had some reservations as to the suitability of geography as an elementary school subject.⁴⁹ However, he accepted that it could provide valuable lessons to children on their everyday environment. Indeed, he realised that it offered opportunities to promote Anschauung and develop skills in classification. As such, Pestalozzi's geography teaching resembles the modern presentation of environmental studies.⁵⁰ A former pupil at Yverdon,

46. Ibid., p.124.

47. Ibid.

48. Ashwin, C., op.cit., p.33.

49. Sämtliche Werke, op.cit., Volume XII, p.366.

50. Watts, D. G., Environmental Studies, 1969, pp.41-44 discusses the historical development of environmental studies and the contribution of Pestalozzi. See also Hopkins, M. F. S., Learning through the Environment, 1968, for details on the emphasis on observation, classification and measurement.

Louis Vulliemin, describes this emphasis on observation. He recalls:

the first elements of geography were taught us from the land itself . . . After taking a general view of the valley, we were made to examine the details, until we had obtained an exact and complete idea of it.⁵¹

On such walks, the pupils were encouraged to collect specimens of earth and rock for further examination in the classroom. By such means the children acquired a fundamental awareness of their natural surroundings, which stimulated an appreciation of physical geography, geology and the part they themselves played within this natural setting.

History teaching, on the other hand, came in for considerable criticism from Pestalozzi. His insistence upon direct experiences, as stressed in the concept of physical nearness, caused him to reject history in view of its relationship to past and distant events. Not convinced of its importance and grieved by its content, Pestalozzi scorned history as an evil intrusion on the elementary school curriculum. With infants in particular, he strongly objected to the early exposition of the iniquitous and violent past of man. Such teaching, he believed, seriously affected the early moral education of the young.⁵²

In contrast, music provided an ideal means through which Pestalozzi could consolidate moral principles. In many respects its teaching resembled that of drawing. He believed that sensory observations in measurement provided a suitable foundation on which an intellectual understanding of music could be achieved. Such music based on singing devised on Pestalozzian lines by the Swiss composer Hans Georg Nägeli

51. Holman, H., op.cit., p.230.

52. Although the teaching of history remained a neglected field under Pestalozzi at Yverdon, there is evidence that Pestalozzi was aware that its limited use could be of some educational value. See Pestalozzi, J. H., Fundamental Principles of Method, 1817, in Sämtliche Werke, op.cit., Volume X, p.633.

and Michael T. Pfeiffer in their publication Teaching of Music on Pestalozzian Principles in 1810, proved very successful and is reminiscent of the later Tonic Sol-fa method initiated by the Reverend John Curwen, which was to become so popular in later nineteenth century British elementary schools.⁵³ Ramsauer, a pupil at Burgdorf and an assistant teacher at Yverdon, speaks of singing as 'one of our chief sources of enjoyment in the institute,'⁵⁴ while another pupil, de Guimps, later recalls, 'there was singing everywhere and always.'⁵⁵

Finally, music in its widest sense also included for Pestalozzi the simple, uniform repetition of even the most monotonous of sounds in the course of his language instruction. In so doing, Pestalozzi believed he was enhancing the love and harmonious solidarity of the pupils, whilst at the same time exercising their mental powers in order to facilitate retention of the fundamental principles of the lesson being taught.

d) Industrial Education

Although industrial production in Switzerland during Pestalozzi's lifetime⁵⁶ was based on domestic economy and was not closely associated with the factory system, Pestalozzi was aware of British industrial development.⁵⁷ He believed he could neutralize the most oppressive consequences of both the feudal and factory systems by educating

53. For further details see Chapter III, pp. 104-106.

54. Holman, H., op.cit., p.238.

55. Ibid., p.239.

56. Industrial activity was mainly centred on the wool and cotton industries. For further details of such industrial development see Biucchi, B. M., "The Industrial Revolution in Switzerland 1700-1914", Volume IV, of Cipolla, C., (ed), The Fontana Economic History of Europe, 1969; Milward, A., and Saul, S. B., The Economic Development of Continental Europe 1780-1870, 1973.

57. Werke, op.cit., Volume X, p.25.

people to increase home productivity and farm work.⁵⁸ As Wolfe points out,⁵⁹ Pestalozzi regarded the domestic family circle as constituting a healthy economic community.

The practical exposition of Pestalozzi's ideas on industrial education was, however, during his own life time, far from successful. As was noted earlier with his attempts at the Neuhof and at Clindy, he was unable to establish a permanent and stable school of industry. Nevertheless, these attempts were at least made, and an indication of Pestalozzi's views on industrial education is available.

The essence of his belief in schools of industry lay in his determination to establish a 'whole man'. He considered it was necessary that such education should prepare children for their future lives. In effect, he aimed to educate the poor for poverty, inasmuch as he did not wish to alter their station in life, nor raise their position in the social hierarchy. As Pestalozzi writes in Leonard and Gertrude, the aim should be to 'prepare men to be what they will be in society.'⁶⁰

In attempting to educate the children of the poor to perform useful work and enjoy contented lives, Pestalozzi realised that self-discipline would have to play an important part in school life. Above all, pupils had to learn how to work and acquire the self-control necessary to carry out such work. To instil this discipline, he insisted on hard work and the complete attention and concentration of

58. Pestalozzi, J. H., Views and Experiences, 1807, in Anderson, L.F., op.cit., p.101.

59. Wolfe, A. J., "Domestic Union", op.cit., p.68.

60. Pinloche, A., Pestalozzi and the Foundation of the Modern Elementary School, 1901, p.123. It is clear that the school at Bonnal, frequently mentioned in the novel Leonard and Gertrude, was itself a school of industry.

his pupils.⁶¹ The rule of silence in the classroom, when they were not participating in simultaneous recitation, fostered a self-discipline in the pupils and furthered their own moral education. As in other schools, however, there always remained a truant pupil. With such cases Pestalozzi was not averse from corporal punishment, but punishment, he maintained, should always be personal. Thus, at Yverdon, it was he alone who caned the pupils. In so doing, resentment between a pupil and an unfamiliar master was avoided.

Discipline of the mind also needed to be harnessed to a discipline of the body. This called for a greater use of gymnastics and bodily exercises. Pestalozzi argued that the existing neglect of the physical well-being of the poor was the main cause of their susceptibility to disease and their unreliability for work. As physical exercise was a natural phenomenon, so he believed it was the responsibility of parents and teachers to further nature's development.⁶² In this way he advocated bodily exercises and encouraged playtime activities in his schools. Such methods proved very successful in improving the health of Pestalozzi's pupils, and so conditioned them for the physical demands of their future trade or occupation.

As Downs has indicated,⁶³ Pestalozzi divided his teaching of vocational skills into three major areas, namely, agriculture, industry and handicraft. Having experimented with spinning, weaving and agriculture in the form of gardening at the Neuhof, he began to appreciate

61. Pestalozzi, J. H., Letters on Early Education, op.cit., Letter XXX, dated 10th April 1819, p.149, stresses that exertion is indispensable for the attainment of knowledge, and that pupils' interest should be excited and kept alive, but not through the use of fear.

62. Ibid., Letter XXII, dated 10th February 1819.

63. Downs, R. B., op.cit., p.65.

their educational value. In particular, he found that such tasks served to develop individual self-discipline. Pestalozzi's efforts in industrial education were, therefore, linked to moral and physical objectives. He aimed to avoid the separation of the work place from the home and to give individual children a sense of pride in manual pursuits, while preparing them for their future station in life.

e) Experimental Education

The result of Pestalozzi's insistence on education based on discovery learning invariably turned the Pestalozzian schools into experimental institutions. The schools were alive with experiments. The pupils' own experiments gave them a deeper and more personal understanding of the subjects studied, promoting an independence of thought, very uncharacteristic of nineteenth century education.

The Pestalozzian contribution to experimental education, however, was centred not so much on experiments by the pupils themselves, as on influencing a new direction of experimental enquiry. Pestalozzi's concern was to find answers to the contemporary educational problems that lay around him. Indeed, he argued that the direction of European education should be turned right round and put on a new road.⁶⁴ To consider whether, in fact, he succeeded in redirecting European education, one needs to examine the central themes of Pestalozzi's experimental education and discuss later their possible impact and implications on British education.

Firstly, through his educational writings, Pestalozzi generated an awareness of the importance of the early years of childhood. He emphasized the importance of the growth of love between mother and

64. How Gertrude Teaches Her Children, *op.cit.*, p.153. For background information on education in Switzerland prior to Pestalozzi refer to Pressland, A. J., *op.cit.*, pp. 6-15.

child, and the possible consequences of an early separation from the family environment. Such observations focused attention onto the individual child.⁶⁵

Pestalozzi also believed that a knowledge of child development was a necessary requisite for all competent teachers. Many teachers of his time were far from competent. Indeed, elementary teachers were often of low standing in the community, being unfit for or incapable of any other work. Pestalozzi stressed that good teachers needed to be sought, trained and educated.⁶⁶ Above all, he continued to emphasize the vital importance of teachers understanding what they were doing; it was not sufficient for them to rely on an instinctive appreciation of the task at hand.

He believed that the teachers of the poor should be men and women from the same social rank as the pupils themselves. This would serve to enhance a closer relationship between school and home. To establish the principle of assisting the poor to educate themselves, Pestalozzi thought in terms of a teacher training department attached to an experimental school. The developments at Clindy in 1818⁶⁷ followed this principle, aiming to provide a supply of trained teachers for the education of the poor.

Pestalozzi believed that the best form of teacher training was through experimental enquiry. By studying teaching practice and the principles involved, each student could establish a science of teaching

65. This was also the main contribution of Rousseau and the English Rousseauites to educational thinking in Britain during the late eighteenth and early nineteenth centuries. The experiments of followers such as Thomas Day and Richard Lovell Edgeworth assisted in promoting the idea of the natural development of the child and helped to produce an educational climate favourable to the introduction of Pestalozzian methods.

66. Sämtliche Werke, op.cit., Volume XII, p.107.

67. Silber, K., op.cit., p.243.

that would assist them in any future teaching situation. The Pestalozzian concept of teacher training was, therefore, firmly centred on a tradition of experimental education. The actual idea of trained teachers, of course, was not new, but Pestalozzi gave practical expression to the idea, supporting a theoretical framework from which it could materialize.

Another aspect of Pestalozzi's experimental education was the way he used children to teach other children in his classrooms. Unlike the rigidity of the monitorial systems of Bell and Lancaster in Britain, where monitors were responsible for drilling either individual or large groups of children,⁶⁸ Pestalozzi's form of mutual instruction relied on the more capable pupils taking personal responsibility for the instruction of individual children.⁶⁹ This, Pestalozzi believed, had the added attraction of strengthening the pupils' conscientiousness and harmonizing classroom loyalty. This form of instruction again was to be experimental, for such forms of mutual instruction were a departure from contemporary teaching practice.

By his efforts in experimental education, spanning developments in child psychology and vocational training, Pestalozzi helped to stimulate the nineteenth century humanitarian motive in education. His experiments highlighted new ideas and demonstrated the need for a reappraisal of the traditional methods of the teaching of the young and attitudes towards the education of the children of the poor.

68. Comenius had also used a monitor system, with the more intelligent pupils taking responsibility for groups of ten less able children. See Curtis, S. J., and Boulton, M. E. A., A Short History of Educational Ideas, 1966, p.195.

69. How Gertrude Teaches Her Children, *op.cit.*, p.18.

II. THE EMERGENCE OF BRITISH PESTALOZZIANISM

1. Pioneers in Ireland

Initial British interest in Pestalozzi's work can be traced to a number of important publications prior to 1816. As Silber points out,¹ foreign literature did much to publicize Pestalozzi's efforts in Yverdon.² Significant books in English included Elizabeth Hamilton's Letters on the Elementary Principles of Education in 1801, and Hints Addressed to Patrons and Directors of Schools in 1815. Richard and Maria Edgeworth's Essays on Professional Education in 1809 also mentioned Pestalozzi's work. Similarly, Robert Owen's A New View of Society written between 1812-1813 and his educational experiments in New Lanark contributed to the educational climate and, as Barnard indicates,³ assisted the continental reformers in extending their influence into Britain. However, actual Pestalozzian developments in England stem largely from those British travellers who studied at first hand the principles and practice of Pestalozzi in Yverdon. While some stayed for several weeks, (Synge, Orpen) others, intent on a deeper understanding of Pestalozzi's ideas, remained as assistants and teachers for as long as four years (Browne, Greaves and Mayo). It was in Yverdon, and not in Stans or Burgdorf that the British Pestalozzians received their inspiration on the advantages of the Pestalozzian method.

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1. Silber, K., Pestalozzi, The Man and his Work, 1960, pp.279-280.
 2. Of particular importance were Staël, Mme. de , De L'Allemagne, 1810; Jullien, M. A., Espirit de la Méthode d'Education de M. Pestalozzi, 1812.
 3. Barnard, H. C., A Short History of English Education, 1949, p.69, cited in Silver, H., The Concept of Popular Education, 1965, p.149.

The first of the British Pestalozzians to visit Yverdon was John H. Synge of Co. Wicklow. His contribution to the development of British Pestalozzianism is an important one.⁴ Born in Dublin in 1788 to parents of firm Protestant convictions, Synge enjoyed a privileged childhood, being privately educated until his admission to Trinity College, Dublin in 1805.

Having transferred to Oxford, Synge graduated in 1810 from Magdalen College, and returned home to his father's estate at Glanmore. It was a time to reflect on his past studies and to consider at leisure his future plans. As he recalls, time was 'entirely at his own disposal.'⁵

The peace and tranquility of home, however, merely excited in him a desire to witness the bravado of war, and so, in October 1812, Synge set out for Lisbon. By the time of his arrival, the Peninsula War was receding northwards. His youthful enthusiasm for the excitement of conflict soon faded. Having spent nearly a year sketching the scenes of Portugal, he eventually resumed his European travel through Spain, France and Italy, finding himself in the autumn of 1814 in Yverdon, Switzerland.⁶

Pestalozzi's institute, now just past its zenith,⁷ was the town's main, if not only, attraction. Yet, Synge was far from interested in

4. A detailed and interesting account of Synge's contribution is to be found in Williams, P. C., 'Pestalozzi John, a study of the life and educational work of John Synge', Ph.D., University of Dublin, 1966. See also Williams, P. C., 'Pestalozzi and John Synge', Hermathena, 106, 1968, pp.23-39.

5. Synge, J. H., A Biographical Sketch of the Struggles of Pestalozzi to Establish his System, 1815, p.v.

6. Williams, P. C., Hermathena, op.cit., p.24.

7. Silber, K., op.cit., p.219, indicates that in 1809 the institute reached its peak of prosperity.

visiting any school:

feeling no small degree of prejudice against schemes of education, from the little he had seen of the mechanical systems practised at home.⁸

However, in order to please some friends, he accompanied them on a visit to the institute where

the intelligent countenances of the children, and the energetic interest which they appeared to take in their studies, forcibly attracted his attention, although the lesson was in German, with which he was, at that time, quite unacquainted.⁹

With his interest now aroused, Synge listened to an arithmetic lesson through the medium of French. This so impressed him that he decided to stay on at Yverdon and study Pestalozzi's system of instruction in depth. His stay lasted three months, as he attempted 'to bring home as much as possible of what appeared so intrinsically valuable'.¹⁰

Yet, Synge's eyes were not only opened to the intellectual benefits deriving from Pestalozzi's system of education, he was even more aware of the moral and humanitarian implications of Pestalozzi's work. As he forcefully writes:

but the great point in which Pestalozzi appears to have surpassed all his predecessors in the paths of instruction, is the removal of all that misery and compulsion, which, till now, has clouded the acquirements of our juvenile years.¹¹

Inspired by the total dedication of Pestalozzi and the parental spirit of the institute and its staff, Synge returned directly home in the early months of 1815. He was determined to translate and disseminate

8. Synge, J. H., A Biographical Sketch, op.cit. p.v.

9. Ibid., p.v.

10. Ibid., p.vi.

11. Ibid., p.xv.

Pestalozzi's ideas to gain them popular appeal. He evidently did not waste any time. As his letters to Pestalozzi disclose, on his return to Ireland in 1815 Synge established a poor-school in Glanmore, the first British Pestalozzian school. Commenting on this school and its children, he enthusiastically writes:

their progress in Language, Number and Form and their good self-expression have greatly interested those who have inspected them without prejudice . . . Everyone is astonished to see the results already achieved . . . I have been more successful than I should have thought possible.¹²

These school experiments gave Synge the necessary opportunity to practically express his own interpretation of Pestalozzi's pedagogy. It remains clear, however, that Synge continued to place considerable importance on Pestalozzi's popular work How Gertrude Teaches Her Children, (1801). His own sensitivity was such that he was quick to acknowledge the vital part that a mother and the living-room environment had to play in an infant's education. As he proudly writes to Pestalozzi,

what will please you even more than the school's success . . . is that several good mothers have begun to follow the steps, care and patience of your Gertrude . . . the harmonious relationships thus produced between them and their children could not be expressed in a letter.¹³

But although the foundation of a first British Pestalozzian school was of undoubted value in itself, it was Synge's written interpretation of Pestalozzi's work which was to really determine the future growth of British Pestalozzianism. In this respect, Synge must take credit for contributing to early British interest in Pestalozzi's work in Yverdon.

12. Three letters from Synge to Pestalozzi, Dublin 1816-1818; Ms. Pest., 55a/365/1-3, Central Library, Zürich.

13. Ibid.

In order to win British acceptability of Pestalozzianism, Synge began by writing two separate works. The first of these was of a relatively general nature, A Biographical Sketch of the Struggles of Pestalozzi to Establish his System, while his second work concentrated more deeply on Pestalozzi's theoretical approach, A Sketch of Pestalozzi's Intuitive System of Calculations. Both these works, published in Dublin in 1815, were written (possibly because Pestalozzi was considered something of a heretic in religious circles in Ireland) under the obscure pseudonym 'An Irish Traveller'. Having progressed to the establishment of another school and a private printing press at Roundwood in 1817,¹⁴ Synge continued his attempt to encourage Pestalozzian ideas in Britain by publishing between 1817-1820 a number of Pestalozzian pamphlets, including, amongst others, Pestalozzi's Intuitive Relations of Numbers (in four parts, 1817-1819) and The Relations and Description of Forms, according to the Principles of Pestalozzi (1817). Synge also distributed brochures on the Pestalozzian method to headmasters which, the evidence suggests, were favourably received.¹⁵

Apart from Elizabeth Hamilton's book supporting Pestalozzi's system,¹⁶ Synge was the only person to produce English Pestalozzian material until P. H. Pullen's The Mother's Book in 1820.¹⁷ Although the circulation of Synge's Pestalozzian literature cannot be ascertained, Williams suggests¹⁸ that while the Roundwood publications

14. Williams, P. C., Hermathena, op.cit., p.31.

15. See five letters, Orpen to Pestalozzi, 1818-1823, Ms. Pest., 54a/272/1-5. Central Library, Zürich.

16. Hamilton, E., Hints addressed to Patrons and Directors of Schools, 1815.

17. For a list of English Pestalozzian works from 1815-1837 see Williams, P. C., 'Pestalozzi John', op.cit., pp.171-172.

18. Ibid., p.173.

reached mainly an Irish audience, his two professionally published books, A Biographical Sketch and Pestalozzi's Intuitive System of Calculations had a much wider circulation in England.¹⁹ Indeed, it is clear that James Pierrepont Greaves and Charles Mayo, both destined to play significant roles in the development of English Pestalozzianism, received their initial introduction to Pestalozzi's ideas through Synge.²⁰

Amongst the first to be directly influenced by Synge were Lord de Vesce and the Dublin physician Charles Orpen. Synge persuaded Lord de Vesce to open a Pestalozzian school in Abbeyleix, Ireland. Unlike the poor-school at Glanmore, the Abbeyleix school was created for Lord de Vesce's own children and other well-off pupils.²¹ At first it consisted of fifteen pupils.²² Orpen indicates that the Abbeyleix school was modelled on the Pestalozzian system.²³ He writes, 'we try to follow your methods as far as we can and know how'.²⁴

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19. The Intellectual Repository, Volume V, No. XXXIII, January-March, 1820, p.46, mentions, however, the limited circulation in England of Synge's A Biographical Sketch. Nevertheless, the article does indicate the significance of the book. See also Pollard, H. M., Pioneers of Popular Education, 1760-1850, 1956, p.175.
20. Campbell, A., Letters and Extracts from the Ms. Writings of J. P. Greaves, Volume I, 1843, p.viii indicates that Synge personally sent Greaves one of his books. (It seems likely the book referred to was A Biographical Sketch). Similarly, Mayo, C. H., A Genealogical Account of the Mayo and Elton Families, 1882, p.79, points out that Charles Mayo heard of Pestalozzi's principles of education through Synge.
21. Letter, Orpen to Pestalozzi, 4th July 1818, Ms. Pest., 54a/272/2. Central Library, Zürich.
22. Letter, Lord de Vesce to Schmid, 19th February 1818, Ms. Pest., 912/87. Central Library, Zürich.
23. For details of the curriculum of the Abbeyleix school see Williams, P. C., 'Pestalozzi John', op.cit., pp.106-107.
24. Letter, Orpen to Pestalozzi, 4th July 1818, op.cit.

Synge, writing in 1818, was able to report that the school had become 'successful beyond our liveliest hopes'.²⁵ By 1820 it was well established, attracting, in Orpen's words, 'more public attention'.²⁶

Having been influenced by the enthusiasm of Synge, Lord de Vesci visited Pestalozzi in Yverdon in 1816. Here he seems to have established a genuine friendship with Pestalozzi's assistant Joseph Schmid, writing in 1818 that 'everything that appertains to you is very close to my heart'.²⁷ While the Abbeyleix school was an important Pestalozzian development in itself, the actual degree of influence of the school in promoting Pestalozzianism in England is difficult to ascertain. However, the school obviously did attract the attention of later English Pestalozzian supporters, as is evident in the references to Lord de Vesci in the letters of Charles Mayo.²⁸

While Lord de Vesci was instrumental in founding the Abbeyleix school for the privileged classes of society, Charles Orpen applied his efforts to establishing Pestalozzian ideas in their true spirit. His medical background had directed him to the plight of the physically handicapped and in particular to the deaf-and-dumb. Having established in Claremont, Ireland, in 1816 a National Institute for the deaf-and-dumb children of the poor,²⁹ Orpen decided to broaden his own knowledge by visiting similar institutes on the Continent. In 1817, he therefore set out with his brother Richard on a tour

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25. Letter, Synge to Pestalozzi, 10th December 1818, Ms. Pest., 55a/365/3. Central Library, Zürich.
26. Letter, Orpen to Pestalozzi, 26th September 1820, Ms. Pest., 54a/272/3. Central Library, Zürich.
27. Letter, Lord de Vesci to Schmid, 19th February 1818, op.cit.
28. Twelve letters from Mayo to Pestalozzi, 1822-1824, Ms. Pest., 53/211/1-12. Central Library, Zürich.
29. The importance of the Claremont Institute is discussed in Williams, P. C., 'Pestalozzi John', op.cit., pp.112-118.

through France, Italy and Switzerland.³⁰

As suggested by Synge, Orpen visited Pestalozzi in Yverdon, and was so impressed by what he saw that he remained there for three months. Having witnessed the benefits of the system practised both in Yverdon and Abbeyleix, Orpen was more than ever determined to apply Pestalozzianism to the needs of the underprivileged.³¹ In 1818, as he journeyed back from Yverdon to Dublin, Orpen enlisted the support of William Allen³² to help him promote Pestalozzi's methods in England. Allen had, in fact, visited the Yverdon Institute in 1816 and had been warmly received by Pestalozzi.³³ After his encounter with Orpen, Allen wrote to Pestalozzi that

I shall be happy to promote thy views and indeed have already thought of a Plan which I have suggested to Dr. Orpen.³⁴

Allen proposed to establish a small committee in London to consider by which means they could best support Pestalozzi. He requested Pestalozzi to send to England copies of his works so that translations could be made and publication costs assessed.³⁵ A similar committee was also to be formed by Orpen in

30. Orpen, G. H., The Orpen Family, 1930, p.200.

31. For details of Orpen's later involvement in the Woodside School in Birkenhead see ibid., p.201.

32. William Allen (1770-1843) was a philanthropist, keen to encourage improvements in the education of the poor. For details of his contribution to education, including his partnership with Robert Owen in New Lanark, his involvement in the British and Foreign School Society and his own educational experiments at Lindfield, see The Life of William Allen, with Selections from his Correspondence, 3 Volumes, 1846; Armytage, W. H.G., Heavens Below: Utopian Experiments in England 1560-1960, 1961; Fayle, J., The Spitalfields Genius, 1884; Silver, H., The Concept of Popular Education, 1965; Stewart, W. A.C., and McCann, W. P., The Educational Innovators, 1750-1880, 1967.

33. The Life of William Allen, ibid., Volume I, p.283.

34. Letter, Allen to Pestalozzi, 17th April 1818, Ms. Pest., 50/5/1. Central Library, Zürich.

35. Ibid.

Ireland.³⁶

By 1818, Pestalozzi's attention was turning to the British Isles for financial support and encouragement.³⁷ His hopes had been raised by the increased British interest shown in his work since the visit of Synge. During the three-year period 1815-1818 Pestalozzi had received a number of important British visitors including, in 1816, Lord de Vesci, William Allen, Henry Brougham³⁸ and Andrew Bell; in 1817, Charles Orpen and in 1818, Robert Owen.³⁹ It was, therefore, with considerable enthusiasm and cautious optimism that he published in 1818 a personal appeal to the British public:

Englishmen! assist my plans by favouring this subscription. I do not seek it for myself, but for Humanity, for the purpose of assuring to posterity, the accomplishment of the object, to which I have devoted the labours of my whole life.⁴⁰

This plea met with a somewhat mixed response. While Synge published Pestalozzi's plea in Dublin in 1818 and made a collection of at least

36. Ibid.

37. For details of the educational climate in Britain at the time see Adamson, J. W., English Education 1760-1902, 1930; Birchenough, C., History of Elementary Education in England and Wales from 1800 to the Present Day, 1938; Lawson, J., and Silver, H., A Social History of Education in England, 1973; Smith, F., A History of English Elementary Education 1760-1902, 1931.

38. See Third Report of the Select Committee appointed to inquire into the Education of the Lower Orders, 3rd and 8th June 1818.

39. Beer, M., (ed.), The Life of Robert Owen, 1920, p.244. Owen was not particularly impressed with Pestalozzi's methods, describing the Yverdon Institute as only one step ahead of ordinary schools. For a discussion on the contribution of Owen to educational thinking and developments at the time see Cole, G. D. H., Robert Owen, 1925; Podmore, F., Robert Owen, 1906; Silver, H., The Concept of Popular Education, 1965.

40. Pestalozzi, J. H., The Address of Pestalozzi to the British Public, Yverdon, 1818, p.10.

2,500 francs for Pestalozzi's poor-school in Clindy,⁴¹ the English response was seriously restrained because of the notable absence of any English edition of Pestalozzi's works. Together with this, the uncertainty surrounding Pestalozzi's religious convictions merely evoked a dilettante curiosity in educational circles. Thus, in comparison to the Irish response, the English one was slow in gathering momentum.

Ireland had enjoyed the distinct advantage of Synge's enthusiasm in promoting the Pestalozzian system. The work initiated in Ireland culminated in the infiltration of Pestalozzian methods into the well-established 'Society for Promoting the Education of the Poor in Ireland', founded in 1811.⁴² This Protestant society, better known as the Kildare Place Society, was supported by over sixteen hundred elementary schools in 1831 and was in receipt of annual grants amounting to £25,000.⁴³ Through its success and influence, it expelled British scepticism about the practicability of Pestalozzi's methods in elementary schools. However, despite the importance of Synge, Lord de Vesci and Orpen in influencing a British interest in Pestalozzianism, its actual development in England was left almost exclusively to James Pierrepont Greaves, the Mayos, and a small group of English Pestalozzian supporters.

41. Letter, Orpen to Pestalozzi, 4th July 1818, Ms., Pest., 54a/272/2. Central Library, Zürich.

42. See Kay-Shuttleworth, Sir J., Four Periods of Public Education, 1862, pp.414-415.

43. O'Brien, W. S., 'Education in Ireland', in Central Society of Education, third publication, 1839, p.144.

2. The Yverdon Experience

The first British visitor to stay at the Yverdon Institute for more than a few months was James Pierrepont Greaves.¹ Born in Merton, Surrey, in 1777, Greaves had become disillusioned with business affairs after a bankruptcy resulting from the Napoleonic blockade of English trade.² During his search to discover some form of religious experience, he came upon an account of Pestalozzi's work (A Biographical Sketch by J. H. Synge) which so interested him that he travelled in July 1818 to Yverdon and remained there until the internal disputes persuaded him to leave in 1822.³

Greaves, unlike some later Pestalozzians, was not a scholar. He lacked a formal education and held book learning in disdain.⁴ His sensitive piety and a mystical belief in Christ,⁵ however, inspired in him an initial enthusiasm for Pestalozzi's educational work that was seldom matched by later English Pestalozzians. Having settled into the Yverdon Institute, Greaves undertook the teaching of English.⁶ During

1. For an insight into the life of Greaves and his involvement in British Pestalozzianism see Campbell, A., (ed.), Letters and Extracts from the Ms. writings of J. P. Greaves, 1845; and Buisson, F., (ed.), Dictionnaire de Pédagogie et d'Instruction Primaire, Volume II, 1887, p.3028.
2. Silber, K., Pestalozzi, The Man and his Work, 1960, p.295.
3. Letter from J. P. Greaves to A. B. Alcott, dated London, 16th September 1837. Ms. Alcott 59M-307(3), 169-170, Houghton, Cambridge, Massachusetts. Copy located in Silber Papers, Box 5, Central Library, Zürich. For details of the internal disputes refer to p.8, footnote 24.
4. See Wurm, C. F., 'James Pierrepont Greaves', 9th May 1852. Article deposited with Wurm Papers, Cod.hans. IV, 76, Hamburg State and University Library.
5. For confirmation of this refer to letters between Mrs. Hillyar and C. F. Wurm in Wurm Papers, ibid. Extracts of these letters are to be found in Silber Papers, Box 4, Central Library, Zürich.
6. Wurm, C. F., 'James Pierrepont Greaves', op.cit.

his four-year stay, Greaves became an important member of the Yverdon staff. At first, he could speak very little French and no German,⁷ which seriously hindered his assessment of the institute. Nevertheless, he was warmly welcomed by Pestalozzi, who viewed Greaves as the cornerstone upon which his educational ideas could be introduced into England.

Greaves' lack of linguistic ability prompted Pestalozzi to write a series of thirty-four letters expounding his theory, the first of which is dated 1st October 1818 and the last 12th May 1819. These were an attempt by Pestalozzi to clarify his ideas, in order that Greaves could appreciate the fundamental truths of his system. As they were written in German, Greaves persuaded his close friend Christian Friedrich Wurm, a young Tübingen theology student, to provide a translation suitable for publication. During the course of this work, Wurm enlisted the help of Mrs. Hillyar to correct any linguistic errors.⁸ In a letter dated 23rd October 1823, she congratulated Wurm on his accurate and sensitive translation, and remarked on how exceptionally beautiful many of the passages were. She was aware, possibly more than any other English Pestalozzian, of their likely impact in England. In the same letter she emphasized, 'they will not meet with general acceptance (this cannot be expected), and the greatest

7. Ibid.

8. See Mrs. Hillyar to C. F. Wurm, 23rd October 1823, in Wurm Papers, op.cit.. Mrs. Mary Hillyar (1788-1884) was the wife of Rear-Admiral Sir James Hillyar (1769-1843). She had travelled to Yverdon in 1819 in order to learn the Pestalozzian system and have her children educated under it. Her eldest son James was a pupil at the Yverdon Institute for several years. Her household in Champitet near Yverdon formed the centre of the "English colony" who were involved in the Yverdon Institute. See letters of Mrs. Hillyar in Wurm Papers, op.cit., for further details of her experiences in Yverdon, and Ms. Pest., 1447, 224, Central Library, Zürich, for confirmation of her son's education at the Yverdon Institute.

enemies will be the evangelical clerics'.⁹

The immediate impact of Pestalozzi and his school on Greaves is clearly evident in a letter from Greaves, dated 18th August 1818, to the then Prime Minister, Lord Liverpool.¹⁰ When one considers Greaves' previous lack of educational interest and the fact that the letter was written only five weeks after his arrival at Yverdon, the letter is written in a remarkably bold and confident style. The purpose of the letter leaves little to the imagination. It was, quite simply, a direct attempt to awaken an official interest in the British Government in Pestalozzi's work and, in so doing, encourage them to send observers to Yverdon to study the system in depth. No reply to this letter can be traced. However, it is not surprising that the letter fell on deaf ears, for the British political climate at the time was far from receptive to demands for action in educational matters.¹¹

Greaves' involvement and influence in Yverdon continued to grow. Pestalozzi allowed Greaves to become the English teaching master in the poor-school in Clindy which was so very close to Pestalozzi's heart and represented an attempt at a teacher training college specifically designed for the needs of the pauper child. The Clindy school experiment was opened by Pestalozzi in September 1818.¹² That Greaves should have been given this post in an experiment of such personal

9. The letters from Pestalozzi to Greaves were published in England in 1827 under the title: Letters on Early Education Addressed to J. P. Greaves, Esq. Confirmation of Greaves' continued enthusiasm for the publication of the Letters is evident in Wurm, C. F., 'James Pierrepont Greaves', op.cit.

10. British Museum Library, Additional Ms. 38273.

11. See Barnard, H. C., A History of English Education From 1760, 1947, pp.63-70 for details of the development of State intervention in education.

12. Silber, K., op.cit., p.243.

importance to Pestalozzi would suggest that Greaves was considered capable of teaching in accordance with the Pestalozzian method, but it should be remembered that Greaves was a very enthusiastic disciple whose sheer zeal could well have over-powered the better judgement of the ageing Pestalozzi. Wurm's account of Greaves supports this view, in that Greaves tended to create his own methods.¹³

Although Greaves continued, in later years, to reflect on the close fellowship that had existed between himself and Pestalozzi, there appears to have been within the turbulent relationships of the institute a growing uneasiness on Pestalozzi's part as to the philosophical viewpoints of Greaves.¹⁴ For Greaves was above all inspired by the works of Swedenborg and Jacob Böhme.¹⁵ He was interested in mysticism and had contempt for all learning that, in his opinion, was not applicable for the good of the inner and outer self.¹⁶ A further recollection by Wurm of Greaves highlights his influence on events in the institute. He writes:

when Miss Taylor in Yverdon had a tooth removed, he took all the pain on himself; and she asserted most profusely that she had felt nothing.¹⁷

Such mesmerizing was not an infrequent practice of Greaves and, together with his strict vegetarian diet, his lifestyle in Yverdon remained in sharp contrast to that of his colleagues. For all his undoubted

13. Wurm, C. F., 'James Pierrepont Greaves'. op.cit.

14. See Appendix A, Letters and extracts from Dr. C. Mayo in Yverdon, 1819-1822, Letter No. 22. One of a largely unpublished collection of forty-five letters, presented in 1933 by Miss Mary Mayo to Dr. R. R. Rusk (of Glasgow University and writer of numerous educational works). Now deposited in Silber Papers, Box 5, Central Library, Zürich. Hereafter referred to as the 'Mayo Letters'.

15. Wurm, C. F., 'James Pierrepont Greaves', op.cit.

16. Ibid.

17. Ibid.

eccentricity, Greaves remained an important figure in the later years of the Yverdon household, being the first Englishman to be employed by Pestalozzi. His influence as the sole English representative was, however, soon to be countered by the arrival of several fellow countrymen.

One such countryman was the Reverend William Browne. He has remained a relatively obscure figure in the development of British Pestalozzianism. Pollard discounts him thus:

the third member of staff was a clergyman named Brown (sic) about whom nothing is known save that he came from Worcester.¹⁸

Similarly, Kate Silber only once refers to his name.¹⁹ The Reverend William Browne was, in fact, the son of William Browne, M.A., of Magdalen College, Oxford, and grandson of William of Iffley, Oxford. The Oxford University Calendar for 1813 onwards shows Browne to have been a scholar at Worcester College, Oxford, on a Mrs. Eaton foundation, candidates for which had to be sons of clergymen of the Church of England. Obtaining his B.A. on 28th May 1814 and his M.A. on 27th June 1816, he became a fellow of Worcester College in 1819.²⁰

In 1819 Browne left England and travelled to Yverdon. Whether, in fact, he accompanied Dr. Charles Mayo who became Chaplain of the 'colonie Britannique', is not clear. Although Browne and Mayo were students at Oxford at the same time and shared decided Protestant affiliations, there remains no evidence in the letters of Mayo to suggest they either knew one another at Oxford or travelled to Switzerland together. It seems likely that the Reverend Browne was

18. Pollard, H. M., Pioneers of Popular Education, 1956, p.178.

19. Silber, K., op.cit., p.301.

20. Alumni Oxonienses 1715-1886, p.177, and yearly Calendars.

the 'and another gentleman' referred to in Mayo's early letter to his sister.²¹ That they became close friends and colleagues, however, cannot be disputed.

The British contingent also consisted of Messrs. Beaumont, Dixon, Trotter and Dr. Charles Mayo's brother Richard. But it was Dr. Mayo who was now to take over from Greaves as the Englishman closest to Pestalozzi and destined to become a leading figure in nineteenth century British Pestalozzianism.

The eldest son of a solicitor, Charles Mayo was born in London on 9th June 1792.²² He was educated at Henley-on-Thames Grammar School, then Merchant Taylors' School and finally St. John's College, Oxford, from where he graduated in 1817. He took up an appointment as Headmaster of Bridgnorth Grammar School on 30th May 1817 and remained there until his journey to Yverdon in July 1819.

On his arrival at Yverdon, Mayo was greeted by Greaves who, the evidence suggests, was known to the Mayo family.²³ Having quickly settled into the simple and pious life of the institution, Mayo was soon able to reflect on how delightful it was just to live under the same roof as Pestalozzi.²⁴

There has been relatively little attempt to piece together the involvement of Mayo in the Yverdon Institute. These years, however, provided the direction upon which Mayo's educational thinking was to develop. His early letters home indicate that Mayo was immediately impressed with the teaching of drawing, and thought that the French was

21. Mayo letters, op.cit., No. 1, (dated 22nd July 1819).

22. See Mayo, C. H., Genealogical Account of the Mayo and Elton Families, 1882, p.73.

23. Mayo Letters, op.cit., No. 1.

24. Ibid., No. 3.

'well-taught'.²⁵ His services as a clergyman were also in demand and, after an exchange of letters, he had already by 22nd July 1819 arranged to do a service in Geneva.²⁶ That Mayo's first impression of the institute was a favourable one is evident from his willingness to discuss the proposal for an English friend's child to be educated at Yverdon.²⁷ While making this proposal, Mayo specifically mentions the teaching of the classics; it was in this field that Mayo made his major contribution to the education practised in the institution. From the outset Mayo was engaged in the teaching of Latin and, unlike Greaves who remained a poor linguist, Mayo continually made great efforts to improve his knowledge of French and German.

In an interesting passage written just one month after his arrival at Yverdon, Mayo describes the typical day routine:

we rise between 6 and 7, prayers at 7, soon after breakfast in a large room just when we please to go there, some of the masters drop in the same way, and English, French, German and Latin are perhaps all talked in succession. At 8 I have a French lesson, then an hour of intermission. At 10 another French lesson, at 11 a German lesson, then an hour of intermission.

From a little after 1 till 3 I teach Latin, at 3 we dine . . . at half-past 4 another German lesson . . . and I find my way to bed between 10 and 11.²⁸

His knowledge of the classics was of benefit to the institute, for until that time this area of the curriculum had not been included in the Pestalozzian method as practised in Yverdon.²⁹ It was with great joy, therefore, that Mayo was able to write to his brother on 16th September 1821 that

25. Ibid., No. 1.

26. Ibid.

27. Ibid.

28. Ibid., No. 5.

29. For confirmation of this, see Badham, C. D., 'Pestalozziana' in Blackwood's Magazine, Volume LXVI, 1849, p.96.

Pestalozzi is mad about the application of his system to the Classics. I do not think the path he has struck out is a good one, but as he has a clever little German to aid him he may throw some light on this most difficult branch.³⁰

Mayo's initial responsibility centred on the fifteen English pupils that had accompanied him to Yverdon. These and the other English pupils were often separated from the other children and given private lessons in Latin and Greek.³¹ Such lessons seem to have been more comprehensible to the English pupils than some of the other Yverdon lessons. One grateful pupil was to write later:

a kind Providence had sent a valued friend and preceptor in Dr. M___ (whose neat Greek characters were stared at as cabalistical by the other masters of the Pensionat).³²

Besides Mayo's involvement in the teaching of the institute, it is clear from his letters that he was in correspondence with quite a large number of people during his three-year stay in Yverdon. Much of his time seems to have been spent writing. Whereas Greaves, because of his lack of linguistic talent, had been unable to attempt a written discourse on Pestalozzi's system, Mayo with boundless enthusiasm aimed to provide the English reader with a new appraisal of Pestalozzi and his method. Having read Synge's works and pronounced Pullen's book as a 'fudge',³³ Mayo wrote to his sister, Elizabeth, in England, requesting her to forward the various Pestalozzian books that were available in English.³⁴

30. Mayo Letters: op.cit., No. 38, (dated 16th September 1821).

31. Badham, C. D., op.cit., p.107.

32. Ibid., p.96.

33. Mayo Letters: op.cit., No. 30, (dated 21st February 1821) (Reference is to Pullen, P. H., The Mother's Book, 1820).

34. Ibid.

Mayo intended to write a series of six letters incorporating a biographical account of Pestalozzi and extracts from his popular works.³⁵ A second series was to follow where Mayo hoped to include distinct branches of the subject. Unfortunately, a combination of events prevented Mayo from achieving his objective. Firstly, an illness in early March 1821 forced a delay in Mayo's writing. Recovering from this, Mayo was then advised by Dr. Badham not to publish any work until the time seemed favourable.³⁶ As a result, the series of letters was never published and so, whether through disillusionment or simply through lack of time, there remained a conspicuous absence of Pestalozzian material written by Mayo during these important years spent in Yverdon.

By 1822 the unrest in the institute was beginning to manifest itself in various ways. The evidence suggests that Pestalozzi hoped that the tactful Mayo could bring about a peaceful reconciliation between the feuding factions.³⁷ Criticisms of teaching method and practice, and internal rivalries, eventually saw the departure of the English contingent. Schmid, who was now the most prominent figure in the management of the institution, was scornfully to suggest that the departure of Mayo with the English boys had been the ruin of the Chateau.³⁸ On the 24th October 1823, Mrs. Hillyar wrote 'there are very few boys in the castle' and by the 6th May 1824, she depressingly records that the number of boys was no more than ten.³⁹ It is clear

35. Ibid., No. 32, (dated 15th March 1821).

36. Ibid., No. 33, (dated 12th April 1821). Dr. Charles Badham, later Professor of Physics at Glasgow University, had four sons educated at the Yverdon Institute, e.g., see footnote 29.

37. Ibid., No. 45, (dated 5th February 1822).

38. Letter from Mrs. Hillyar to C. F. Wurm, op.cit., dated 24th October 1823.

39. Mrs. Hillyar to C. F. Wurm, op.cit.

from her correspondence that she blamed Schmid for the demise of the institute.⁴⁰ Its decline, however, was not merely the fault of any one man, but more due to the culmination of financial errors and personal incompatibilities.

On his return to England in April 1822,⁴¹ Mayo attempted to secure further support for the Pestalozzian system. He approached several influential men including Brougham, Wilberforce and William Allen and requested their financial assistance towards the establishing of a charity school in Yverdon.⁴² At the same time Mayo instructed Pestalozzi to write personally to these people. In a letter sent to Wilberforce, Pestalozzi addressing him as 'Noble friend of Mankind', begs his support:

you feel the importance of these views even more than the few men of our age, who show any interest about early education. I feel convinced, you will agree with me, that the fireside circle of domestic life is the centre, the sanctuary, in which all the blessed powers for human education are combined.⁴³

A committee was established in London to collect subscriptions.⁴⁴ A proposal was made to send six poor children from England to Yverdon with an initial payment for their education of one hundred Louisdors per year.⁴⁵ The Yverdon response, however, was discouraging. Schmid, considering the money insufficient and the venture unsuitable, aroused

40. Ibid., dated 24th March 1824.

41. Mayo, C. H., Genealogical Account of the Mayo and Elton Families, 1882, p.73.

42. Mrs. Hillyar to C. F. Wurm, op.cit., dated 24th October 1823.

43. Pestalozzi to Wilberforce, dated Yverdon 17th April 1823, Ms. Pest., 3d/158/e, Central Library, Zürich.

44. Mrs. Hillyar to C. F. Wurm, op.cit., dated 24th October 1823.

45. Ibid.

the hostility of, amongst others, Synge and Orpen, who, having personally contributed to the fund, failed to receive certain Pestalozzian books which they had urgently requested.⁴⁶ Mayo, realising Pestalozzi's financial appeal in Ireland was now to be seriously hindered by the diminished enthusiasm of Synge and Orpen, begged Pestalozzi on behalf of the Committee to send a pupil from Yverdon to study in one of the English public schools.⁴⁷ By this approach, it was hoped that the English would be shown at first hand the superior skills of a Pestalozzian-trained pupil, so encouraging a serious English appraisal of Pestalozzi's system. Mayo's request, however, was viewed by Schmid in Yverdon as an English withdrawal from the proposed charity school development.⁴⁸ As a result, Yverdon refused to participate in sending any pupils to schools in England. The English Pestalozzians were, therefore, left to develop and promote their own practices and methods without support from Yverdon.

46. Synge and Orpen had each subscribed £6 for the books. Orpen pointed out that nothing could be done on the part of Ireland until Schmid gave satisfactory account of why the books had not been received. See letter Orpen to Pestalozzi, dated 3rd March 1823, Ms. Pest., 54a,272,5, Central Library, Zürich.

47. Mrs. Hillyar to C. F. Wurm, op.cit., dated 24th October 1823.

48. Ibid.

III. PESTALOZZIAN INFLUENCE IN ENGLAND

1. Cheam School

Apart from his fund-raising efforts on his return to England, Charles Mayo had realised the importance of establishing a school that accurately demonstrated the Pestalozzian system. In this respect he appreciated the advantages of a Pestalozzian school staffed by teachers with first-hand experience of Pestalozzi's method. Therefore, in August 1822, just five months after his return to England, Mayo established a boys' school in Epsom, Surrey.¹ Its close proximity to London made it a most suitable location - so much so that by 1825 a local historian was able to report that Epsom boasted two schools on the Pestalozzian system: Dr. Mayo's and the Reverend J. Barron's.²

The Epsom land tax returns show that Mayo rented premises from C. Malton Esq., and later from Mr. Barrett between 1822 and 1827.³ The property in 1828 was then rented until 1831 to Mr. Cornelius who himself established a Pestalozzian school in Epsom.⁴

Mayo's four years in Epsom were highly successful. That this success was due as much to the actual Pestalozzian method of his education rather than to Mayo himself is evident in a letter from one of the school's parents:

Dr. Mayo was not at Epsom but I saw sufficiently⁵
of his plan to determine to send William to him.

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1. For an insight into the activities of the school see the 'Waldegrave Letters', a large number of mostly unpublished manuscripts in the private collection of Lord Waldegrave.
 2. Pownall, H., History of Epsom, 1825, p.122.
 3. Epsom Land Tax Returns, Surrey County Record Office, Kingston.
 4. Referred to in An Account of M. Jacotot's Method of Universal Instruction in a letter to E. N. Esq., from B. Cornelius, principal of the Pestalozzian School at Epsom, 1830. (Located at Bodleian Library, Oxford, reference T1354(6)).
 5. Waldegrave Letters: op.cit., William to his wife Elizabeth dated 4th March 1825.

The curriculum of the Epsom school is also mentioned in this same letter as including grammar, classics, mathematics, botany and geology. This attention to the natural sciences together with the school's evangelical spirit proved very popular, forcing Mayo to seek larger accommodation. As a result, in 1827 Mayo moved his establishment to Cheam School.⁶

The history of Cheam School dates from 1645.⁷ In 1719 it left its Whitehall premises and moved to a new building in High Street, Cheam. It was on this site that Mayo established his Pestalozzian school. Mayo took over the school in 1827 from the then headmaster, Mr. Wilding, and was to remain there until his death in 1846. The school itself had a prestigious background. A study of two engravings of original drawings by the Cheam School art master, T. Maisey, in 1835 give some idea as to the size of the school.⁸ It was an impressive building: three storeys high, with school rooms that were 'airy and roomy'.⁹

Since the turn of the century the school had been in decline, but Mayo soon instilled a new spirit into the school and by 1832

6. Although 1826 has been given as the date that Mayo established his Cheam School (see Silber, K., Pestalozzi, The Man and his Work, 1960, p.301; Stewart, W. A. C., and McCann, W. P., The Educational Innovators, Volume I: 1750-1880, 1967, p.169), subsequent evidence from the above mentioned local land tax returns; the Students' Magazine and Cheam School Journal No. 3, p.1; and letters from Samuel Waldegrave to his mother, dated 29th January and the 19th February 1827, would indicate that Mayo moved to Cheam School in the summer of 1827.

7. See Peel, E., Cheam School From 1645, 1974.

8. Sutton Public Libraries - Local History Facsimile Reprints, Series 1; No. 3.

9. Waldegrave Letters: op.cit., William to Elizabeth, 3rd August 1827.

forty-five boys were attending.¹⁰ Mayo was in the same mould as the former headmasters of the school. They were Protestant clergymen of evangelical persuasion, and this tradition helped Mayo establish his new school in Cheam as a Pestalozzian school, incorporating an evangelical tone. The success of the Epsom school already assured him of continued success in Cheam, and in this he was assisted by the influential parents of the school who, like William Waldegrave, were eager to support Mayo's system in Parliament.¹¹

The larger school necessitated more teaching staff and gave Mayo the opportunity of engaging teachers who had studied at first hand the methods of Pestalozzi. In this respect Mayo was pleased to enlist the support of the Reverend William Browne who now became a teacher at the school.

Within four years, Browne had founded, along with his two sisters, his own boys' school in Stafford House, Cheam.¹² Unfortunately, there is very little material available as to the type of school Browne established. Clearly, there was no formal connection between the two schools, but the friendship of the two headmasters remained. Browne's school was on a much smaller scale than Mayo's; nevertheless, a friendly

10. Based on manuscript notes in the back pages of the Student's Magazine, or, Cheam School Journal, No. 1, p.2, found in the basement of the Whitehall School building, Cheam. Hereafter referred to as 'Whitehall'.

11. Waldegrave Letters: op.cit., William to Elizabeth, 3rd August 1827.

12. The Reverend Browne remained at the school until 1852. On the 20th February 1852, he took up appointment as Rector of Letheringsett, Norfolk. The Norwich Diocesan Calendar indicates that Browne established a Sunday school and by 1858 twenty-five children were in attendance. However, it is not known whether Browne adopted any Pestalozzian methods in his teaching, although there is an indication that he allowed a greater participation by the children than was usual. He died on the 5th May 1861, and is buried along with his sisters in the grounds of Letheringsett Church.

rivalry existed between the two schools. One of Mayo's pupils writes:

a missionary meeting at Mr. Palmer's was another annual event, where the only thing that excited us was when the subscription list was read out, the smaller sums first, and then crescendo, till it culminated in Mr. Brown's (sic) School so much - Loud cheers from Brown's (sic) boys - and then, finally, ours the biggest of all, a fact which we emphasized by rapturous, prolonged and redoubled applause, to the utter discomfiture of Brown's (sic) boys.¹³

Although Browne had left Mayo's school, there was no shortage of suitably qualified teachers to take his place. Mayo was assisted until 1834 by his mother and sister Elizabeth, but it was the presence of Swiss-trained teachers in particular which represented a break from the traditional English public school of the period. Amongst the most important of these may be ranked Heussi, Lutener, Wurm, Krüsi, together with Devey and the most talented of all, Reiner. These represented the largest single collection in England of Pestalozzian-trained teachers; however, apart from Reiner and those teaching modern languages, they were not given the opportunity to teach the older pupils at the school, who remained the personal responsibility of Dr. Mayo.¹⁴

The school itself was in many ways a form of experimental school, in so far as Mayo was attempting a new form of education in England with a distinct set of values. In this respect, it is somewhat

13. Letter from Carr-Gomm, F., 'A Very Old Cheam Boy' dated 6th December 1895, published in the Cheam School Journal, 1952/53, p.46.

14. See 'An Account of Cheam School in the Reverend Dr. Mayo's Time'. Anonymous. This work, which was passed on by Dr. Kate Silber to W. A. C. Stewart and W. P. McCann for their book The Educational Innovators 1750-1880, was not to be found amongst their papers relating to this book at Keele University, and was presumed by the University Library to have been lost. Although Dr. Silber was of the opinion that she did not have another copy, the one now reproduced for the first time in full in Appendix B of this thesis was discovered by the writer amongst the late Dr. Silber's papers in Zürich.

surprising that the teachers he employed at Cheam did not always live up to the Pestalozzian ideals one would expect. T. F. Fremantle, a Cheam School pupil from 1839 until 1842, writes:

Mr. Clodon who is a very harsh master is coming on Monday and all the boys hate him.¹⁵

Similarly, another pupil reflects on the ingenious ferocity of Blundersfield, an Englishman, teaching at the school who

stamped on your chilblained feet while singing "A-awake my soul" at morning prayers if your toes were not exactly on the line. - who, with Taylor's "Greek Iambics", the thinnest of all bound books, cut you over your blue knuckles on a winter morning.¹⁶

Other teachers, including Mr. Heale and the 'French horror' Delas, also came in for criticism.¹⁷ Some pupils were, nevertheless, very happy at Cheam, as the letters of Samuel Waldegrave clearly indicate, but on the whole, the Mayo Cheam school days were not looked upon very favourably by former pupils.

Although the Pestalozzian spirit was not always as evident as Pestalozzi would have liked, there are signs that personal friendships on a scale similar to those developed at Yverdon did exist at Cheam. Samuel Waldegrave, for example, established a firm friendship with Mr. Davis,¹⁸ a former lecturer at the London University, who assisted Mayo in the teaching of Latin, Greek and geography. Reiner was

15. Letter from T. F. Fremantle to his Mother, undated, Cheam, (probably 1841). This is one of a series of largely unpublished letters of T. F. Fremantle, 2nd Baron Cottesloe in a collection at the County Record Office, Aylesbury, Bucks. Hereafter referred to as the 'Fremantle Letters'.

16. Carr-Gomm, F., op.cit., p.44.

17. Ibid., p.45.

18. Waldegrave Letters: op.cit., Elizabeth to William, 3rd November 1829.

particularly liked by the Cheam pupils, as was Mayo.¹⁹

The pupils ranged in age from seven to eighteen years. Whilst at Epsom, Mayo had not accepted pupils older than nine years,²⁰ but at Cheam he changed this policy. By November 1829 he had informed Elizabeth Waldegrave that he wished to reduce the school numbers to 'shrink again to 35' and had accordingly raised his terms to all new families.²¹ In February 1832, however, there were still forty-five boys on the school register.²² This shows the increasing popularity of the school, and the pressure Mayo was under to expand his numbers. However, the school was not without its critics. In 1829, for example, there was an outcry against Mayo's methods of teaching, led by Mr. Cunningham of Harrow.²³ The objections centred on Mayo's teaching of the classics. Mr. Cunningham was invited by Mayo to witness the teaching for himself, and subsequently reported that, in his opinion, the Cheam scholars were quite as forward as those of Harrow boys of the same age, and that they were also advancing rapidly at Cheam in their knowledge of mathematics.²⁴ This only

19. See 'An Account of Cheam School', op.cit.

20. Waldegrave Letters: op.cit., William to Dr. Mayo, 4th March 1825.

21. Ibid., Elizabeth to William, dated 3rd November 1829.

22. 'Whitehall', op.cit., No. 1, p.2.

23. Waldegrave Letters: op.cit., Elizabeth to William, 3rd November 1829.

24. Ibid. Although there is evidence that a Pestalozzian school in South Lambeth in the 1820s also stressed the importance of mathematics, (see A Short Account of the system pursued in the Pestalozzian Academy, South Lambeth, 1826, p.36,) it is clear that mathematics was a neglected subject in public schools at this time. See Cust, L., A History of Eton College, 1899, p.207 which describes the absence of mathematics in the Eton curriculum and its introduction after 1834 by the headmaster, Dr. Hawtrey. Similarly, Leach, A. F., A History of Winchester College, 1899, p.469 points out that mathematics was regarded as an extra in the curriculum.

served to increase the waiting list for places at Cheam.

The daily routine of the school gives an indication as to the form Pestalozzianism developed under Mayo. The big bell was rung at 6 a.m. and the following two hours until breakfast at 8 a.m. were taken up with studying scripture or other lessons. Official classes began at 9 a.m. with an interval of ten minutes for play taken off each hour. At 11 a.m. the pupils were given bread and then continued their lessons until play began again for one hour from 12.45 p.m. There was then dinner at 2 p.m. and play until 4 p.m. Classes then followed until 6 p.m., preceding tea and the preparation of lessons for the following day. Finally, prayers conducted by Dr. Mayo ended the school day at 7.45 p.m.²⁵ In many respects there is little new in the daily timetable adopted by Mayo at Cheam. However, it is apparent that, like Pestalozzi, Mayo himself did allocate a significant proportion of the day to periods of play. His emphasis on the importance of play was further enhanced by the facilities at Cheam School, which included a fives court, playground and a large sportsfield.²⁶ In this way, Mayo continued to adhere to the developmental principles of Pestalozzian education.

Although the timetable differed in certain respects from other public schools of the period,²⁷ it was in the actual lessons taught in the school that the major differences are to be found. Reference

25. See 'An Account of Cheam School', op.cit.

26. For confirmation of the availability of these facilities see Fremantle Letters, op.cit., Thomas to his Mother, dated 1839; and Fremantle, D., Recollections of Dean Fremantle, 1921, p.10.

27. See, for example, Bamford, T. W., The Rise of the Public Schools, 1967, p.62; Leach, A. F., A History of Winchester College, 1899, p.465.

has already been made to Cunningham's criticism of the teaching of the classics. The main area of contention was the actual method of teaching employed by Mayo at Cheam. Mayo followed Pestalozzi's system, that the pupil was to make use of what he had already learned.²⁸ Under no circumstance was a question to suggest an answer, and learning by rote was substituted by forms of discovery learning based on the object lesson approach. In this respect Cheam School demonstrated the practicality of the Pestalozzian method as taught by Mayo.²⁹

The most popular teacher at Cheam, however, was not Dr. Mayo, but Mr. Charles Reiner. He was a German from Frankfurt, who had travelled to Yverdon to become one of the trainees at Clindy. There is little doubt he was a brilliant teacher who had skilfully adopted Pestalozzian ideas and formed them into a highly successful method of teaching. Reiner was responsible for the teaching of mathematics and, to a lesser extent, for German, but also he undertook the teaching of science-based subjects. He gave his pupils lessons on chemistry, botany, physical geography, geology, astronomy and zoology which were all thoroughly enjoyed by the pupils.³⁰ In this way Reiner's pupils received forms of knowledge almost, if not completely, ignored by most other schools,³¹ awakening the pupils' interests to areas

28. 'Account of Cheam School', op.cit.

29. This was in contrast to the teaching normally practised at that time. Bamford, T. W., op.cit., p.xii points out, that with the exception of Charterhouse, there is no real evidence that the public schools were aware of the 'experimental' approach to education which was such a feature of the age from the late eighteenth century to 1837.

30. See 'An Account of Cheam School', op.cit., and Fremantle, D., op.cit., p.10.

31. Bamford, T. W., op.cit., p.75 discusses how public school pupils were cut off from a true appreciation of science and industry. It was not until 1849 that a new approach to science teaching was made at Eton and Rugby (p.87).

outside the 'classical' school curriculum. Some pupils, such as Hugh Childers, became very interested in the sciences and later reminisced on how

Reiner's admiration of Faraday led to some of us being really advanced scholars in chemistry, which, with electricity were the studies I most delighted in.³²

Reiner's main teaching contribution to the school was undoubtedly in mathematics. In this field he not only taught the subject extremely well, but inspired in the pupils a real enthusiasm for numbers. The extent of this enthusiasm and the pupils' mathematical knowledge may be assessed in a letter from a Cheam pupil in December 1836, where Childers at the age of nine and a half years was able to boast that

I know: Addition, subtraction, multiplication, division (long division), reducing numbers to an improper fraction, reducing to least common denominator, reducing to lowest terms; addition, subtraction, multiplication, division of fractions, reducing a decimal to fraction, a fraction to a decimal; addition and subtraction of decimals.³³

Although in this case it may be argued that Childers was intellectually an above-average pupil, the enthusiasm of other pupils for mathematics is clearly evident. T. F. Fremantle, for example, enjoyed teasing his father with difficult equations,³⁴ highlighting the child's enjoyment of working with numbers. Reiner's mathematics embraced arithmetic, geometry, trigonometry and algebra.³⁵

His actual teaching is perhaps best illustrated in an unpublished

32. Childers, H. C. E., The Life and Correspondence of the Right Hon. H. C. E. Childers 1827-1896, 1901, p.9.

33. Ibid., pp.9-10.

34. Fremantle Letters: op.cit., Thomas to his Mother, Cheam, Tuesday, undated.

35. 'An Account of Cheam School', op.cit.

letter from Reiner to a former pupil, a private tutor in a family, who had sought his advice.³⁶ The letter demonstrates the clarity of Reiner's teaching, and the emphasis on progressing in a series of well-defined steps is very reminiscent of Pestalozzi's own method. Again, the letter shows the insistence of Reiner that the pupil should only progress to further work when the previous was thoroughly understood, the emphasis being placed on revision questions before beginning each new lesson.

In particular, Reiner's teaching of fractions highlights his insistence on a pupil's fundamental appreciation of numbers. In the letter he emphasizes that 'every question in Com. Arithmetic may be solved without knowing any rule'. In teaching fractions he maintains that by first drawing lines and dividing them into equal parts, (| | |) the child is given a clear idea of a 1/2, 1/3 and a 1/4, so that the child can then visualise that 1 (ie. the drawing line) = $\frac{2}{2} = \frac{3}{3} = \frac{4}{4} = \frac{17}{17}$. By such methods, Reiner did not consider it necessary for the pupil to learn the tables by heart, for his fundamental understanding of numbers enabled him to solve any problem. In this way the pupils saw each number as an individual; an individual that could be dissected into smaller parts. One former pupil remembers telling a friend 'that there was a whole world below 1, which they had thought was the beginning of everything'.³⁷

Similarly, Reiner's lessons in geometry³⁸ show Pestalozzi's influence. Although such lessons began and ended with a problem from

36. Letter from C. F. Reiner to a young man. Undated. Formerly in the possession of Miss Mary Mayo, daughter of Dr. C. Mayo. Now deposited with Silber Papers, Box 5, Central Library, Zürich.

37. 'An Account of Cheam School', op.cit.

38. Ibid.

Euclid, the class was expected to solve the geometry questions by discovering the necessary auxiliary lines, and by making use of results from former answers. The first pupil to achieve the correct answer was then allowed to demonstrate it on a large slate, which closely resembled Pestalozzi's experiments with a pupil-teacher system. The progress in mathematics of the Cheam School pupils is, therefore, quite marked. Although one account suggests that even 'algebra, quadratic equations and logarithms had been reached before the age of 12½ when the lessons ceased',³⁹ other evidence suggests that logarithms, for example, were started by fourteen-year-olds.⁴⁰ Nevertheless, proficiency in mathematics at an early age would seem to have been achieved at Cheam School.⁴¹

Besides the efforts of Reiner in the science-based subjects, the curriculum of Cheam School was on the whole classical. The pupils' magazine articles in the Cheam School Journal in the 1830s emphasize this point. Boys aged from twelve to seventeen years often contributed detailed works on 'the satiric poetry of the Romans', 'the rise of the Athenian power', 'Hannibal on his recall from Italy', besides numerous contemplative essays on religious passages, such as Samuel Waldegrave's 'Reflections on Hosea' written at the age of fifteen years in the 1833 edition of the Journal. Indeed, several of Mayo's pupils went on to achieve academic distinction in the classics, especially at Oxford.⁴² For example, Henry Shepheard,⁴³ who was later to take over as

39. Ibid.

40. Waldegrave Letters: op.cit., Samuel to his Father, Cheam, 12th April 1831.

41. Childers, H. C. E., op.cit., pp.8-9.

42. See Alumni Oxonienses 1831-1844; Peel, E., Cheam School From 1645, 1974, pp.142-146; and Dictionary of National Biography.

43. A pupil at Epsom School 1823-1825.

headmaster of Cheam School on Mayo's death, obtained a first in Greats and won a fellowship at Oriel. Thomas Fremantle,⁴⁴ a Balliol scholar, took a first in Greats and won the Hertford scholarship, while his younger brother William⁴⁵ also obtained a first in Greats and was a Fellow of All Souls. Similarly, Samuel Waldegrave graduated from Balliol with a first in classics and mathematics in 1839, and such was his performance in mathematics that the examiner felt obliged to place him by himself in the first class.⁴⁶

The relative importance of each subject in the school curriculum is highlighted in an unpublished timetable of a Thursday and Friday at Cheam School in Dr. Mayo's time.⁴⁷ The importance of the classics in the timetable is evident. It is interesting to note that drawing is not included in this timetable. Nevertheless, it is clear from the pupils' letters, especially the younger ones, that drawing played an important part in the early education of the children.⁴⁸ Whether, in fact, it received at Cheam the attention and importance placed on it by Pestalozzi at Yverdon in the formation and development of a child's writing, is doubtful. But, that it did exist at all in a child's early education at Epsom and later at Cheam, would suggest that it was given some importance in the development of the child's earliest skills at handwriting. The timetable also indicates the relative importance of Bible lessons in the curriculum, and the special use of lessons on

44. At Cheam School from 1839-1842.

45. At Cheam School from 1840-1844.

46. Carlisle Patriot, 8th October 1869. Samuel Waldegrave was at Mayo's schools from 1826-1835.

47. Waldegrave Letters: op.cit., Samuel to his Mother, Cheam, undated (written between 1828 and 1834).

48. Ibid., 29th January 1827 and 19th February 1827.

shells (conchology) as given by Miss Mayo. The frequency of lessons taught by both Reiner and Mayo is also highlighted.

Cheam School Timetable

c. 1830

Time	Thursday	Friday
6½	French 1 (Mr. Hubillon) Writing 3 (Mr. Machan)	Same as Thursday
7½	Bible 1 Bible 2 Bible 3 (Learn) (Mr. Davis) (Dr. Mayo)	Bible - the others as on Thursday (Dr. Mayo)
	Bible 5 English reading (Miss Mayo) (Mr. Machan)	
9	Herodotus 1 Geometry 3 (Mr. Davis) (Mr. Reiner)	Xenophon 2 Arithmetic 3+4+5 (Mr. Davis) (Mr. Reiner)
	Writing 4+5 (Mr. Machan)	Others as on Thursday
10	Geometry 2 Xenophon 3 (Mr. Reiner) (Mr. Davis)	Algebra 2 others as usual (Mr. Reiner)
	Greek 3+4 (Dr. Mayo)	
11	Trigonometry 1 French 3 (Mr. Reiner) (Mr. Hubillon)	As usual
	Latin 3+4+5 (Dr. Mayo)	
12	Cicero 1 Conchology (Mr. Davis) (Miss Mayo)	As usual
	Latin 3+4+5 (Dr. Mayo)	
4		Geography 1 (Mr. Davis and Mr. Machan)
5		Greek (Dr. Mayo)
6½	French (Mr. Hubillon)	Writing French Bible (Mr. Machan) (Mr. Hubillon) (Miss Mayo)

A study of a pupil's 'holiday task' gives an insight into the actual content of the subjects. In December 1829 one twelve year old pupil⁴⁹ was set for his Bible homework a comparison between the characters of St. Paul and St. Peter, whilst in his Greek and Latin classes the emphasis was on translation and composition with only one map exercise forming the total homework on the science-based subjects. An even more detailed account is given by the same pupil of the actual Bible classes held by Dr. Mayo in the early mornings at Cheam.⁵⁰ The lessons themselves consisted of a 'harmonized arrangement of the Gospels', which was a chronological order of the life of Christ. The pupil explains the slow progress in Dr. Mayo's Bible classes, because each chapter and verse was considered and discussed in great detail, drawing upon other texts of scripture and culminating in an afternoon session of writing down, in a form of sermon, what each pupil had learnt from the morning's work.

This account of Cheam in 1831 differs from later accounts of the 1830s. Childers, for example, although remarking on the large amount of religious instruction, is critical of its narrowness:

Bible-reading, without note or comment, once a week - and that was all. No explanations, no practical instruction, no hints at the Church system. Yet our teachers affected to believe in the verbal inspiration of every line of Scripture.⁵¹

This gives, however, a clear indication as to the emphasis on scripture and the Bible in Mayo's school.⁵² The school's own morning

49. Ibid., Elizabeth to William, Cheam, 18th December 1829.

50. Ibid., Samuel to his Father, Cheam, 12th April 1831.

51. Childers, H. C. E., op.cit., p.10.

52. Although as Newsome, D., Godliness and Good Learning, 1961, p.86, points out, the religious emphasis was less apparent at Eton than elsewhere, the public schools on the whole were dominated by the 'school chapel, clergymen, church services, prayers and the Bible in Greek' which formed an integral part of their tradition. See Bamford, T. W., op.cit., p.48.

hymn,⁵³ consisting of six verses, also symbolizes the wholeness of the Christian spirit that Mayo was attempting to establish at Cheam. It demonstrates his desire for a union between the child's school life and his duty and obedience to the will of God. As Mayo himself remarked, 'the method of Pestalozzi is in essence the application of Christianity to the business of Education',⁵⁴ and this formed the basis upon which Mayo viewed the Pestalozzian method practised in his school.

Cheam School's religious tone was certainly evangelical in nature and accordingly attracted families of committed Protestants. In this it differed from the ideal envisaged by Pestalozzi, for Pestalozzi would not commit himself to any one Christian or religious doctrine; his school was open to all children irrespective of religious affiliations. Cheam, on the other hand, was a school very much of its time. Its religious position was characteristic of the Zeitgeist of English society in the first half of the nineteenth century.⁵⁵

Outside class hours, the pupils at Cheam School enjoyed certain recreational activities. Unlike many of their contemporaries, each Cheam pupil was allocated a garden. This practice of allocating individual gardens to pupils did not begin at Cheam until 1832. The school chronicle records that

the vacant space at the top of the smaller playground has been allotted to the younger Boys for gardens, with the exception of a small portion, which has been appropriated for a Tool House.⁵⁶

53. See Mayo, C., A Lecture on the Life of Pestalozzi: with other Papers, 1856, p.94.

54. Mayo, C., Memoir of Pestalozzi . . . being the substance of an 1826 lecture delivered at the Royal Institution, 1828, p.28.

55. See Mack, E. C., Public Schools and British Opinion 1780-1860, 1938, pp.161-163, 199, 347, for examples of the evangelical influence on public schools.

56. Whitehall, op.cit., No. 2, p.6.

Most pupils at Cheam enjoyed these gardening activities which were based on Pestalozzi's ideas as developed for the education of the poor.⁵⁷ It enabled the Cheam pupils to become aware of their natural surroundings, as is made apparent in the School Journal of 1832 by the references to types of flora by the pupils on their return to Cheam after their school holidays. Besides gardening, time was also spent doing gymnastic exercises, as well as playing in the fives court and participating in cricket.⁵⁸ Mayo believed in the importance of the physical training of the young. He saw the gymnastic exercises as used by Pestalozzi at the Yverdon Institute as an important feature of Cheam School. Indeed, such was the strength of his views that he encouraged the introduction of gymnastic exercises in the London Orphan Asylum.⁵⁹

During the three hours each evening allocated to recreation Cheam School pupils could divide their time between such activities as printing, drawing, gardening, reading or playing sport.⁶⁰

As the pupils grew older, so certain privileges were granted in the school. The narrowness referred to by Childers is again evident in the allocation of privileges at Cheam during the 1830s. As Mayo's

57. See Green, J. A., Life and Work of Pestalozzi, 1913, p.217.

58. Fremantle Letters: op.cit., Thomas to his Mother, Cheam 1842. For a comparison of the involvement of sport in the public schools see Bamford, T. W., op.cit., pp.74-75; Cust, L., op.cit., p.249; Newsome, D., op.cit., pp.81-82.

59. For an account of Mayo's enthusiasm for gymnastic exercises in schools including the London Orphan Asylum see a letter from Mayo to his Cousin, dated, Cheam, 24th September 1828, in Mayo, C. H., Genealogical Account, op.cit., pp.5-6.

60. Waldegrave Letters: op.cit., Samuel to his Father, Cheam, 18th April 1831. It is interesting to note here that there appears no evidence in the Cheam School pupils' letters of the practice of fagging which was common in other public schools. See Bamford, T. W., op.cit., p.68.

health deteriorated, so his trust in his pupils declined. This, in turn, affected the privileges of his pupils, as the school became increasingly less Pestalozzian. Childers remarked how, when he first arrived at Cheam in 1836, all the boys of fourteen years and above were allowed to take long walks without an usher. Having eagerly awaited this privilege, it was subsequently withdrawn, to the great resentment of the boys.⁶¹ Other privileges included having your own bedroom and being able to sit up and read at night.⁶²

Luxuries at the school, however, were rare. As at Yverdon, washing conditions were primitive. Although Pestalozzi's own pupils had to wash under a cold water tap in the castle's central courtyard, Mayo's pupils were little better off. They were never allowed a proper bath and there were no basins in the bedrooms of the younger children. All except the older boys had to visit a small washroom and scramble for the use of wooden bowls and cold water, which 'with a single looking-glass and three or four jack-towels, constituted the only luxuries of the lavatory'.⁶³

To the older boys, however, the most important luxury was the privilege of sitting at the 'high table'. This was a privilege for boys over fourteen years who, at breakfast, for example, had 'tea in cups passed down, instead of bowls of bread and milk set out; also, they had bacon, and even on occasions an egg'.⁶⁴ Although in this respect the diet Mayo approved was somewhat better than Pestalozzi's

61. Childers, H. C. E., op.cit., p.11.

62. Waldegrave Letters: op.cit., Samuel to his Mother, undated.

63. Carr-Gomm, F., op.cit., p.46. Such primitive washing conditions were common in many public schools even thirty years later. See Bamford, T. W., op.cit., p.73.

64. Carr-Gomm, F., op.cit., p.46.

at Yverdon, it was the personal relationships that Mayo tried to establish with his older pupils which formed one of the most desirable features of the Cheam School system.

At dinner and tea, the older pupils sat with Dr. Mayo, where they occupied, along with Mrs. Mayo, the room known as the parlour. During such meals Mayo would start discussions on such topics as politics, encouraging pupils to voice their own opinions.⁶⁵ During these discussions Mayo seems to have been aware of his educating role. Often he would insist that all meal-time conversations had to be through the medium of Latin or Greek, and in 1832 a new regulation was imposed by Mayo making French the compulsory language in the bedrooms, washing room and dining room.⁶⁶ Whether, in fact, this was an attempt by Mayo to imitate the Yverdon Institute which was conducted through the medium of French and German, or simply to give his pupils further practice in the language, is not known. Whatever Mayo desired, the experiment, as Dean Fremantle recalls, was not a success and silence became the norm in the dormitories and dinner was conducted in the most discreet whispers.⁶⁷

Mayo continued to take every opportunity to enhance the education of his pupils, and was very prone to giving impromptu lessons during the schoolday visits to the countryside. Such lessons were often accompanied by amusing stories and several of his pupils recall how Mayo, whilst walking with his pupils, would manage casually to turn their attention to the local flora and natural landscape.⁶⁸

65. 'An Account of Cheam School', op.cit.

66. Whitehall, op.cit., No. 1, p.3.

67. Fremantle, D., Recollections of Dean Fremantle, 1921, pp.10-11.

68. Fremantle Letters: op.cit., Thomas to his Mother, undated.

To appreciate the true character of Cheam School between 1827 and 1846 it is necessary to study in depth the personality of Mayo and its influence on the school. The most striking aspect of Mayo's head-mastership is the deep and affectionate interest he took in all his pupils. In no case is this more clearly shown than in a series of unpublished letters dated between 1833 and 1841 to John Hawkins concerning his son Henry's education at Cheam.⁶⁹ Mayo demonstrates in these letters not only a real concern for the pupil, but also an insight into the pupil's problems at the school. In this particular case, Henry who had suffered ill-health, was finding difficulties in keeping pace with the rest of his class. Mayo quite openly points out the child's problems:

his frequent illnesses have thrown him far behind his equals in age, and his slender abilities do not enable him to regain the ground he has lost. Indeed I fear the inequality existing between him and his class fellows increases rather than diminishes. Though the oldest in his Greek and Latin classes he is so much the weakest, that his mistakes and incompetency too frequently provoke a laugh from his companions.⁷⁰

This passage demonstrates Mayo's directness of approach. He was unwilling to disguise the child's problems to his parents, and was similarly forthright in his opinions as to the boy's 'slender abilities'. It is this personal interest in each of his pupils that so epitomizes Mayo's years at Cheam. It is clear that Mayo found the Hawkins case most painful, but was not too proud to suggest after much deliberation that the boy's parents would be advised, in Henry's own interest, to have him removed from Cheam and educated by a personal tutor, where

69. Hawkins Papers, West Sussex Record Office, Chichester, Volume 2, Part 8.

70. Ibid., f.1066.

he could obtain the advantages of individual attention.⁷¹

The interest that Mayo took in his pupils' progress is also expressed in his letters to the Waldegrave family. These show the close relationship Mayo often had with the pupils' families and the extent of his involvement in giving advice to parents. In such circumstances Mayo was looked upon more as a personal friend than a school headmaster.⁷² This would seem to arise out of Mayo's Christian and evangelical approach. His Christianity is remarked upon by the pupils' parents. One such parent writes

Dr. Mayo is certainly a delightful man -
I do think he is the most every-minute-
Christian I ever met with.⁷³

The pupils themselves give a further indication as to the type of family Mayo attracted. In most cases the families were from the wealthier classes whose children were often interrelated to other Cheam School pupils. Many were from the aristocracy. As Peel points out,⁷⁴ of two hundred and sixty-two boys known to have attended the school during Mayo's headship, twenty-five were sons or grandsons in the paternal line of baronets, twelve of barons, seven of viscounts, thirty-nine of earls, three of marquesses and one of a duke. Carr-Gomm, reflecting on his days at Cheam in Mayo's time, wrote: 'We were most aristocratic in those days, and prided ourselves on being the most exclusive school in the kingdom'.⁷⁵

71. Ibid.

72. See also Palmer, R. (Earl of Selborne), Memorials, Part 1, 1896, p.194.

73. Waldegrave Letters: op.cit., Elizabeth to her Husband, dated 31st March 1830.

74. Peel, E., op.cit., p.139.

75. Carr-Gomm, F. C., op.cit., p.47.

The closest bond between the families, however, was the evangelical nature of their shared Christian beliefs. This is clearly evident amongst the families' private letters and had subsequent influence on the education of their children at Cheam. Like many pupils, Samuel Waldegrave, a pupil under Mayo from 1826 to 1835, was not only very happy at the school, but was also very conscious of his religious beliefs and responsibilities even at a very early age. When only thirteen years old, discussing a parental wish for him to consider his future entry into the ministry, he replied:

I trust I may be enabled always to bear in mind that I ought to glorify God in my own body and my soul which are his knowing that I am bought with a great and precious price even the blood of Jesus Christ.⁷⁶

With such mature and deep religious convictions Samuel was later to enter the Church in 1842 and eventually became Bishop of Carlisle.⁷⁷

Another similar example is that of William Henry Fremantle, a pupil at Cheam from 1840 to 1844, who later became Dean of Rippon and a religious author.

Many parents were anxious that their children's education should be firmly based on religious principles. In his letter of introduction to Dr. Mayo, William Waldegrave stressed that

we wish sound Christian principles to be made the foundation of all he does, all he learns - we wish him to be taught to consider that without that as his spring of⁷⁸ action all acquirement is vain or worse.

76. Waldegrave Letters: op.cit., quoted in a letter from Elizabeth to her Husband dated 14th October 1830.

77. See Carlisle Patriot, 8th October 1869. Samuel was consecrated as Bishop of Carlisle in York Minster on 11th November 1860.

78. Waldegrave Letters: op.cit., dated 4th March 1825.

The Christian spirit of the school, however, was not of the heroic type based on honour that was so apparent in other public schools at the time,⁷⁹ and many pupils were later to reflect on what they saw as the unpleasant side of the education at Cheam.

One such pupil was Hugh Childers, at Cheam from 1836 to 1843, who was later to enjoy a prominent political career.⁸⁰ He recalls that

Evangelicalism, not of the manly type that prevails now, was supposed to teach us that one of the first duties of a schoolboy was to watch the conduct of his fellows, and report it to the master. Hence, sneaking and spying were universal.⁸¹

Thus, there was a cloistered aspect to the system that, as Dean Fremantle disclosed, was 'not suited to boys as they grew up'.⁸² In this respect, a belief in original sin underlay Mayo's practice which was certainly in direct contrast to the philosophy of trust and love preached by Pestalozzi in the Yverdon Institute. The serious manner with which Mayo took his vocation left little room for pupils' misdeeds. He saw the education of children by Pestalozzian methods as secondary to their Christian and scriptural education. In so doing, the keynote of his educational system established at Cheam was not based on love like Pestalozzi's, but firmly on scripture.

In order to achieve his objectives, Mayo was prepared, to a greater extent than Pestalozzi, to administer corporal punishment. One former pupil remembered Mayo as 'a kind and handsome but

79. See Newsome, D., op.cit., p.46; Bamford, T. W. op.cit., p.41; Simon B., and Bradley, I., The Victorian Public School, 1975, pp.115-129.

80. Hugh Culling Eardley Childers, 1827-1896. First Vice-Chancellor, Melbourne University, First Lord Admiralty, Chancellor of the Exchequer, Home Secretary.

81. Childers, H. C. E., op.cit., p.8.

82. Fremantle, D., op.cit., p.11.

severe old gentleman, with a firm belief in the efficacy of the cane frequently and vigorously applied'.⁸³ Such punishments, however, were often not resented by his pupils, many of whom invariably recognised them as lawful and just.⁸⁴

Mayo also set strict rules with regards to the gifts that parents were allowed to bring to their children at Cheam. He objected strongly to his pupils being crammed with cakes and apples, which Mayo in any case provided for the children,⁸⁵ but he was not so strict as not to allow them occasionally to receive a few oranges and walnuts.⁸⁶ In this way, Mayo seems to have attempted to instil in his upper class pupils a degree of austerity which, in turn, placed the otherwise privileged Cheam pupils into a similar position to those that were in Yverdon. As a result, alongside the religious indoctrination that he provided, Mayo became increasingly concerned with the works of fiction that boys read. While prohibiting the reading of novels at Cheam, Mayo was distressed at their leisure reading out of term. He considered it to be a serious intrusion on the religious education fostered at Cheam, and a threat to the moral development of his pupils.⁸⁷

Like Pestalozzi, Mayo's character ensured the loyalty and support of a considerable number of influential friends. Whereas Pestalozzi sought through them to advance his methods, Mayo from the start of his

83. Carr-Gomm, F. C., op.cit., p.44. For examples of punishments in public schools see Leach, A. F., op.cit., pp.456-463; Bamford, T. W., op.cit., pp.67-68.

84. Carr-Gomm, ibid.

85. Waldegrave Letters: op.cit., Samuel to his Mother, undated, (before 1834).

86. Ibid.

87. As Bamford, T. W., op.cit., p.75 points out, many public school headmasters at this time condemned the modern novelists and prohibited their reading in school.

teaching at Epsom was more inclined to be preoccupied with teaching their children and, consequently, tended to refrain from seeking wider support for the development of Pestalozzianism on a national scale. Clearly, Mayo felt that the establishing and success of his school was crucial to the introduction of Pestalozzianism in England. Krüsi indicates that Mayo remarked that

the most effectual mode of accomplishing this end (the introduction of the Pestalozzian method into England) was to devote himself to the formation of a school, in which the arrangement and practical application of these principles might be made.⁸⁸

Mayo's direction was probably misguided. Certainly Cheam School secured a stage from which the practicability of Pestalozzi's method could be demonstrated. However, Cheam School failed to make a significant impact on the methods adopted in the public schools, and offered no direct contribution to the problems associated with educating poor children, especially in the larger cities. Consequently, the experiments initiated in Clindy by Pestalozzi were not utilised by the British Pestalozzians, and the opportunity of expressing and developing Pestalozzi's ideas on pauper education was lost.

In many respects it was the swiftness of Mayo's success as a headmaster and educator which hindered future progress, and was in the long term a setback for Pestalozzian advancement in England. The popularity of Cheam School combined with Mayo's occasional bouts of ill health⁸⁹ prevented him from expounding the Pestalozzian ideology in writing. It is clear, however, that there was a need for Pestalozzian literature at the time. Lord Brougham in a letter dated 1828 to Dr. Babbage (Professor

88. Krüsi, H., Pestalozzi, His Life, Work and Influence, 1875, p.223.

89. Mayo, C. H., Genealogical Account, op.cit., p.5.

of Mathematics at Cambridge) expressed considerable enthusiasm for Mayo to 'draw up a detailed account of the system'.⁹⁰ Mayo was seen as a talented scholar ideally placed to write such an account. Hermann Krüsi (junior), the son of Pestalozzi's first assistant and at one time teacher at Mayo's school at Cheam, commented that

in general attainments and classic learning Dr. Mayo ranked as peer to the first scholars in the land; and his connection with the Universities, and his wide reputation as a man of letters, gave him ample opportunity to secure desirable positions in the higher paths of science and literature.⁹¹

That he possessed the talents and was held in such esteem in academic circles, gave Mayo a great opportunity to advance Pestalozzi's ideas through literature. In choosing to leave the main exposition and responsibility for any such writings to his sister Elizabeth, Mayo indirectly influenced the development of a secondary and distinctly British form of Pestalozzianism.

2. Object Lessons

In comparing the respective works published by Charles and Elizabeth Mayo, it is apparent that it was Elizabeth's literature which emphasized most directly the Pestalozzian approach. Apart from Dr. Mayo's two works which are in substance his 1826 lecture on Pestalozzi given at the Royal Institution, his writings consist of religious sermons, prefaces to or revisions of other writers' books, or mainly short, often privately-printed exercises and translations specifically

90. Silber Papers, Box 4, Central Library, Zürich. Babbage was deeply concerned about the absence of professionalism in English science. His criticisms were expressed in his work Reflections on the Decline of Science in England, 1830. See also Russell, C., Science and Social Change, 1700-1900, 1983, pp.187-190.

91. Krüsi, H., op.cit., p.222.

for the use of Cheam School.¹ These private works were never intended for a wider audience, and are really just basic school exercises with no Pestalozzian slant.

A study of Mayo's correspondence in his early years at Epsom and Cheam, however, indicates that Mayo was concerned about certain aspects of Pestalozzianism, and explains to some extent his failure to interpret Pestalozzi's ideas in writing.

In a letter to Wurm, dated Epsom 25th April 1825, discussing school exercises, Mayo asserts that

it is almost as important to know what
may be omitted as what must be done.²

He was critical of ingenious Pestalozzian exercises that wasted precious school time. Mayo held the opinion that

the Pestalozzian master not infrequently resembled an artist who painted the sign of an inn in water colours; for a short while his painting was full of harmony and beauty but the first shower of rain just rendered everything a total chaos and the second shower completely eradicated it.³

This indicates a certain uneasiness on Mayo's part towards the actual practice of teaching on Pestalozzian lines, and would account for the system adopted at Cheam where ingenious exercises found no place and lesson time was held in reverence. As Stewart has written,

Mayo took from Pestalozzi the more obvious and superficial aspects of his theory - the religious and moral tone, the need for progression, development, and harmony, and the importance of a balance between moral, intellectual, and physical education.⁴

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1. For a list of the books written or edited by Dr. Mayo see Mayo, C. H., Genealogical Account, op.cit., pp.7-9.
 2. Wurm Papers, Cod. hans IV, 76, Hamburg State and University Library.
 3. Ibid.
 4. Stewart, W. A. C., Progressives and Radicals in English Education, 1972, p.81.

In so doing, Mayo encouraged a form of Pestalozzianism, suitable to the British educational scene, devoid of contentious issues that could have seriously challenged the introduction of any form of British Pestalozzianism. In this sense, Mayo's school was a compromise between the need for a Pestalozzian spirit and the demands of an efficient schoolmaster. His unwillingness to adopt a truly Pestalozzian teaching method himself may have discouraged him from producing a full exposition of Pestalozzi's ideas to guide other British educationists. It was his enthusiastic sister, Elizabeth, who responded to the challenge by developing her own personal interpretation of Pestalozzi's system.

The efforts of Charles Mayo in Epsom and Cheam School have received considerable attention and have tended to overshadow the significance of Elizabeth Mayo. Her contribution to the development of British Pestalozzianism was, however, of fundamental importance.⁵ Born in Hammet Street, London, on the 18th June 1793, Elizabeth was one year younger than Charles. This closeness in age was reflected in later life by a deep personal bond between brother and sister, as is clear in Charles Mayo's letters from Yverdon between 1819 and 1822. Inspired by her brother's initial enthusiasm for Pestalozzi's methods, Elizabeth became increasingly interested in Pestalozzi's work, and with her mother was engaged in the teaching undertaken at Charles Mayo's first school in Epsom and later in Cheam. It was during these early years that Elizabeth was to gain practical experience of the Pestalozzian system, and develop an awareness of the possibilities it offered to the teaching of young children.

While Charles refrained from publishing Pestalozzian books, Elizabeth wrote seven major works,⁶ the first two of which were written

5. The most detailed account available of Elizabeth's contribution is to be found in Mayo, C. H., Genealogical Account, op.cit., pp.10-14.

6. See ibid., pp.13-14.

during her teaching days at Cheam. Although the extent of her brother's assistance in the writing of these two important works cannot be accurately assessed, a distinct style emerges which is not reflected in her brother's own works. These two early books, Lessons on Objects (1831) and Lessons on Shells (1832), demonstrated not only a new style, but also a new emphasis in educational literature at that time. Rather than concentrating on the advantages or otherwise of a particular system, they focused attention more directly on to the work of the teacher and a new method of teaching. This interpretation, commonly referred to as the 'object lesson', became synonymous with British Pestalozzianism in the nineteenth century.

The two books stem from the teaching practised by Mayo and his assistants at Cheam. They were aimed at the teaching of children between the ages of six and eight years in the case of Lessons on Objects, and between eight and ten for Lessons on Shells. The impact of the books and their subsequent acceptance both increased the success of Cheam School and lengthened still further its waiting list.⁷ The books and the object lesson approach, however, had far wider implications than simply the continued success of Cheam School. Before this can be assessed, it is necessary to briefly analyse such an object lesson.

The example taken is that of an object lesson on water.⁸ The

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7. Confirmation of the popularity of the books is evident in the number of editions published. Lessons on Objects had reached its twenty-sixth edition in 1878, and Lessons on Shells had appeared in a third edition in 1846.
 8. From Mayo, E., Model Lessons for Infant School Teachers and Nursery Governesses, Part II, 3rd edition, 1849, pp.20-22. For further examples of the object lesson see Garlick, A. H., Object Lessons for Standards I, II and III, 1901; Hassell, J., Common Things and Elementary Science and Familiar Objects of Everyday Life, 1891; Ricks, G., Object Lessons and How to Give Them, 1887. A short account on object lessons is also available in Birchenough, C., History of Elementary Education in England and Wales from 1800 to the Present Day, 1938, pp.281, 284-285.

teacher firstly directs the children to identify the substance as water. She then draws their attention to its characteristics. On asking questions such as 'what has the water done to the paper?' she extracts the answer 'it is wet' which, she explains, makes water a liquid. She then proceeds to ask the pupils to name other liquids. By a comparison between milk and water the teacher shows the transparency of water and stimulates the pupils to call out 'We can see through water'. The pupils are asked to name other similar examples in the classroom, such as glass. As the lesson develops, other properties are discovered by the pupils, and the teacher asks the children to repeat various properties as they proceed. The lesson ends with the teacher asking the pupils to repeat together what they have found out about water - 'Water is a liquid; we can see through it; it is bright; it has no colour; nor any taste, nor any smell; it is cold. It is used for washing and for drinking'.⁹

Such object lessons devised by Elizabeth Mayo contain much that is Pestalozzian. Apart from facilitating language, number and form, the lessons aim at 'sense training', which is further exemplified by drawing the attention of the pupils to the senses they are using. In turn, the senses were often used to vary the manner in which lessons on objects were given. In this way the teacher would ask the pupils what qualities they observed in the water, by using their sight or their smell. This is typical of the Pestalozzian approach and highlights the fact that Elizabeth Mayo had grasped one of the most essential elements of Pestalozzi's teaching. Furthermore, the object lessons contain other features reminiscent of Pestalozzi's own method. Firstly, the lessons aimed to increase the child's powers of observation, not only by inspiring the child to assess the individual properties

9. Mayo, E., ibid., p.22.

of an object, but by educating them to be aware of the objects and actions that surrounded them in every-day life. The child's powers of observation were thus increased, and inspired inquisitiveness to discover and take note of other objects in their immediate surroundings.

The lessons take a similar form to discovery learning, except that each step is actually initiated and controlled by the teacher. The order of discovery occurs in a natural and logical sequence. In some respects this discovery element is similar to Pestalozzi's emphasis on direct experiences, concentrating on educating the pupils, not by book learning or the blackboard, but by taking the pupils out into the Yverdon countryside to instruct them on aspects of their environment.

The object lessons also contain elements of Pestalozzianism based on the moral training of the child. Most of the individual lessons emphasize a moral point. In lessons on water, for example, it is suggested that the teacher remarks on the goodness of God in supplying every country with water, 'so essential to our life and comfort', whilst alcohol, the 'noxious spirit', is 'obtained at great expense by art and labour'.¹⁰ The concluding phrase of such lessons is that God supplies abundantly all those things that are really necessary for life on earth. Such an emphasis bears a striking resemblance to Pestalozzi's moral education.

The object lessons mirrored the Pestalozzian method in that they assisted the teacher to gain the attention of their pupils. Pestalozzi disliked abstract teaching and would have approved of Elizabeth's system of focussing the child's attention on a real object and discussing its relative parts. While achieving this aim, these lessons also assisted the child's retention of the lesson material.

10. Ibid.

In following Pestalozzi's principle of intuition, in which the impression received by our external senses (especially our sight) was communicated directly to the mind, the object lessons assisted the child in forming the idea and a consciousness of the object, so helping in the memory process. Pestalozzi had sought to direct his teaching to a particular one of the child's senses, in order to facilitate his understanding of the object. By this method Pestalozzi aimed to enhance the perceptive faculties of the young. Elizabeth Mayo's lessons followed the same Pestalozzian principle by combining practical experiments with an object in the classroom; the child was able to remember more clearly the individual properties of each object. Memory, which received considerable attention from Pestalozzi, was, therefore, a fundamental element in the structure of Elizabeth's object lessons. This aspect of memory was probably impressed on Elizabeth by her brother Charles, for it is clear in his letters that he considered memory to be an often neglected faculty in education.¹¹

Although it is apparent that the development of Elizabeth Mayo's object lessons contain much that is outwardly Pestalozzian, the lessons do contain certain elements that would not have met with Pestalozzi's own approval. To some extent this is not surprising since Pestalozzi's own object lessons were, as Krüsi points out,¹² not practised in the later years at Yverdon and therefore Dr. Mayo himself only received second-hand knowledge of the object lesson method from teachers who had

11. Wurm Papers, op.cit., letter, Charles Mayo to Wurm, dated 25th April 1825.

12. Krüsi, H., op.cit., p.225. Pestalozzi had first used object lessons in the poor-school in Stans. In subsequent years, however, they were abandoned by Pestalozzi because he felt the lessons were so miscellaneous in character as to be counter-productive in his systematic approach to intellectual education.

formerly practised it. That Elizabeth's interpretation should on the whole be in many respects so Pestalozzian, would support Pestalozzi's own favourable testimony and confidence in Dr. Mayo's ability to accurately communicate the Pestalozzian method.¹³

The flaws in Elizabeth Mayo's interpretation of object lessons tended to be centred on the emphasis on teacher direction. Above all, this emphasis removed the spontaneity in the learning process that Pestalozzi, and before him Rousseau, had sought to encourage. In so doing, the discovery learning was of a very restricted form, developing out of the leading questions of the teachers. Raumer, writing in 1855, also criticizes the use in the British interpretation of object lessons of obscure words.¹⁴ In a valid argument he asserts that in the German language the words denoting the properties of the objects are simple words which can be easily understood by the children. Transparent, for example, is durchsichtig (see-throughable), while absorbent is einsaugend (insucking). Whereas, the English word had no initial or obvious meaning to the English child, the meaning of the German word was quickly apparent to the German-speaking children. As a result of this complication, there was a tendency for abstract verbalism to become a prominent feature in British object lessons.¹⁵

The failure of Elizabeth Mayo's interpretation of object lessons to replace the verbalism so characteristic of education at that time, was largely a reflection of contemporary standards of teaching. Through

13. See Johann Heinrich Pestalozzi. Sämtliche Briefe, (ed.), Pestalozzianum and Zentralbibliothek Zürich, 1946—. Volume XII, p.269.

14. Raumer, K., The Life and System of Pestalozzi, 1855, p.56.

15. For contemporary criticism of the emphasis on learning particular words see Malden, H., On the Introduction of the Natural Sciences into General Education, 1838, pp.19-20, cited in Lawson, J., and Silver, H., A Social History of Education in England, 1973, p.248.

their lack of ability and training, teachers allowed the object lessons to deteriorate into a gross misrepresentation of the original method advocated by Miss Mayo. Many teachers used the formalism of the object lesson as an excuse for laziness, changing the subject and properties for each object, but making no or little effort to create any enthusiasm for the individual topic.¹⁶ Under such circumstances, it too often became an inflexible lesson style based on arid verbalism.

Elizabeth Mayo's object lesson approach, nevertheless, represented a popular interpretation of the Pestalozzian method, which assisted in promoting Pestalozzi's emphasis on sense training and focussing educational thinking onto the relevance of such training to the education of the young child. Writing in the preface to Lessons on Objects in 1855, Elizabeth commented:

when this work was first presented to the public, nearly thirty years since, the idea of systematically using the material world as one of the means of educating the minds of children, was so novel and so untried a thing in England, that the title, 'Lessons on Objects', excited many a smile, and the success of the little volume was deemed to be, at best, very dubious.¹⁷

By 1855, however, the book had reached a sixteenth edition and the use of object lessons had become widespread. Promoted by the Home and Colonial School Society,¹⁸ the adoption of object lessons in schools brought the name of Pestalozzi to British teachers. The gallery arrangement, which was so favoured in schools, also proved well adapted to the delivery of object lessons, which by the 1860s had achieved considerable popularity and had secured their place in the nineteenth century school timetable.

16. Pollard, H. M., Pioneers of Popular Education, 1956, p.184.

17. Mayo, E., Lessons on Objects, 1855, p.xi.

18. See Chapter IV for details of the Home and Colonial School Society. Further comment on object lessons is to be found in Chapter VI, pp. 200-201, 209.

Examples of the existence of object lessons in schools of this period are numerous. In May 1864, for example, St. Thomas's Boys' National School, Winchester, arranged a new timetable to enable two object lessons each week to be taught in the school.¹⁹ Often these were, in fact, given to the whole school. Another example is provided by the nearby Winchester Central National Girls' and Infants' School where object lessons concentrated on animals and geography.²⁰ The acceptance and use of object lessons in schools was not confined to any one area, and other examples are to be found in the northern industrial cities. In Preston, St. Wilfrid's School concentrated their object lessons on scientific and natural history topics.²¹ Such lessons aimed to train the senses as well as the intellect. Indeed, object lessons themselves became part of a primitive form of science teaching.²²

Although object lessons were a derivation of the Pestalozzian method, their development in British education should be recognised as merely a branch of the method adopted, and not as the complete method itself. While the fundamental Pestalozzian principle of proceeding from the known to the unknown, from vague to clear ideas, remains a constant feature of the object lesson approach, British Pestalozzian developments other than those directly associated with object lessons must also be assessed.

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19. St. Thomas's Boys' National School, Winchester, school log book 5th May 1864, located at Hampshire County Record Office, Winchester.
 20. Winchester Central National Girls' and Infants' School log books 1866-1870, located at Hampshire County Record Office, Winchester.
 21. St. Wilfrid's School log book, 1868, cited in Baldwin, W. T., 'The Development of Elementary Education in Preston from 1815 to 1902', M.Ed., University of Liverpool, 1970.
 22. For an account of the contribution of the Mayos and object lessons to science teaching see pp. 93-97.

3. Specific Applications

As Stewart and McCann point out,¹ the teaching of arithmetic was dominated by mechanical and hypothetical exercises which failed to develop the mental powers of the pupil. Crossley and Martin's book The Intellectual Calculator, or Manual of Practical Arithmetic, 1833, highlights the mechanical formalism of such teaching. Although this book had appeared in a seventy-seventh edition by 1865, there is evidence that the teaching of arithmetic on Pestalozzian principles also found support. As early as 1815, John Synge's book A Sketch of Pestalozzi's Intuitive System of Calculation, had drawn the attention of the British public to Pestalozzi's three arithmetic tables. These tables of simple units and simple and compound fractions were used in Synge's own school and also at Abbeyleix in Ireland where the system was seen and later developed by the Kildare Place Society for its model schools in Dublin.² Commenting on these schools, Kay-Shuttleworth recalled how

we never observed in any school greater expertness in mental calculation, than in the Kildare Place Schools, nor so universal an aptitude for numerical combinations.³

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1. Stewart, W. A. C., and McCann, W. P., The Educational Innovators 1750-1880, 1967, pp.174-175.
 2. Society for Promoting the Education of the Poor in Ireland, Ninth Report, Dublin, 1821, p.28., cited in Williams, P. C., 'Pestalozzi John, a study in the life and educational work of John Synge', Ph.D., University of Dublin, 1966, p.107. Synge also produced a Manual of Exercises in arithmetic for the Kildare Place Society's schools. See Minutes of the Committee of Council on Education, 1842-1843, p.270.
 3. Kay-Shuttleworth, Sir J., Four Periods of Public Education, 1862, pp.414-415. For further details on the contribution of Kay-Shuttleworth to British education and his promotion of Continental methods see Smith, F., The Life and Work of Sir James Kay-Shuttleworth, 1923; Stewart, W. A. C., and McCann, W. P., *op.cit.*, pp.179-197; Warwick, D. W., 'Sir James Kay-Shuttleworth (1804-1877): the genesis, development and influence of his ideas on education and teaching,' Ph.D., University of Lancaster, 1978.

In England, P. H. Pullen's Intellectual or Intuitive Arithmetic in 1821 gave further publicity to Pestalozzi's views on arithmetic. This work was followed by Reiner's Lessons on Numbers in 1831 which emphasized the need for mental calculations without the assistance of slate or pencil. Reiner's book closely followed the object lesson approach, bearing a strong resemblance to the sensory observation method originally proposed by Pestalozzi.

Attention was also drawn to Pestalozzi's method of teaching arithmetic through the efforts of Kay-Shuttleworth and the Committee of Council on Education who, in the 1840s, organized at Exeter Hall a series of lectures on various subjects for teachers.⁴ These lectures included instruction in the teaching of arithmetic according to Pestalozzi.⁵ As a result of the success and popularity of the various lectures, a number of different subject manuals were published under the direction of the Committee of Council.⁶ In terms of arithmetic teaching, support was given to Pestalozzi's system by the publication in 1844 of Exercises in Arithmetic for Elementary Schools. After the Method of Pestalozzi. By 1857 another Pestalozzian arithmetic book had appeared in the form of Tate's A System of Mental Arithmetic after the Method of Pestalozzi for the use of Teachers.⁷

Although such efforts did much to promote Pestalozzi's method of

4. Fitch, J., 'Primary Education in the Nineteenth Century', in Education in the Nineteenth Century, edited by Roberts, R. D., 1901, pp.43-44 indicates that considerable numbers of teachers attended these lectures, which attempted to make known Continental reforms in methods of teaching.
5. Ibid.
6. See Stewart, W. A. C., and McCann, W. P., op.cit., p.188.
7. Thomas Tate was the mathematics master at Battersea Training College. His support for the Pestalozzian system of teaching arithmetic stemmed from his use of Syngé's Manual of Exercises, see Committee of Council on Education, Minutes, op.cit., 1842-1843. p.271.

teaching arithmetic, they failed to secure sufficient support to oust the mechanical formalism of the Crossley-and-Martin approach.⁸ Nevertheless, there is evidence that the schools established or directly influenced by Kay-Shuttleworth did favour the arithmetic teaching methods and tables of units advocated by Pestalozzi. The Committee of Council's report in 1844, for example, highlights the extent of the term 'Pestalozzi' in the timetable of the School of Industry in Norwood.⁹ Under the heading of 'General Routine of Boys' School' there are numerous references to 'Pestalozzi'.¹⁰ It shows that 'Pestalozzi' formed a daily lesson for each class at the school; from the highest first class to the lowest sixth.¹¹ The first class spent most time on 'Pestalozzi' which totalled between 1½-2 hours each week.¹² As tables and arithmetic are also mentioned as part of the daily routine, together with reading, writing, dictation, geography, and the Bible or catechism, it would at first seem likely that the term 'Pestalozzi' is merely a reference to an object lesson. However, the Committee of Council's report in 1843 appears to offer significant evidence that the term refers to arithmetic.¹³ Indeed, it is clear from the Norwood weekly timetable included in this report, that a distinction within the

8. Stewart, W. A. C., and McCann, W. P., op.cit., p.195.

9. Minutes, op.cit., 1844, Volume II, pp.376-377. The Norwood school received children from the London workhouses. In 1840 one thousand children were attending the school. See The Times, 24th October 1840, p.3. For an account of the school refer to Webb, S. and B., English Poor Law History, 1927, Part II, I, pp.259-263.

10. Minutes, ibid.

11. In 1842 when Norwood had seven classes, however, 'Pestalozzi' was not given to the seventh class. See ibid., 1842-1843, p.601.

12. Ibid., 1844, Volume II, p.376.

13. Ibid., 1842-1843, p.601.

subject of arithmetic was made between that which was 'on slate' and that which was 'Pestalozzian'. This would suggest that the term refers to mental arithmetic and the use of Pestalozzi's tables of units.¹⁴

As Duke points out,¹⁵ Norwood influenced the Kirkdale industrial school in Liverpool and the one at Swinton in Manchester.¹⁶ These schools established in the early 1840s modelled themselves on the Norwood system. Not surprisingly, therefore, they also adopted the Pestalozzian method of teaching arithmetic. At Kirkdale all classes, from the highest first, to the lowest fifth, were taught arithmetic using Pestalozzi's tables.¹⁷ Similarly, the term 'Pestalozzi' is to be found in the timetable of the Swinton school.¹⁸ As object lessons appear in their own right on the school timetable, even on the same day as the term 'Pestalozzi',¹⁹ it appears the term is again being used as another reference to Pestalozzi's tables and the teaching of arithmetic.²⁰

14. Ibid., 1845, Volume II, p.269, actually lists Pestalozzi's tables under the title of arithmetic.
15. Duke, F., 'Pauper Education', in Fraser, D. (ed.), The New Poor Law in the Nineteenth Century, 1976, p.70.
16. Further details on the Kirkdale school are to be found in Duffy, W., 'The Early Years of the Liverpool Industrial School, Kirkdale'. M.Ed., University of Liverpool, 1976. Apart from Kirkdale and the Manchester school, the only other industrial-type school showing some Pestalozzian influence in the curriculum is Ealing Grove agricultural school founded by Lady Byron in 1834 (see Stewart, W. A. C., and McCann, W. P., op.cit., pp.154-169; Minutes, op.cit., 1842-1843, pp.557-558). However, Ealing Grove and similar type schools reflect Fellenberg's influence and his emphasis on a system of education based on agriculture.
17. Minutes, op.cit., 1845, Volume II, p.279.
18. Ibid., pp.295-296.
19. Ibid., p.296.
20. The school timetable does link 'Pestalozzi' and 'Tables' for one particular period; however, Pestalozzi, Arithmetic, Tables and Object Lessons do on other occasions appear separately.

Realising that there was a need to extend the teacher training developed at Norwood, Kay-Shuttleworth established in February 1840 the Battersea Training College.²¹ As Rich indicates,²² the first students to attend the new college were thirteen-year-old pupil teachers from Norwood. Under the superintendence of Kay-Shuttleworth the college continued with the teaching methods adopted at Norwood, using in arithmetic the methods of Pestalozzi.²³ However, it is clear that at both Norwood and Battersea many subjects were taught according to Pestalozzian principles.²⁴ Above all, the emphasis was on a synthetical approach leading the pupils from vague to clear ideas; from the simple to the complex.²⁵

In terms of arithmetic teaching the Pestalozzian system produced favourable results. Reporting on the third class at Norwood, Seymour

21. For accounts of the development of Battersea College refer to Adkins, T., History of St. John's College, Battersea, 1906; Kay-Shuttleworth, Sir J., op.cit., pp.294-431; Rich, R. W., The Training of Teachers in England and Wales during the Nineteenth Century, 1933, pp.55-79; Smith, F., op.cit., pp.104-132. The Committee of Council's First and Second Reports on the training at Battersea also provide detailed information: see Minutes, op.cit., 1842-1843.
22. Rich, R. W., op.cit., p.62.
23. Kay-Shuttleworth, Sir J., op.cit., p.340; Minutes, op.cit., 1842-1843, p.558.
24. Pollard, H. M., Pioneers of Popular Education 1760-1850, 1956, p.256 indicates that teaching methods in reading, writing and arithmetic at Battersea were inspired by Pestalozzi. Similarly, The Educational Magazine, June 1840, pp.380-381 discusses Norwood's system of simultaneous teaching and reading which closely resembles the methods used by Pestalozzi in Yverdon.
25. See Poor Law Commission, Fifth Annual Report. Reprinted in The Training of Pauper Children, 1841, pp.102-120, cited in Smith, F., A History of English Elementary Education 1760-1902, 1931, p.167.

Tremenheere describes how

almost all did correctly and expeditiously two sums in Compound Multiplication, and solved questions of Proportion mentally, according to the process of the Pestalozzian tables.²⁶

He also indicates that the most advanced pupils were able to reduce Compound and Simple Fractions by the mental process taught by the Pestalozzian tables.²⁷ By such methods Pestalozzi's system of arithmetic teaching, based on numerical concepts and tables of units, assisted in developing pupils' awareness and understanding of numbers.

The British Pestalozzians also made a contribution to the teaching of science in England. As Layton points out, Cheam School was a notable development.²⁸ As early as 1825 Charles Mayo had expressed his concern to C. F. Wurm about the contempt for Positive Science.²⁹ At Cheam School Mayo attempted through a study of common objects to exercise the child's perceptive faculties. By the use of object lessons he sought to develop powers of observation and the child's ability to categorize objects. In this sense, Charles Mayo at Cheam and Elizabeth Mayo through her lessons on objects 'pioneered a form of teaching which they regarded as preparatory to instruction in science'.³⁰

26. Minutes, op.cit., 1842-1843, p.604.

27. Ibid., p.605. At Battersea the teaching of arithmetic by the Pestalozzian system was equally diligently pursued with similar results. See ibid., pp.218-219. This account of the arithmetic teaching at Battersea explains how the Pestalozzian system was used alongside ordinary lessons in mental arithmetic.

28. Layton, D., Science for the People: the origins of the school science curriculum in England, 1973, p.23.

29. Wurm Papers, op.cit., Letter, Charles Mayo to Wurm, dated Epsom, 25th April 1825.

30. Layton, D., op.cit., p.24. For further comment on object lessons and the development of science in schools see Selleck, R. J. W., The New Education 1870-1914, 1968, pp.123-126.

Although Ingle and Jennings have pointed out that there are few recorded cases of science being taught in schools in England before 1850,³¹ Cheam School does provide one such example.³² As mentioned earlier, it was Charles Reiner who was responsible for the teaching of the sciences at Cheam School. Subjects such as chemistry, botany, geology, astronomy and zoology were taught to the pupils.³³ Cheam School, however, made little impression on influencing other schools in the late 1830s and early 1840s to moderate their adherence to the traditional classics-based curriculum.³⁴

The development in the 1840s of King's Somborne under the influence of Richard Dawes and of Hitcham under John Stevens Henslow demonstrated what could be achieved.³⁵ The two schools adopted different approaches.

31. Ingle, R. and Jennings, A., Science in Schools; Which Way Now? Studies in Education, 8, University of London Institute of Education, 1981, p.15. See also Russell, C., Science and Social Change, 1700-1900, 1983, p.152.
32. See also the Pestalozzian Academy in South Lambeth in A Short Account, op.cit., p.32 which indicates that botany and chemistry were taught. The other main examples include the Hills at Hazelwood, Richard Dawes at King's Somborne, John Stevens Henslow at Hitcham, John Ellis and the Rational Schools, and Queenwood College. See Stewart, W. A. C., and McCann, W. P., op.cit., pp.82-92, 98-118, 130-132; Ball, N., 'Richard Dawes and the teaching of common things', Educational Review, 17, 1964, pp.59-68; Layton, D., op.cit., pp.35-74; 'Queenwood College, Hampshire. A mid-nineteenth-century experiment in science teaching', Annals of Science, Volume II, 1955, pp.246-254. Thompson, D., 'Science Teaching in Schools during the Second Half of the Nineteenth Century', School Science Review, 133, June 1956, pp.298-305 also describes science teaching at the City of London School from 1838.
33. Fremantle, D., Recollections of Dean Fremantle, chiefly by himself, 1921, p.10. Also see 'An Account of Cheam School', op.cit.
34. One exception was George Holyoake during his period at the Sheffield branch school. The science teaching and Pestalozzian methods pursued by the Rational Religionists is discussed in Stewart, W. A. C., and McCann, W. P., op.cit., pp.82-92.
35. For a detailed analysis of their contribution and of science education in the nineteenth century see Layton, D., op.cit.

The King's Somborne school pursued scientific knowledge as an end in itself, emphasizing the importance of the 'Science of Common Things'. ~~Science~~ Science was seen in terms of 'useful knowledge' linked to an understanding of the natural world. Hitcham, on the other hand, while emphasizing the importance of botany in the curriculum, pursued science in relation to its value in training powers of observation and reasoning. This division of opinion as to what science teaching should seek to achieve continued to be a feature in developments in science education throughout the century.³⁶

The emphasis on the 'Science of Common Things' as advocated by Dawes won the support of Henry Moseley and the Education Office of the Committee of Council which was primarily concerned with elementary education. As such, Dawes' ideas became more influential in the field of the education of the labouring poor, unlike Henslow's Hitcham experiments which, subsequently attracting recognition from the Department of Science and Art, became a feature of developments in the public and endowed secondary schools later in the century.³⁷

As Layton points out,³⁸ by the 1850s there had developed a well-defined movement for the teaching of science in elementary schools. Assisted by the efforts of Henry Moseley, the Committee of Council had

36. See Roberts, R. D., (ed), Education in the Nineteenth Century, 1901, p.125. Herbert Spencer's Education: Intellectual, Moral and Physical, first published in 1861, however, made a significant contribution to the movement for science teaching in that it emphasized the overall value of science education compared to the traditional classics-based curriculum.

37. Layton, D., op.cit., pp.36-37. For an assessment of the contribution of the Department of Science and Art to the science movement in the nineteenth century see Roderick, G. W. and Stephens, M. D., Scientific and Technical Education in Nineteenth Century England, 1972; 'Observations on the work of the Department of Science and Art', History of Education Society Bulletin, 10, Autumn 1972; Tracey, G. W., 'The Origin and Growth of Scientific Instruction in Science Classes under the Science and Art Department', Durham Research Review, 21, 1968.

38. Layton, D., op.cit., p.95.

made available to schools a range of scientific apparatus and books while encouraging a growth in the supply of trained teachers. The initial progress, however, suffered a serious setback with the implementing of the Revised Code in 1862. The emphasis on payment by results had a restricting effect on the elementary school curriculum, limiting instruction to the three Rs. Despite Playfair's acknowledgement of the superiority of German and French exhibits at the 1867 International Exhibition in Paris,³⁹ and the recommendations of the Samuelson Select Committee in 1868 and Devonshire Commission in 1875 on the need for more science teaching in elementary schools, science as a subject had been effectively forced out of the elementary school. Consequently, as Heward remarks,⁴⁰ science became post-elementary. Apart from the widespread recommendation of object lessons in infant schools, the Department of Science and Art had to be accepted as the only means of science education for the working classes.

A division had therefore emerged between object lessons and science teaching. The Samuelson Report (1884), advocating more object lessons and an increase in science teaching in training colleges, was followed in 1888 by the Cross Report and its examination of the Elementary Education Acts. These Reports assisted in focussing attention once again onto science in the elementary school curriculum. Despite the innovations and advances that had earlier been made and the campaign for working class science education in such periodicals

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39. Haines, G., Essays on German Influence upon English Education and Science 1850-1919, 1969, p.48. Lyon Playfair was Secretary and Inspector of the science division of the Department of Science and Art.
40. Heward, C. M., 'Industry, cleanliness and godliness', Studies in Science Education, 7, 1980, p.100.

as Nature,⁴¹ and through the British Association for the Advancement of Science,⁴² the Cross Commissioners in 1888 could, nevertheless, state with accuracy that the teaching of science in elementary schools was still in its infancy.⁴³

The extent of the Pestalozzians' contribution to the movement by the turn of the century is difficult to assess. Although Layton points out that Dawes was undoubtedly familiar with the work of the Pestalozzian Home and Colonial School Society and had visited schools on the Continent, he asserts that there is little evidence to suggest influence from these sources.⁴⁴ However, while Cheam School's influence may well have been on a limited front, the impact of Elizabeth Mayo's object lessons on science teaching was significant. Layton describes them as a recurring pedagogical device in educational practice during the nineteenth century.⁴⁵ Although such object lessons tended to draw religious and moral conclusions, they did provide an initial basis on which to develop science teaching in early childhood education.

A study of nineteenth century British art education similarly indicates some Pestalozzian influence. As Ashwin points out,⁴⁶

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41. Founded in 1869 by Norman Lockyer to disseminate scientific information and to further the cause of science.
42. See Haines, G., op.cit., pp.50-51.
43. Cited in Layton, D., op.cit., p.215.
44. Ibid., p.47.
45. Ibid., p.24.
46. Ashwin, C. F., 'Pestalozzi and the Origins of Pedagogical Drawing', British Journal of Educational Studies, Volume XXIX, No. 2, June 1981, p.149. For a more detailed account of the development of drawing in Europe see Ashwin, C. F., Drawing and Education in German-Speaking Europe 1800-1900, 1981 (revision of Ph.D., thesis, University of London, 1980).

German-speaking Europe recognised their debt to the pioneering development of drawing as undertaken by Pestalozzi. In Britain, however, Pestalozzi's contribution was only indirectly acknowledged.

During the 1830s it was realised that Britain needed to develop a system of art teaching for the working classes, with an emphasis on design. The 1835 Select Committee on Arts and Manufactures highlighted the superiority of French design and the progress being made in Germany where drawing formed an element in the system of national education.⁴⁷ The evidence given to the Select Committee persuaded the Government to finance the establishing of a Central School of Design.⁴⁸ On the 1st June 1837, the new Central School of Design was opened at Somerset House, Aldwych. The School was the first step by the State to sponsor art education in a practical way.⁴⁹ The appointment in 1840 of William Dyce as director of the School determined the direction of nineteenth century British art education.

William Dyce (1806-1864) was a Scottish painter influenced by the German Nazarene painters who regarded art as a severe and precise craft.⁵⁰ He had become master of the Trustees Academy in Edinburgh in 1837, which had been set up in the eighteenth century to teach drawing to artisans. Although Scottish education (through the influence of the Edinburgh Review and enlightened educators such as John Anderson and George Birkbeck)⁵¹ was alive to experiments in practical education,

47. See Carline, R., Draw They Must, 1968, p.76.

48. Bell, Q., The Schools of Design, 1963, p.60.

49. Carline, R., op.cit., p.77.

50. Macdonald, S., The History and Philosophy of Art Education, 1970, pp.77-78.

51. See Kelly, T., George Birkbeck, Pioneer of Adult Education, 1957.

Dyce was not sympathetic to the Pestalozzian idea of using practical subjects such as drawing as a basic subject of educational value. As Macdonald indicates,⁵² Dyce was in favour of the Fellenberg system, using practical subjects for vocational training to prepare individuals for their station in life.

Dyce's views attracted the attention of the Central School of Design which led to his being commissioned to visit France and Germany to study their methods of art teaching.⁵³ His visit to Europe in 1837 strengthened his conviction as to the advantages of the trade-type schools as established in Germany.⁵⁴ In particular, he was impressed with the Bavarian system whereby all primary schools gave lessons in outline drawing of geometrical shapes and simple elements of ornament.⁵⁵ The German schools owed much to Pestalozzi's ideas as developed in his ABC der Anschauung published in 1803.⁵⁶ Pestalozzi had sought to develop the teaching of drawing in a series of well-defined steps. As a result, his system tended to follow a rigid developmental pattern beginning with the drawing of lines and progressing towards angles and geometrical figures. Although, as Ashwin points out,⁵⁷ Pestalozzi's ideas on teaching drawing were further developed by Schmid and Ramsauer, the formalism in the teaching of drawing remained.⁵⁸ It was the

52. Macdonald, S., op.cit., p.77.

53. Carline, R., op.cit., p.78.

54. Macdonald, S., op.cit., p.79.

55. Ibid.

56. See Ashwin, C. F., Drawing and Education, op.cit., p.56. Although Pestalozzi's system of drawing was influential in the German schools, Pestalozzi had, in fact, abandoned in 1804 his attempts to discover the various elements of form. The concentration of his efforts on child nature were subsequently to provide another source of inspiration.

57. Ibid., pp.31-50.

58. Green, J. A., Life and Work of Pestalozzi, 1913, p.281.

German type of strict and ordered drawing syllabus that Dyce advocated on his return to Britain.

On his appointment as director of the Central School of Design in 1840 Dyce immediately attempted to introduce his formal training system. The syllabus was to follow a strict sequence with an emphasis on form and colour. Students were to progress from elementary drawing to colour and then eventually to design.⁵⁹ Dyce aimed to produce teachers of ornamental drawing for industry and was determined to prevent his students seeking careers in the fine arts.⁶⁰

The rigidity of Dyce's ideas, however, caused internal frictions and in 1842 he resigned as director. His departure did not prevent the continuing development of the Central School of Design or the formal system of training supported by Dyce. In the period 1842 to 1852 twenty-one Branch Schools were established throughout the country, strengthening the position of the Central School in the manufacturing towns.⁶¹ However, as Stephens indicates,⁶² the Central School was never properly developed as a pacemaker to lead the Branch Schools. Little real progress had been made in promoting art education in elementary schools by 1851.

59. One of the main weaknesses of Dyce's system was that it separated art from design. For a more detailed account of Dyce's syllabus see Carline, R., op.cit., p.78.

60. Ibid., p.80.

61. The contribution and development of the Branch Schools is discussed in detail in Bell, Q., op.cit., Chapter VII; Cunningham, P. J., 'The formation of the Schools of Design, 1830-1850, with special reference to Manchester, Birmingham and Leeds', Ph.D., University of Leeds, 1979.

62. Stephens, W. B., 'The Victorian Art Schools and Technical Education: A Case Study, 1850-1889', Journal of Educational Administration and History, December, 1969, p.13. See also Report from the Select Committee on Schools of Art, Parliamentary Papers, 1864, XII, pp.iii-iv.

The Great Exhibition of 1851⁶³ proved an important event in attracting the attention of industrialists to a general decline in aesthetic standards. Although Britain won most of the prizes at the Exhibition, there was a growing appreciation of the extensive use of art in industry. As Bell points out, some observers were aware of a 'desolating poverty of artistic invention'.⁶⁴

The Exhibition also further enhanced the reputation of the confirmed utilitarian Henry Cole,⁶⁵ who in 1852 became superintendent of the newly created Department of Practical Art.⁶⁶ The department outlined three principal objectives.⁶⁷ Firstly, the promotion of elementary instruction in drawing and modelling. Secondly, special instruction in the knowledge and practice of ornamental art and, finally, the practical application of such knowledge to the improvement of manufactures. Whereas the Central School of Design and the Branch Schools had attempted to train ornamental designers for industry, the new Department aimed to provide a normal school of students competent to teach.⁶⁸

Cole's department, with its emphasis on training teachers in elementary drawing, soon joined forces with the movement towards

63. For the contribution of the Society of Arts to the Great Exhibition see Wood, H. T., The History of the Royal Society of Arts, 1913, Chapter XVII. The Society had been formed in 1754 for the encouragement of arts, manufactures and commerce.

64. Bell, Q., op.cit., p.245.

65. A detailed account of Cole's activities is to be found in Cole, Sir H., Fifty Years of Public Work accounted for in his Deeds, Speeches and Writings, 1884.

66. See First Report of the Department of Practical Art, Parliamentary Papers, Volume LIV, 1852-1853.

67. Ibid., p.2. For a later account of these objectives see the Thirtieth Report of the Department of Science and Art, Parliamentary Papers, 1883, Volume XXVII, Appendix D, p.xxxvii.

68. Macdonald, S., op.cit., p.159.

science education and in October 1853 a new Department of Science and Art was established with Lyon Playfair as Secretary and Cole as Inspector. Following the anxieties expressed at the Great Exhibition, the new department declared its intention of supplying scientific and artistic instruction to the industrial classes as a matter of urgency.⁶⁹ Under Cole's supervision one hundred and twenty schools of art were established in the twenty-year period after 1852.⁷⁰

Despite the changes in teacher education initiated by Cole, developments in art education continued to be dominated by an emphasis on accuracy. Assisted by the formal drawing teaching methods published and approved by the Society of Arts,⁷¹ the rigid teaching approach adopted by Dyce remained the basis for the class teaching of drawing in elementary schools. Such teaching made use of certain innovations in the Pestalozzian system of drawing. As Ashwin remarks,⁷² detailed analysis of the material prior to the lesson and the principle of progressive synthesis, through increments of difficulty, became established features. Although an indirect Pestalozzian contribution is, therefore, apparent in British art education from 1837, Pestalozzi's influence is more clearly in evidence later in the century through his ideas on child development.

From the 1870s criticism of the art methods pursued by the

69. First Report of the Department of Science and Art, Parliamentary Papers, 1854, Volume XXVIII, Appendix A. Comment was made on the needs expressed in the Second Report of the Royal Commissioners for the Great Exhibition of 1851. See Parliamentary Papers, Volume LIV, 1852-1853, Appendix B.

70. Macdonald, S., op.cit., p.182.

71. See the Society's series of manuals entitled Rudimentary Art, published from 1852.

72. Ashwin, C. F., 'Pestalozzi and the Origins of Pedagogical Drawing', op.cit., p.149.

Department of Science and Art gathered momentum. Ebenezer Cooke,⁷³ in particular, was one of the Department's severest critics.⁷⁴ It was through Cooke that the name of Pestalozzi emerged in later developments in British art education. Cooke advocated the importance of child nature and was a strong supporter of Froebel's kindergarten movement.⁷⁵ Although critical of Pestalozzi's efforts to make form the foundation of his teaching,⁷⁶ Cooke valued the psychological implications of child nature as expressed in the writings of Rousseau, Pestalozzi and Froebel.⁷⁷

Influenced by the educationist James Sully, Cooke argued against the formal geometrical type of drawing and the belief held by utilitarians, like Henry Cole, that such accurate drawing was important as a mind-trainer with implications for the study of other subjects. Cooke sought to emphasize that the child was a creative being with an active imagination that should be developed through art. Supported by the views expressed by Herbert Spencer⁷⁸ and Alexander Bain, Cooke

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73. Ebenezer Cooke was responsible for the first English translation of Pestalozzi's How Gertrude Teaches Her Children, published in 1894. Cooke edited the book and wrote the detailed introduction and accompanying notes. It is clear from this book that Cooke was strongly influenced by Pestalozzi's work and ideas.
74. Carline, R., op.cit., pp.130-131. (Other important critics included John Ruskin and Herbert Spencer.)
75. See Cooke, E., Our Art Teaching and Child Nature, 1895, cited in Carline, R., ibid.
76. Cooke, E., 'The ABC of Drawing: An Inquiry into the Principles underlying Instruction in the Elements of Drawing'. In Reports from Commissioners, Inspectors, and others, Volume XI, 1897, p.137.
77. Macdonald, S., op.cit., p.326.
78. See Spencer, H., Education: Intellectual, Moral and Physical, 1861, (1878 edition), pp.37-41. For an analysis of Cooke's interpretation of Spencer's views on Pestalozzi see introduction to Holland, L. E., and Turner, F. C., How Gertrude Teaches Her Children, 1894. Further comment on Pestalozzi's influence on Spencer's ideas is to be found in Chapter VI of this thesis.

highlighted the importance of unfolding the child's powers through its own natural activities.⁷⁹ Although, as Macdonald points out,⁸⁰ the views of Spencer, Bain, Cooke and Sully did not effect a swift change of attitude to art education in Britain, they did demonstrate a growing awareness of the significance of child nature and art and the contribution made by Pestalozzi.

A Pestalozzian influence is also apparent in the developments in British music education during the nineteenth century. With the assistance of Pfeiffer and Nägeli, Pestalozzi had developed a method of music teaching based on sensory observations.⁸¹ Pestalozzi viewed music, particularly in the form of singing, as an important part of his system of moral education. At Cheam School Mayo continued this policy and went so far as to have a specialist music teacher visit the school each week,⁸² giving lessons on the Hullah system.⁸³ The subject's importance was also stressed in Elizabeth Mayo's book entitled Selection of Hymns and Poetry for the use of Infant schools and Nurseries published in 1838. However, one of the most important developments in vocal music was the emergence of Curwen's Tonic Sol-fa method. As Hayward remarks, 'the Tonic Sol-fa method of

79. Macdonald, S., op.cit., p.326.

80. Ibid., p.328.

81. For further details on the Pestalozzian method of teaching music see Green, J. A., Life and Work of Pestalozzi, 1913, pp.222-223.

82. See Fremantle Letters, op.cit., Thomas to his Mother, undated, (probably 1839).

83. Peel, E., Cheam School From 1645, 1974, pp.124-125. John Hullah (1812-1884) was lecturer in music at the Battersea Training College and in 1870 became Inspector of Music of the Training Colleges. Hullah introduced a method of vocal music using the "fixed-doh" system of Wilhem, whose method was widely practised in France. For details of his opinions see Nettel, R., Sing a Song of England: A Social History of Traditional Song, 1954, p.202.

Mr. Curwen was a direct result of his (Pestalozzi's) influence'.⁸⁴

John Curwen's Tonic Sol-fa method, which gained increasing support throughout the nineteenth century,⁸⁵ was inspired by the technical limitations of Hullah's system⁸⁶ and by Curwen's realisation of the power of singing as an instrument for moral and religious education. Curwen's method with its "moveable doh" system owes much to the ideas of Sarah Glover, whose work Curwen had become acquainted with in 1841.⁸⁷ It is likely, in view of a letter written by Miss Glover to Curwen,⁸⁸ that she, too, was aware of the educational ideas of Pestalozzi. Similarly, the Tonic Sol-fa Reporter in 1859 emphasizes the importance of the educational works of Elizabeth Mayo in preparing the ground for an appreciation of Miss Glover's ideas.

The development and acceptance of Curwen's system relied to a certain extent on the support of the teacher training colleges and, in particular, the Pestalozzian Home and Colonial School Society. Curwen realised that the colleges were of crucial importance to the development of the teaching of vocal music in schools. While the Government continued to support the Hullah method,⁸⁹ Curwen relied on the independent

84. Hayward, F. H., The Educational Ideas of Pestalozzi and Froebel, 1904, p.69. The Educational Times and Journal of the College of Preceptors, 1st October 1896, pp.496-497, also indicates that Curwen attended an Education Society lecture on Pestalozzi and had testified how strongly he believed in him.

85. Taylor, I., 'Music and the Victorian Elementary School', History of Education Society Bulletin, No. 18, Autumn 1976, p.47 does point out, however, that progress in vocal music in schools was severely restricted by the Revised Code of 1862.

86. See Pearsall, R., Victorian Popular Music, 1973, pp.115-116.

87. Curwen, J. S., Memorials of John Curwen, 1882, p.49; Curwen, J. S., and Graham, J., The Tonic Sol-fa Jubilee, 1891, p.21.

88. Curwen, J. S., ibid., p.56.

89. See Hickson, W. E., 'Music and the Committee of Council for Education', Westminster Review, Volume XXXVIII, January 1842. Government support for Curwen's method is evident from 1867. See Pearsall, R., op.cit., p.117.

Home and Colonial School Society to promote his system. Curwen himself visited the Society to give talks on his system⁹⁰ and the Society benefited from the teaching of Mrs. Stapleton,⁹¹ who was the first teacher of Tonic Sol-fa in London.⁹²

Despite the Home and Colonial School Society's acceptance of government grants in the early 1850s, which then forced it to adopt the system of singing patronised by the Government,⁹³ the Tonic Sol-fa system had by the mid-1860s become the chief method of teaching vocal music in English elementary schools.⁹⁴ The progress made in this area, although not directly attributable to Pestalozzi, can at least be credited as part of a system favoured by British Pestalozzians. It represented an area of education hitherto neglected by them, but their acceptability of it highlights their determination to use a variety of methods to assist them in achieving their desired objectives in moral education.

It is clear that the British Pestalozzians placed special importance on moral education. In addition to her work on object lessons, Elizabeth Mayo drew the attention of her readers to Pestalozzi's adherence to the significance of religion in the education of young children. Here, as with object lessons, Elizabeth produced her own

90. Curwen, J. S., op.cit., p.38, for example, indicates that Curwen read a detailed paper to the trainee teachers on 8th July 1846.

91. Ibid., p.208.

92. Ibid., p.216.

93. See letter from Mr. Reynolds, Secretary of the Home and Colonial School Society, to John Curwen, in ibid., p.209.

94. Leinster-Mackay, D., 'John Hullah, John Curwen and Sarah Glover: A Classic Case of "Whiggery" in the History of Musical Education', British Journal of Educational Studies, Volume XXIX, No. 2, June 1981, p.165.

distinct interpretation. Asserting her Pestalozzian belief that education should be systematically progressive, graduating in a series of well-defined steps, she placed a new significance on the part played by God in the development of the individual. While Pestalozzi placed the significance of God in the context of moral education based on the love relationship that was to be developed in the child between his mother, his God and his fellow man, Elizabeth Mayo's efforts went much deeper and sought to develop a series of lessons which could be used by parents and teachers alike, commencing with the first dawning of the infant mind to the ages of nine or ten years. These lessons advocated by Miss Mayo had, in her opinion, the advantage

that they have not emanated from theories produced in the closet, but have been written as they have been wanted, and their value was immediately tested in the school-room.⁹⁵

Initially, the lessons, which consist of a graduated series of four steps, contain the basic elements of Pestalozzi's views on moral education. They begin by introducing the child to God as the Creator, to whom the child owes love and obedience. However, the lessons then branch off to consider in detail various examples taken from the Bible, making use of catechisms. Although her book Religious Instruction, first published in 1845, was merely an attempt to assist teachers in planting the first seeds of religious awareness in the young child, it offers a clear demonstration of how various aspects of Pestalozzi's teaching were expanded to meet the particular needs of the British Pestalozzians. Indeed, Elizabeth Mayo's interpretation of Pestalozzi's moral education concentrates on the development of religious instruction at the expense of stressing the 'love concept' that formed the

95. Mayo, E., Religious Instruction in a graduated series of lessons for young Children, 2nd edition, 1849, p.iv.

central feature of Pestalozzi's own system of moral education. By such methods the British Pestalozzians overcame criticism of Pestalozzi's views on religion⁹⁶ and won support for their emphasis on religious instruction.

Despite Elizabeth Mayo's tendency to concentrate in her books on the theory of classroom practice rather than general educational ideas, her influence on nineteenth century education was considerable. Although it can be argued that her impact on developments should be attributed to Pestalozzi, it must not be overlooked that it was Elizabeth's own work and interpretation which gave Pestalozzianism its greatest impulse in British education. Without her contribution to the advancement of Pestalozzian literature British Pestalozzianism would probably not have emerged so strongly in British education during the nineteenth century. Her involvement was vital, and singles her out as the most important of the British Pestalozzians.

Elizabeth Mayo's emphasis on object lessons and the need for graduated steps in the learning process focused attention on the importance of the education of the younger child. This, in turn, helped to centre Pestalozzian developments not on the élitism of private schools such as Cheam, but on the desirability for infant schools in general. Her work demonstrated the possible moralizing influence teachers could have on their pupils, and consequently the relative importance of a structured teacher training course to improve the expertise and quality of infant teachers. Her enthusiasm for such teacher training courses led her to become involved with the Home and

96. Initially there was concern as to whether Pestalozzi sufficiently emphasized Christian doctrine in his religious thinking. See Letter, Synge to Pestalozzi, dated Dublin, 10th December 1818, Ms. Pest. 55a/365/3, Central Library, Zürich.

Colonial School Society. An opportunity had again arisen to promote the ideas of Pestalozzi.

IV. THE HOME AND COLONIAL SCHOOL SOCIETY1. Progress in Infant Education

Although the degree of originality in the British Pestalozzians' overall interpretation of Pestalozzi's method is unclear, there can be little doubt that in infant education they offered a fundamentally new Pestalozzian approach. The emergence of the Pestalozzian Home and Colonial School Society was a significant change in direction, as it promoted the specific training of infant school teachers. Pestalozzi had maintained that the child's home and the subsequent relationship developed between mother and child formed the basis for infant education. In his opinion the 'living-room environment' provided the ideal learning situation; an environment particularly suited to a young child's moral education. Consequently, Pestalozzi saw an infant school as an intrusion on the natural relationship developed in early childhood between mother and child.

While accepting in principle the Pestalozzian ideal, the British Pestalozzians were aware of the impoverished environment of many children. Unlike Pestalozzi, they were confronted with an urban working class whose lives centred on the factory system as developed by the Industrial Revolution.¹ They realised that too often the circumstances of a child's home, with a working mother and an overcrowded household, made the Pestalozzian theory an impracticable ideal. In their opinion, the alternative was an infant school, necessitating infant school teachers. It would be wrong, however, to suggest that the British Pestalozzians were instrumental in creating the first

1. For an account of the social implications of the Industrial Revolution see Thompson, E.P., The Making of the English Working Class, 1963.

British infant school, for they were not. Indeed, several educators may lay claim to this honour, amongst whom may be named Owen, Buchanan and Wilderspin.² Their influence on the overall progress in British infant education must be remembered when the British Pestalozzians' contribution is assessed.

As we are concerned with Pestalozzian developments, the question as to whether the first British infant school was established by Owen in New Lanark in January 1816, by Buchanan in Brewer's Green, Westminster in 1819, or by Wilderspin in Quaker Street, Spitalfields on 24th July 1820, is not in itself of particular relevance. Nevertheless, when the subsequent development of infant education in Britain from the early 1820s is seen as a result of such innovations, the problems confronting the Infant School movement become apparent.

The circumstances surrounding New Lanark, the Westminster and Spitalfields schools were quite different. Robert Owen, who had in fact visited Pestalozzi at Yverdon in 1818,³ saw his New Lanark school as a step on the ladder to social change.⁴ His infant school, providing for the children of his own mill workers, was an attempt to alleviate the conditions imposed on the poor by the practices and excesses of the factory system. As Harrison points out,⁵ the New

2. For an insight into their respective claims, see The Times, 10th November 1834, p.6; 12th November 1834, p.2, and 14th November 1834, p.3.

3. Beer, M., (ed), The Life of Robert Owen, 1920, p.244.

4. To assess the work and influence of Owen see Podmore, F., Robert Owen, 1906; Cole, G. D. H., Robert Owen, 1925; Cole, M., Robert Owen of New Lanark, 1953; and Pollard, S., and Salt, J. (eds), Robert Owen: Prophet of the Poor, 1971.

5. Harrison, J. F. C., Robert Owen and the Owenites in Britain and America, 1969, p.22.

Lanark development was presented as a model of enlightened philanthropy. As such, it attracted considerable support from contemporary philanthropists. Although Owen's approach can be viewed as broadly humanist,⁶ his complete doctrine was unacceptable to the Evangelicals.⁷ In later years his views on the doctrine of circumstances and the formation of character aroused further religious anxieties, so that by the 1830s Owen became identified with the working class movement, socialism and atheism.⁸ Nevertheless, despite the controversies that later surrounded Owenism, it is clear that the New Lanark school provided an important model for developments which were to take place in England.

New Lanark's first infant school teacher, James Buchanan,⁹ was allowed by Owen to move to London to take charge of a new infant school in Brewer's Green, Westminster. The establishing of the Westminster Infant School, described by McCann and Young as 'merely one of a number of Owenite projects',¹⁰ can be viewed as the first infant school to be set up in a truly urban setting. As such, it was the Westminster school which provided the initial lead in demonstrating the effectiveness of Owen's New Lanark experiments for the education of the working class urban child.¹¹ Buchanan and the Westminster school are important;

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6. Simon, B., Studies in the History of Education 1780-1850, 1960, pp.194-195.
 7. Harrison, J. F. C., op. cit., p.23 discusses the Evangelicals' theological pessimism about human nature as preventing their acceptance of Owen's doctrine.
 8. Simon, B., op. cit., p.199.
 9. For a short account of the work of Buchanan see Rusk, R. R., A History of Infant Education, 1933, pp.135-145.
 10. McCann, P. and Young, F. A., Samuel Wilderspin and the Infant School Movement, 1982, p.36. This publication provided important material for Chapter IV of this thesis.
 11. Turner, D. A., '1870: The State and the Infant School System', British Journal of Educational Studies, XVIII, No. 2, June 1970, p.154 points out, however, that Buchanan was receptive to Pestalozzi's ideas and consequently the Westminster Infant School was never an exact model of the New Lanark institution, although it owed more to Owen and New Lanark than to any other source.

for through Buchanan's association with Swedenborgianism¹² he attracted and influenced others to establish infant schools while continuing himself to advance the work and ideas of Owen and Pestalozzi.

David Goyder, a London printer and Swedenborgian Sunday school teacher, was one person to be so influenced. In his Autobiography Goyder indicates that Buchanan advised him to acquaint himself fully with the system of Pestalozzi prior to becoming the master of Bristol Infant School which was to open in June 1821.¹³ Goyder's account of the school curriculum highlights the extent to which Pestalozzi's ideas were eventually adopted.¹⁴ While there is evidence of Swedenborgian and Owenite influence, Goyder made use of Pestalozzi's tables of arithmetic and followed his insistence on the exercising of children's memories. Goyder indicates that Pestalozzi's writings continued to provide the basis for the system pursued at the Bristol Infant School.¹⁵

12. This movement originated from the work of Emanuel Swedenborg, the Swedish philosopher and theologian, 1688-1772. The resulting Church of the New Jerusalem saw itself as the successor to the existing Christian Church and believed in a spiritual millennium that was just beginning. The Swedenborgians rejected the concept of evil supported by the Church, believing that evil existed in the world rather than in the nature of man. This belief shaped their attitudes to the education of the young. There was above all a concentration on infancy and infants, as young children were seen as symbols of innocence. As McCann and Young op.cit., p.52 point out, the educational process was viewed as developmental, proceeding from the blank mind via the principles of order, knowledge and truth to wisdom in God. For an account of Swedenborg's life and influence see Jonsson, I., Emanuel Swedenborg, 1971; Higham, C., 'The Rev. David Goyder's Work for Infant Education', New Church Magazine, Vol. XXIV, No. 406, October 1915, pp.445-450; and McCann, P. and Young, F. A., op.cit., pp.49-61.
13. Goyder, D. G., The Autobiography of a Phrenologist, 1857, p.109.
14. Goyder, D. G., A Manual of the System of Instruction Pursued at the Infant School, Meadow Street, Bristol, 1825, p.29.
15. Autobiography, op.cit., p.120.

By the beginning of 1822 the school was attracting considerable attention and was frequently visited by those interested in education.¹⁶ During these formative years Goyder continued to be active in promoting Pestalozzi and his system at various public meetings.¹⁷

Similarly, Samuel Wilderspin knew of Buchanan's methods at the Westminster Infant School and was influenced by them.¹⁸ The Spitalfields school established by Wilderspin in 1820 was an important development alongside the Westminster school in promoting the effectiveness of infant schools in a working class urban environment. Although McCann and Young¹⁹ have described the innovations and new teaching methods adopted by Wilderspin at Spitalfields, Goyder remarked that he observed nothing at Spitalfields that he had not already witnessed at Buchanan's Westminster school.²⁰ Indeed, Wilderspin's awareness of Buchanan was strengthened through their mutual interest in Swedenborgianism. Like Goyder, both Buchanan and Wilderspin were members of the New Church of Jerusalem²¹ which also attracted the sympathies of prominent Pestalozzians such as J. P. Greaves.²² The

16. Ibid, p.125. It is interesting to note here that Bristol also witnessed the establishing of a school by Lant Carpenter who had similarly been influenced by Pestalozzian ideas. See McCann, P. and Young, F. A., op.cit., p.58; and Simon, B., op.cit., p.110.

17. Autobiography, op.cit., p.126.

18. McCann, P., 'Samuel Wilderspin and the Early Infant Schools', B.J.E.S., XIV, No. 2, May 1966, p.192 points out that Wilderspin was a frequent visitor to Westminster Infant School, showing intense interest in the system pursued.

19. McCann, P. and Young, F. A., op.cit., pp.20-28.

20. Autobiography, op.cit., pp.108-109.

21. Ibid., p.109 indicates that Wilderspin was a clerk at Goyder's brother's chapel in Saint George's Fields and that Buchanan was a member of that Chapel's congregation.

22. Wurm, C. F., 'James Pierrepont Greaves', op.cit., 9th May 1852. Wurm discusses the point that Greaves read Swedenborg's works and was believed by many to be a Swedenborgian.

Intellectual Repository, a paper promoting Swedenborg's philosophy and its emphasis on the innocence of infancy and importance of child development, also disseminated the Pestalozzian system and the closeness of Pestalozzi's ideas to those of Swedenborg.²³ Greaves, for example, was a contributor to the Repository, writing in 1818 of the significance of Pestalozzian ideas for infant education.²⁴ Such articles were of considerable importance in promoting Pestalozzi at a time when no English translations of his works were available. These articles are likely to have aroused interest among a number of New Church members including Buchanan, Goyder and Wilderspin.

The return of Greaves to England in 1824²⁵ after a four year stay in Yverdon provided a new impetus to the advancement of British Pestalozzianism.²⁶ The enthusiasm of Greaves to associate himself with the development of infant schools on his return to England demonstrates the importance attached by the British Pestalozzians to the advancement of infant education in Britain. Greaves began by involving himself in the work of the Central Infant School in Brewer Street, London. In a letter to Mrs. Hillyar, his sister writes, 'he is as busy as a bee there, since he is educating people with the desire of being active in this branch of Christian welfare.'²⁷ Greaves'

23. Intellectual Repository, Vol. IV, No. XXXII, October-December 1819, pp.500-507. See also Vol. V, No. XXXIII January-March 1820, pp.46-52 and No. XXXVII, January-March 1821, pp.303-304.

24. Ibid., Vol. IV, No. XXVIII, October-December 1818, pp.237-242.

25. Salmon, D. and Hindshaw, W., Infant Schools, Their History and Theory, 1904, p.79, give the date of Greaves' return to England as 1825. The Hillyar letters, however, show that Greaves was in England in 1824.

26. Greaves had taken two years to arrive in England after his departure from Yverdon. During these years he spent a considerable period with Christian Wurm and taught English at Tübingen University. See Wurm, C. F., op.cit.

27. Letter from Mrs. Hillyar to C. F. Wurm, op.cit., dated 9th August 1824.

commitment to infant education brought him into contact with the Infant School Society.²⁸

The Society had been formed as a result of a meeting of supporters of infant education on the 7th June 1824.²⁹ The Morning Chronicle, 8th June 1824, indicates that such support rested mainly on the need to rescue children from vice and crime. As McCann has pointed out, there was a dramatic rise in juvenile offences at this time.³⁰ In this respect infant schools were viewed as a means to social stability. Roberts argues that the infant schools were consequently distrusted by the working classes, being seen as schools imposed on them in competition with their own working class neighbourhood dame school.³¹ McCann's Spitalfields research would tend to support this view that there was a distrust of middle class intentions.³² Nevertheless, the formation of the Society was a significant step forward towards the future acceptability of infant schools.

J. P. Greaves was appointed the Society's first secretary.³³ From his accommodation in the Mansion House, Bucklersbury, Greaves sought to encourage further progress in infant education by establishing links with former colleagues abroad. During this time, for example, and on his recommendation, Christian Wurm came to England to teach at Mayo's

28. For a detailed account of the composition and significance of the Society see McCann, P. and Young, F.A., op.cit., Chapter V.

29. Robert Owen, William Allen, William Wilberforce and Dr. Mayo were subscribers to the newly formed Society. See Morning Chronicle, 5th July 1824.

30. McCann, P., op.cit., p.189.

31. Roberts, A. F. B., 'A New View of the Infant School Movement,' B.J.E.S., 20(2), 1972, p.156.

32. McCann, P., (ed), Popular Education and Socialization in the Nineteenth Century, 1977, p.29.

33. Infant School Society, Annual Report, 1825.

school in Epsom.³⁴ McCann and Young describe Greaves' role during the first year of his secretaryship 'as a sort of public relations officer.'³⁵ It is apparent that he performed the role of information officer³⁶ and played an influential part in the initial promotion of the Society.

The contribution of the Infant School Society to the establishing and acceptance of infant schools prior to 1830 was a considerable one. Despite this, however, the Society lasted only four years, holding its last annual meeting in 1827. During its brief four year existence from 1824 to 1828 there occurred a rapid rise in the number of infant schools established. McCann and Young estimate that three times as many schools were founded in the Society's first year than in the preceding eight and a half.³⁷

The failure of the Society to consolidate its position would seem to be the result of several related factors. Its initial failure to found a permanent and impressive Model School prevented its development towards an established infant 'training' school rather than a society just for the promotion of infant education. Moreover, the lack of central government direction combined with confused and often conflicting objectives severely restricted the Society in pursuing a defined policy for the future advancement of infant education in Britain. Most crucially, the composition of the Society's own committee members imposed considerable limitations.

Initially, the twenty-five committee members³⁸ included nine who had been on the committee of the Westminster Infant School.

34. Wurm, C. F., op.cit.

35. McCann, P. and Young, F.A., op.cit., p.79.

36. Morning Chronicle, 5th July 1824.

37. McCann, P. and Young, F.A., op.cit., p.83.

38. See Morning Chronicle, 24th June 1824.

More importantly, however, the appearance of Brougham amongst the twenty-five tended to attract the hostility of the Tory-Anglican forces and their campaign against radical educational innovations. As McCann and Young point out, the Infant School Society increasingly attracted the Evangelicals who, by 1827, were in control of the Society.³⁹ Their impact on the direction and eventual decline of the Society is quite apparent. While continuing to stress the rescuing of children from vice and crime as their main objective,⁴⁰ they also attempted to associate infant education with the dissemination of scriptural knowledge. In so doing they sought to exclude those who had associated themselves with unorthodox ideologies or radical trends in education. Consequently, Greaves was dismissed in 1827.⁴¹ This decision may have been taken by the Society to avoid any possible future embarrassment resulting from Greaves' involvement in the appearance of Pestalozzi's Letters on Education published in that same year. As the Pestalozzian, Montague Burgoyne pointed out,⁴² however, his dismissal owed much to Greaves' liberal views and his refusal to passively accept the opinions of the Society's leadership. Like Greaves, Buchanan also found himself out of favour and was forced to resign as master of Westminster Infant School in 1827.⁴³

Despite his association with Swedenborgianism and the New Church, Wilderspin managed to remain with the Society until its effective closure in 1828. This can be accounted for by his discreet support

39. McCann, P. and Young, F. A., op.cit., p.79.

40. Morning Chronicle, 8th June 1824.

41. Greaves continued, however, to be involved in promoting Pestalozzianism. See Co-operative Magazine, 1828, Vol. III, pp.29-31.

42. Letter, Burgoyne to Brougham, dated 3rd January 1833. Brougham Mss., 44415, University College, London.

43. See Educational Magazine, Volume II, August 1835.

of Swedenborgianism during these years and by the nature of his role within the Society. As travelling representative engaged in assisting the establishing of infant schools throughout the country, Wilderspin was removed from much of the internal politics of the Society. Nevertheless, he was aware of the feuding factions⁴⁴ and would appear to have refrained from publicly supporting radical educational views during the existence of the Society.

McCann and Young's research throws new light onto Wilderspin's contribution to the development of infant schools during these formative years. They suggest that although he advocated the use of the gallery system and corporal and psychological punishment as a justifiable means of controlling the unruly urban child, he did attempt to offer a progressive and more child-centred approach to the education of infants.⁴⁵ It is clear that Wilderspin was influenced from 1824 by the Pestalozzian ideas of Greaves. The third edition of Wilderspin's book Infant Education in 1825, for example, included an appendix of Pestalozzian answers which McCann and Young attribute to Greaves.⁴⁶ The publication in 1827 of Letters on Early Education Addressed to J. P. Greaves acquainted Wilderspin still further with the views of Pestalozzi. It was, however, only after the demise of the Infant School Society in 1828 that Wilderspin was prepared to incorporate Pestalozzian principles into the main text of his book Infant Education.⁴⁷

44. Ibid.

45. McCann, P. and Young, F. A., op.cit., pp.20-28.

46. Ibid., p.64.

47. Infant Education (4th Edition) 1829. There was a conspicuous absence of Wilderspin publications between the appearance of the 3rd and 4th editions during the years 1825-1829.

While highlighting Pestalozzian ideas, such as those concerning language, number and form, Wilderspin's writings and theories were inclined to conflict with his own methodology.⁴⁸ His question-and-answer lessons linking words and things often degenerated into a quest for inert knowledge, which Pestalozzi had explicitly tried to avoid.⁴⁹

Despite Wilderspin's growing appreciation of child development, his early works indicate a reluctance to break with the organizational structure of the then elementary schools with their emphasis on the monitorial system. Such publications as his book On the Importance of Educating the Infant Poor in 1824 indicate his concern to pacify contemporary criticism. As he states,

Let it also be distinctly understood that
I am not finding fault with those well
regulated systems of instruction, known by the
names of the Madras and Lancasterian system.⁵⁰

Although Wilderspin's efforts escaped hostile criticism, the growing evangelical bias in the Infant School movement in the latter half of the 1820s saw little emphasis in Wilderspin's published works that accorded with their views on the place of scriptural knowledge within infant education. In this respect attention was drawn to the work and writings of Charles Mayo.

Aware of the fragmentary development of infant education in Britain, and having witnessed the success of Pestalozzi's system when applied to the education of young children, the evangelical supporter Charles Mayo had the necessary theoretical and practical experience

48. See The Infant System, 8th edition, 1852, especially Chapter VIII on hints for conducting an infant school.

49. See Holland, L. E. and Turner, F. C., translation of How Gertrude Teaches Her Children, 1894, pp.45-46.

50. Wilderspin, S., The Importance of Educating the Infant Poor, 2nd edition, 1824, p.78.

to clarify the intellectual and religious objectives of infant education. His significant, albeit solitary work, Observations on the Establishment and Direction of Infant Schools, 1827, being the substance of a lecture given to the Royal Institution in May 1826, illustrates Mayo's support for infant schools⁵¹ and his awareness of the problems still confronting infant education in 1826. With perception he demanded 'let then the friends of the infant poor clearly define to their own minds the object they have in view.'⁵² In this Mayo had encapsulated the fundamental problem facing the development of infant education in the latter half of the 1820s.

Mayo's account needs to be studied in depth, for its numerous publication under varying titles and its inclusion in magazine articles show the importance of its contribution to infant educational thought at the time and to the future emergence of infant teacher training at the Home and Colonial School Society.

Mayo's Observations highlighted his belief in the value of an infant school compared to the degradation and poverty that formed the everyday environment of so many children. He expressed the view that having to correct the bad habits of young children was a far more difficult task than to initiate the formation of good ones. The infant school therefore was, in his opinion, rightly viewed as providing an ideal environment in which to promote good habits before the evils of the child's environment could take root. In supporting the infant school cause, Mayo advocated three basic aims. The first and by far the most important was 'the development of moral and religious sentiments

51. Mayo had been a subscriber to the Infant School Society. See Morning Chronicle, 5th July 1824.

52. Mayo, C., Observations on the Establishment and Direction of Infant Schools, 1827, p.16.

and inculcating the elementary truths of religion.'⁵³ The priority given by Mayo to this area aroused the interest and support of the Evangelicals. Mayo visualized the infant school as being essentially moral. Thus, as with Pestalozzian theory, moral education emerges as the basis upon which the infant mind should develop. The infant school, Mayo declared, 'must seek moral ends by moral means.'⁵⁴ On achieving this primary objective it was free to concentrate on its secondary aim of enhancing the intellectual development of the infants. Finally, Mayo argued that such schools should provide an opportunity to improve the physical and bodily well-being of the child.

The stressing of these three basic aims may seem rather trivial today; yet, they highlight the need that existed in the 1820's to formulate an acceptable and approved basis upon which a system of infant education and training could develop. In emphasizing these aims Mayo was not advancing something radically different from the system supported by Wilderspin.⁵⁵ At a time when even infant school discipline was harsh, they both advanced a Pestalozzian spirit in infant education which was eventually to become the predominant feature of the child-centred infant school.

Mayo's Observations, however, stressed the association of moral education with Christianity and it was largely this emphasis which led to Mayo being singled out for support by the Evangelicals. The Christian spirit and higher moral tone of such schools would, Mayo believed, assist in bringing the spiritual benefits of the infant school into the children's own homes. As Mayo pointed out, 'the text of a

53. Ibid., p.15.

54. Ibid.

55. Wilderspin's first published work On the Importance of Educating the Infant Children of the Poor in 1823 had appeared in a third edition by 1825.

hymn repeated in a parent's hearing has opened the first source of Christian sentiment.'⁵⁶ The significance of the living-room environment as advocated by Pestalozzi remained an important feature of Mayo's views on infant education.

To achieve the requisite moral tone in infant schools Mayo emphasized the role and importance of the teacher. As he wrote, 'the great art of the teacher throughout the whole plan is to lead, rather than drive.'⁵⁷ His Observations reflect his concern as to the sustained enthusiasm and developed skill of the infant teacher to maintain the moral and religious sentiments promoted in the infant school. 'A master should be chosen with judgement and trained with care,'⁵⁸ but, having been so trained Mayo declares he should be free from the needless restraints so often the result of an adherence to an over-formal theology. In this sense, Mayo expresses a desire for infant schools to be exempt from the religious issues which divided the two main elementary school societies,⁵⁹ while emphasizing the educational advantages of teachers being allowed sufficient freedom to develop their teaching style.⁶⁰ In so doing, Mayo directed attention on to the need for a properly trained infant school teacher, if the desired objectives of infant schools were to be achieved.⁶¹

This alone, however, was not enough. Although the tone is at times

56. Mayo, C., op.cit., p.15.

57. Ibid., pp.18-19.

58. Ibid., p.17.

59. Ibid., P.11.

60. Ibid., P.17.

61. It is interesting to note here that even in 1831 there was still confusion concerning the full potential of the Pestalozzian system. See The Times, 18th June 1831, p.5.

passionately Pestalozzian, Mayo failed to secure a basis for a consolidated effort to promote an infant teacher training institution. To achieve this goal he required the assistance and enthusiasm of his sister Elizabeth. Her writings on object lessons, which appeared from 1831, focused attention more directly on the role of the teacher in the infant classroom, and subsequently on the necessity for structured teacher training programmes the likes of which she later influenced at the Home and Colonial School Society.

The exactness by which the teacher was to lead children through clearly defined steps, inducing sense impressions, exemplified the new skills the infant teacher needed to learn. It demonstrated a new form of pedagogy directed at the particular needs of the infant child. Furthermore, Elizabeth's works were indicative of a growing consciousness of the special skills required for the teaching of very young children, as opposed to the elementary school child of seven years and above. In this respect, her works promoted a specific teaching style and did not, like many of her contemporaries, attempt to validate any wider educational position. As a result, those involved in infant schools became increasingly aware of the need for trained teachers.

This need was further emphasized by the problems that still remained in the infant school movement by the early 1830s. The demise of the Infant School Society and the emergence of the Evangelicals at the forefront of developments in infant education prevented a co-ordinated effort to secure an established and accepted pattern for future progress in infant education. As a result there occurred a fragmentary development of infant schools established without the means of engaging trained infant school teachers. While many now agreed that infant schools were advantageous, criticisms of the standard of infant teaching brought about a crisis within the infant

school movement during the mid-1830s.⁶²

The crisis was to some extent overcome by the establishing of an infant teacher training institute in 1836. As Charles and Elizabeth Mayo were seen to be closely involved in the work and progress of this institution and as both were regarded as Pestalozzians and originators of the object lesson, it is not surprising that British Pestalozzianism soon became synonymous with infant teacher training. The first infant teacher training institution, the Pestalozzian Home and Colonial Infant School Society was born.⁶³

2. A Pestalozzian School Society

The Home and Colonial Infant School Society was first opened on the 1st June 1836 in Southampton Street, Holborn. Within three years¹ the Society had expanded and moved to Gray's Inn Road, St. Pancras. The contribution of this teacher training society to British nineteenth century education is considerable.² Not only did it provide a basis upon which other teacher training establishments were to build, but it secured a stage from which both the Mayos and other supporters

62. McCann, P. and Young, F. A., op.cit., p.170.

63. In order to clarify the Society's work, it extended its title to the Home and Colonial Infant and Juvenile School Society in 1845.

1. Salmon, D. and Hindsaw, W., Infant Schools, Their History and Theory, 1904, p.82 discuss the Society's move after two years. However, an Abstract of Trust indicates that the Society was located at Gray's Inn Road from 24th June 1839, some three years after its opening in Southampton Street. See unpublished Abstract of Declarations of Trust affecting property situated in Gray's Inn Road belonging to the Home and Colonial School Society, dated from 1848, found at the Public Record Office, Kew.: File ED.40/20. Hereafter referred to as Abstract of Trust.
2. Bartley, G. C. T., The Schools for the People, 1871, pp.481-488 gives an interesting account of the work of the Society. See also Rich, R. W., The Training of Teachers in England and Wales During the Nineteenth Century, 1933, pp.39-41.

were able to express their Pestalozzian ideas. A legal document dating from July 1848 gives an interesting insight into the beginning of the Society.³ Prominent among those involved in its formation was the philanthropist John Stuckey Reynolds, while Lord Henry Cholmondeley, the Honourable and Reverend Henry Montague Villiers, later Bishop of Carlisle and Durham, John Labouchere, the Reverend Thomas Dale and Thomas Lewin made up the initial trustees of the Society. The document makes clear that it was Reynolds, in company with the solicitor John Bridges of Bridges, Sawtell and Company of 23 Red Lion Square, that took out the leases on the properties numbering 334-354 Gray's Inn Road. In detailing the use of such premises the document gives a most valuable account as to the initial purpose of the Society. It states that the premises were

to be used as and for a Normal School or Normal Schools for the education and training of Teachers including a School or Schools for children in connection therewith. The said Normal School or Schools to be under the general management and control of the Committee for the time being of the subscribers to the said Home and Colonial School Society.⁴

The idea of using Normal Schools as part of a teacher training programme was not new. Pestalozzi, for example, had advanced a similar plan at Clindy and both the National and British and Foreign School Society had established such schools at their premises in Baldwin's Gardens and Borough Road respectively.⁵ Their teacher training,

3. Abstract of Trust, op.cit.

4. Ibid., p.4. To avoid confusion it should be noted that Normal Schools were established for the training of teachers in a system or method; in effect they were practising schools. Model Schools, however, were established to allow trainee teachers and visitors to observe the effectiveness of the 'method' when conducted by a trained teacher.

5. The early history and involvement of these two societies in teacher training is discussed by Rich, R. W., op.cit., pp.1-24. See also Binns, H. B., A Century of Education, 1908, pp.77-97; Burgess, H. J. and Welby, P. A., A Short History of the National Society, 1961.

however, bestowed more attention on training in the respective system, rather than training infant teachers. The Home and Colonial School Society's initiative demonstrated the clarity with which the Committee of the Society set about achieving improvements in infant teacher training.

The objectives of the Society highlight the foundation on which the Society was established, and the extent to which the Society desired to become involved in infant education. One of its main objectives was

the improvement and extension of the Infant School system and of education in general on Christian principles as such principles are set forth and embodied in the Doctrinal Articles of the Church of England.⁶

This shows the Society's specific dedication to the advancement of infant education marking it out as the first training establishment of its kind in Britain. Its adherence in its religious teaching to the principles of the Church of England was not specifically included in the original clause of the Society, and was only added after 1841 in order to satisfy those worried about its religious foundation.⁷ The teachers accepted for training were, therefore, not only those from the Established Church. The Society continued to attract teachers of all denominations. As the Committee of Council Report for 1842-1843 by Seymour Tremenheere indicates, about one third of all those teachers passing through the Society had belonged to the Dissenting denominations.⁸

6. Abstract of Trust, op.cit., p.8.

7. Bartley, G. C. T., The Schools for the People, 1871, p.484.

8. Tremenheere, S., 'Report on the Model Schools of the Home and Colonial Infant School Society', in Minutes of Committee of Council, 1842-1843, p.590.

Although the Society quite clearly favoured those religious principles of the evangelical section of the Established Church, its fundamental concern was to recruit 'individuals of character and piety "apt to teach"'⁹ and suitable for infant schools in order that they could be trained and recommended to schools as infant teachers. Provision was also made for existing teachers who were encouraged by the Society to seek formal training to improve their own methods.¹⁰

The Society's own laws, however, again illustrate the importance of religion as a necessary basis upon which the training should be given. The Society was only willing to educate and train teachers of different religious denominations if they could satisfy the Committee as to their belief in the fundamental truths of Christianity.¹¹ Indeed, all staff of the Society, including housekeepers and other non-teaching staff, were obliged to sign in the presence of the Committee a declaration of their belief in these fundamental truths.¹² Similarly, the observance of the significance of religion was continued in the meetings of the subscribers of the Society, where its laws demanded that such meetings should always be opened with prayer.¹³ Thus, the whole institution was absorbed in religious sentiments; a Christian benevolence directed towards education.

The religious spirit that was apparent in the Society's rules was further exemplified by the religious instruction given to the children in the Society's four Model Schools. As Tufnell in his report indicated, religious instruction for infants was

9. Abstract of Trust, op.cit., p.8.

10. Ibid.

11. Ibid., p.9.

12. Ibid.

13. Ibid.

divided into four steps.¹⁴ Beginning by introducing the infants to the first ideas of God, the Society progressed to highlight religious instruction by forms of Scripture. Thirdly, a course from the Bible was given, concluding with the exercising of the child's judgement and reflection on what he had learnt. By such methods the Society sought to impart a comprehensive religious instruction programme, calling forth considerable skills on the part of those teachers in training at the Society.

When the infant school movement was gathering momentum in the 1820s some difficulty was experienced in procuring members of the Church of England to be trained as teachers.¹⁵ Through the work of the Committee of Council, and in part through the more specific religious clause of the Society, there were, by 1846, 156 teachers at the Society, of whom 109 were members of the Church and 47 were Dissenters.¹⁶

The successful candidates were admitted into the Society's College in Gray's Inn Road by the Ladies' Committee once a fortnight and received on the first Tuesday of each month.¹⁷ The teachers themselves had to prove their suitability by possessing one of two differing forms of entry qualifications. The first and least difficult to qualify under were those rules governing qualifications of candidates sent by Patrons or Local Committees. By 1843 such candidates accounted for one third of all those received at the

14. Tufnell, E. C., 'Report on the Schools of the Home and Colonial Infant and Juvenile School Society', in Minutes, op.cit., 1846, Vol. II, p.546.

15. Ibid., p.557.

16. Ibid.

17. Tremenheere, S., op.cit., p.574.

Institution.¹⁸ Besides the general requirement of sound moral and religious principles, the applicant had to be able to read, spell and write, to sing a little, to know the simple rules of arithmetic and be well acquainted with the Word of God.¹⁹ For candidates entering the College and expecting after training to be recommended by the Society to schools, the regulations were considerably stricter. Emphasizing once again the religious and moral principles of the applicant, the Society expected a decided piety on the part of the candidate, together with some knowledge of grammar, geography and natural history.²⁰ Such candidates were on probation for one month and were expected to pay the sum of seven shillings a week for their training and accommodation.²¹ Although Whitbread points out that initially the training courses at the Society lasted six months,²² there is evidence that the first courses were only for fifteen weeks.²³ By 1846, however, the Society was insisting that all those trainee teachers who were to be recommended to schools must remain with them in training for twenty-four weeks, which in later years was extended to one year.²⁴

While similar regulations also applied to the entry of six young girls as pupil teachers, what is clearly evident is the decisively weak education these prospective teachers had received

18. Ibid.

19. Tufnell, E. C., op.cit., p.548.

20. Ibid., p.550.

21. Ibid., p.553.

22. Whitbread, N., The Evolution of the Nursery-Infant School, 1972, p.22.

23. Tremenheere, S., op.cit., p.578.

24. Tufnell, E. C., op.cit., p.548.

prior to their training at the Society. As its First Report had pointed out in 1837, a teacher required a proper amount of elementary knowledge, much soundness of judgement, insight into character, energy, tenderness and self-control.²⁵ But such qualities were not to be found in the class of persons entering teaching in the 1830s. Even in later years, however, the position had not improved.

The 1842 Report of the Society, highlighted by Tremenheere in his account for the Committee of Council, reiterated the complaint that the candidates for training came from a class whose education was in general very deficient. Consequently, the Society often found itself having to devote precious time to the acquisition of the elementary branches of knowledge, time that could be ill afforded on only a twenty-four-week course.

The quality and status of those hoping to enter a teaching career is well illustrated in a list of the occupations of 200 candidates applying to the Society in 1842.²⁶ Of these 88 were unemployed, 32 were in business, 26 were engaged in millinery or needlework, 15 in service and 39 in teaching. A high proportion of those previously unemployed, together with many of the other applicants lacked the academic discipline to grasp the general principles practised at the Society, and the rather moderate salaries offered to qualified teachers further discouraged the entry of more educated young ladies into a teaching career.²⁷ The unsuitability of many of

25. Tremenheere, S., op.cit., p.578.

26. Ibid., p.579.

27. Ibid., p.580. Tremenheere comments on the moderate salaries of teachers and the information received from David Stow in Scotland as to the higher salaries being obtained by those teachers trained at his establishment in Glasgow. For an insight into the respective training given at the Society and at Stow's Normal School, see Ibid., pp.583-584.

the applicants to the Society came at a time when demand for infant teachers far exceeded supply.²⁸ In 1853 for example, the Society received two hundred applications in three months, giving an average of eight hundred per annum which was twice the total number of teachers in training in all institutions.²⁹ The Society was consequently unable to meet almost half of the requests received for qualified teachers, and the national position was not helped by the large number of trained teachers who subsequently gave up their teaching posts. The Society estimated, in 1847, that in the eleven years of its existence, some thirty-six per cent of the single women trained at the Society had ceased to be teachers either from death or other causes.³⁰ This fall-out rate emphasizes the problems that faced teachers in nineteenth century Britain, and the opportunities that existed for the extended introduction of Pestalozzianism into the principles of education as practised at the Society.

The objectives and laws that form the constitution of the Society make no reference to Pestalozzi. Although Silber suggested that the Society was formed in order to show the application of Pestalozzianism to elementary education while omitting the name of Pestalozzi from contemporary accounts,³¹ the absence of any Pestalozzians amongst the first trustees and committee members seriously weakens this assertion. Nevertheless, the particular religious position held by the Society did assist the British Pestalozzians' influence on the Society. As Charles Mayo had remarked in his 1826 lecture, 'the method of Pestalozzi

28. Cook, F. C., 'Report on the Church of England Training Schools for Schoolmistresses' in Minutes, op.cit., 1853-1854, Vol. I, p.494.

29. Ibid.

30. Tufnell, E. C., op.cit., p.559.

31. Silber, K., Pestalozzi, The Man and his Work, 1960, p.302.

is, in its essence, the application of Christianity to the business of Education.³²

The religious position of the British Pestalozzians was very similar to the religious convictions held and adopted by the Society. For all its rules and regulations governing religion, it was as Krüsi remarked in 1875,

sufficiently broad to embrace all the distinctive evangelical sects, and it is as free from the influence of caste as it is possible to be in the present condition of English government and society.³³

Therefore, there was little objection to the promotion of the Pestalozzian system on purely religious grounds, with infant education in particular being excluded from the restriction of the Catechism. Consequently, the religious problem which thwarted so many educational attempts throughout the nineteenth century, and cast doubts on the religious acceptability of Pestalozzianism, was not an issue. Moreover, the similarity of the Society's and the Pestalozzians' view of Christianity applied to education provided an initial and sound basis upon which further developments could take place.

When or how Pestalozzianism became involved in the early teachings of the Society is not absolutely clear. That it in part evolved through the work and influence of the Mayos is not in question, but it should be noted that there is little evidence to suggest that the Mayos or any other British Pestalozzians were instrumental in the Society's original foundation.

Its establishment in 1836, however, came at a fortunate time for Elizabeth Mayo. Her books on Lessons on Objects (1831) and Lessons on

32. Mayo, C., Memoir of Pestalozzi, op.cit., p.28.

33. Krüsi, H., Pestalozzi: His Life, Work and Influence, 1875, p.226.

Shells (1832) had reached a wide audience. The proposed emphasis on sensory impressions provided a convenient basis on which to develop a teaching method within a newly established infant teacher training society.³⁴ As Krusi later pointed out, the Mayos' writings had attracted the attention of the manager of the Society, J. S. Reynolds.³⁵ Similarly, Cheam School was now firmly established as one of the leading schools of its time, and Elizabeth herself had since left her brother at Cheam and moved to London. Charles and Elizabeth's joint work, Practical Remarks on Infant Education, first published in 1837, further enhanced their now considerable reputation, and in particular Elizabeth's increasing interest in infant teaching. This work, which was published in five further editions until 1857, was again a clear testimony of the Mayos' views on infant education and its close association with religious instruction. It offered to the Home and Colonial School Society a highly acceptable format on which to enlarge their own system of training infant school teachers, and its first publication in 1837 was at precisely the right time to influence the work of the Society as it expanded and moved from Holborn in 1839, into its new premises in Gray's Inn Road.³⁶

Towards the end of their book, Practical Remarks, the Mayos outline nineteen rules for infant school teachers.³⁷ These rules

34. The use of Miss Mayo's books in the training pursued at the Society is confirmed in numerous inspectors' reports. See for example, Tufnell, E. C., op.cit., p.571.

35. Krusi, H., op.cit., p.226.

36. Bartley, G. C. T., op.cit., p.483, indicates that Practical Remarks had an extensive circulation and was one of a number of important works published by the Society. As Tufnell, E. C., op.cit., p.551 points out, this book, together with Model Lessons for Infant Schools, had to be purchased by new students on entry to the Society.

37. See Mayo, C., and Mayo, E., Practical Remarks on Infant Education, 4th edition, 1849, pp.105-109.

clearly illustrate the depth of perception of the Mayos with respect to the needs of the infant child. They are, above all, surprisingly modern, the advice offered by the Mayos being representative of a developmental approach and of the emphasis on things before words.

An example of this modern approach is Rule I which states:

follow a regular course in every subject
which you teach in your school, whilst
at the same time avail yourself of any
accidental circumstances which may³⁸
excite an interest in the children.

This shows the increasing flexibility that the Mayos sought to advance in the structure of infant school lessons, and is similar to Pestalozzi's own use of the everyday environment to stimulate pupil interest. Other rules highlight a more relaxed approach to infant teaching characteristic of Pestalozzi. The emphasis on leading rather than driving the children is quite clear. The rules indicate that teachers should be sure that their pupils are firm on one step before they proceed to another. The children were to be led from something they know to something new. Before giving a lesson, the rules advise teachers to consider what series of questions can lead the children to the point on which they wish to engage their attention. Such rules provided a formula for successful infant teacher training.

Although these rules emphasized the need for teachers to prepare lessons a day in advance and offered practical advice to the trainee teacher, the Mayos, as Rule XVI points out, remained firm in their overall conviction as to the basic purpose and objective of infant education:

38. Ibid., p.105.

take every opportunity of giving moral lessons and encouraging moral habits on scriptural principles, always remembering that the great object of infant instruction is to form moral habits and to produce religious impressions.³⁹

As mentioned earlier, this belief in the fundamental importance of religion when applied to education was essential to them; it was through their emphasis on this that Pestalozzianism was absorbed into British infant teacher training.

The work of the Mayos, however, was not the only Pestalozzian influence in the Society. As early as 1837, Dr. Biber, a noted Pestalozzian and a close friend of Greaves, gave two lectures to the trainee teachers of the Society which, although not published in full, were considered of sufficient importance to be outlined by the Educational Magazine in 1840.⁴⁰ The magazine extracts do not mention the name of Pestalozzi, yet Biber's attendance at the Society shows the Home and Colonial's initial interest in the British Pestalozzians' ideas on education, especially with respect to their religious viewpoints concerning the nature of the infant.

It was, however, Elizabeth Mayo who became the leading Pestalozzian associated with the Society. Her departure from Cheam School on the marriage of her brother in 1834 meant that she was able to devote more time to the work of the Society when it was formed in 1836. Unfortunately, it cannot be ascertained whether Elizabeth became involved in infant schools when she moved to London with her mother in 1834. Nevertheless, an account of her work at the Home and Colonial Society from 1845 onwards is provided by the former master of the Juvenile School,

39. Ibid., p.108.

40. The Educational Magazine, July 1840, pp.22-28. Dr. Biber, a former teacher at Yverdon, assisted Greaves in editing the Contrasting Magazine, and was involved in the 1820s in the publication of the Pestalozzian journal the Christian Monitor.

Mr E. Coghlan. His account written in 1881 clarifies the contribution of Elizabeth Mayo to the work of the Society after 1845. However, he writes:

it is rather difficult to say exactly what the work of Miss Mayo was at the institution . . . for she exercised a general supervision over everything that was taught, wrote model sketches and lessons on many of the subjects, and sometimes in the earlier of these years gave lessons to show how certain subjects ought to be handled in class teaching.⁴¹

Coghlan's account illustrates Elizabeth's importance to the development and work of the Society. She was in the course of her work responsible for initiating and often supervising various courses of lessons in the schools of the Society, which included subjects such as Scripture, geography, natural history and, of course, lessons on objects. Besides this, Coghlan's account indicates that the student teachers being trained in the Normal Schools were expected to keep detailed accounts of their work in personal journals. Elizabeth Mayo stressed the importance of these, examining them on a weekly basis. She used them to supervise closely the teaching methods adopted by the trainee teachers. As Coghlan recalls,

if anything in these reports seemed to require more than a marginal note, the teacher was sent for or visited, and the matter set right.⁴²

Elizabeth's criticisms, although sharp and very direct, were apparently always good-natured and enthusiastic. Through a close supervision of her trainee teachers she was able to promote her beliefs on Pestalozzianism.

It is clear from the quarterly journals of the Society that they, too, were used by Elizabeth to expound the Pestalozzian system. In the 1859 journal, for example, she gives a concise account of the educational

41. Mayo, C.H., A Genealogical Account of the Mayo and Elton Families, 2nd edition, 1908, pp.279-280.

42. Ibid.

principles of Pestalozzi, as do many other passages throughout the journals. Elizabeth Mayo's contribution to the work of the Society from its inception in 1836 until her death on the 1st September 1865 was therefore of considerable importance in framing the future development of the training institution. While the success of Charles Mayo and Cheam School drew attention to the Pestalozzian cause, it is the Home and Colonial School Society which deserves recognition as the purest British Pestalozzian academy of the nineteenth century. This further underlines Elizabeth's importance as the most influential figure of the nineteenth century British Pestalozzians.

The Society attempted through its work to assist in the general improvement of infant education. It outlined its desire to appoint inspectors to visit existing schools and to promote the establishment of schools in areas where they were most needed.⁴³ The Society realised the importance of its role as a publishing institute that could circulate to teachers information on its infant system, advancing the Society's own views and the progress that was occurring in other parts of the world.⁴⁴ In providing such books on object lessons and other infant manuals,⁴⁵ the Society was able to issue various school materials to assist the teacher in the infant classroom.

43. Abstract of Trust, op.cit., p.8. As Bartley, G. C. T., op.cit., p.484 points out, due to financial constraints the Society was only able to inspect schools in the London area.
44. Abstract of Trust, op.cit., p.8. There is evidence that teachers trained at the Society took up employment in Malta, India, Africa and Australia. See Appendix to Rev. F. C. Cook's Report in Minutes op.cit., 1850-1851, Vol. I, p.358.
45. Bartley, G. C. T., op.cit., p.483 indicates these publications were important works having an extensive circulation. Such books included Practical Remarks on Infant Education, Model Lessons for Infant Schools, Manual for Infant Schools and Nurseries, and several series of texts and prints on natural history and Scripture. For confirmation of the demand for these publications see Tremenheere, S., op.cit., 1842-1843, p.586.

In this respect, the Society took on a greater responsibility for developing an infant teaching system than the subsequently founded teacher training establishments.⁴⁶

Through the publication of books on its Infant School system the Society was able to promote the Pestalozzian method. The Society's most thorough account of Pestalozzianism is contained in a series of articles entitled 'What is Pestalozzianism?' in the 1848 and 1849 Journals.⁴⁷ These articles are written anonymously. However, on comparing them with Miss Mayo's Pestalozzi and His Principles,⁴⁸ it is clear that many passages are identical. It would, therefore, appear that Miss Mayo was the writer of these detailed articles. They give an historical as well as a theoretical perspective of Pestalozzi's work, and demonstrate the writer's detailed understanding and perception of the underlying theories of Pestalozzi's teaching.

Apart from the Pestalozzian literature that began appearing on behalf of the Society, the extent to which Pestalozzian methods attained an increasing role in the work of the Home and Colonial School Society is more difficult to assess. The extracts from 'Lessons on Education' given to training students at the Society show that Pestalozzian views did become firmly established as the underlying spirit of the teacher training centre. Details of these extracts contained in Barnard's book of 1859 give a clear indication as to

46. For an account of the development of the training college system 1839-1846 and the emergence of the new training colleges see Rich, R. W., op.cit., pp.80-103.

47. Quarterly Educational Magazine and Record of the Home and Colonial School Society, Vol. I, 1848, pp.37-43, pp.113-122, pp.213-218, pp.324-328, Vol. II, 1849, pp.24-29, pp.142-151.

48. See Pestalozzi and His Principles, third edition 1873, Part II, located at the early childhood archives of the Froebel Institute College, London.

the emphasis placed by the Society on the caring aspects of Pestalozzianism.⁴⁹ They illustrate that the student teachers, besides being taught the fundamental principles of Pestalozzi, were also given detailed instruction in the art of teaching with special reference to Pestalozzi, on class instruction, classroom management and on school government.

Instrumental in giving this instruction was Mr. Dunning, the headmaster of the Training Department. The 1843 Committee of Council's report on the Society indicates that Mr. Dunning was acutely aware of the problems facing the poorly-educated trainee teachers, as they faced up to the scholastic demands of the training. He saw Pestalozzi's work and teachings as an inspirational basis upon which to assist the teacher in training, and as late as October 1862 was still reaffirming the Pestalozzian cause emphasising that 'Pestalozzianism itself was born in difficulty, and cradled up in hardship'.⁵⁰

It is also interesting to note here that, apart from the frequent references to Pestalozzi contained in the Society's literature, the principles listed in the extracts from 'Lessons on Education' demonstrate a deep understanding of the problems of the infant school teacher and subsequently appear not only perceptive, but rather modern in approach.

The 'love concept', so fundamental in Pestalozzianism, seems to form the basis of the Society's system. The extracts emphasize that parental spirit should govern the schools, and relate to the importance of the love and kindness of the infant teacher. They stress the difference between punishment, correction and discipline, and highlight the dangers of abusing the threat of fear in the classroom. That the

49. Barnard, H., Pestalozzi and Pestalozzianism, 1859, pp.32-36.

50. Educational Paper of the Home and Colonial School Society, No. 16, October 1862, p.108.

principles contained in these extracts were, in fact, a feature of the actual teaching at the Society, is illustrated by the Committee of Council's report of 1843. Tremenheere, writing about the youngest children in the Model Schools, remarks:

the gentleness and tenderness, the unruffled, cheerful, persevering firmness with which the wrong is interrupted . . . soon has the effect of bending⁵¹ the wills of the untamed strangers.

The general spirit of good-will and mutual kindness was considered by Tremenheere to be one of the Society's most pleasing features. The Pestalozzian spirit in the Model Schools is also in evidence in Tufnell's 1846-47 report:

I have visited many schools where the pupils acquire more extensive knowledge but I have never seen children of this class, whose minds appeared to have been more thoroughly opened, or who exhibited a more lively intelligence.⁵²

Other aspects of the extracts, however, demonstrate how control of large numbers of infant children continued to dictate the overall system of teaching. The nature and importance of gallery instruction was stressed, as was the children's arrangement in it in terms of ability.⁵³

How closely the principles advanced by the Society were in line with those practised in the Model Schools in Gray's Inn Road will become clear after the daily routine at the training centre has been considered.

51. Tremenheere, S., op.cit., p.585.

52. Tufnell, E. C., op.cit., p.570.

53. The gallery was a series of tiered steps at one end of the classroom which allowed the teacher to simultaneously teach a large number of children.

Daily Occupation⁵⁴Morning

- 9.00 Children Assemble; learn a Text; Prayers
- 9.30 Sing a Hymn; Bible Lessons in the Gallery
- 10.00 Learning to Read in Classes
- 10.30 In the Play Ground - Marching and Play
- 11.00 A lesson in the Gallery
- 11.30 Arithmetic in classes
- 12.00 School closes

Afternoon

- 2.00 Assemble School; learn and repeat Texts. Sing
- 2.30 Learn to read in Classes
- 3.00 In the Play Ground - Marching
- 3.15 Gallery Lessons, Questioning each other
- 4.00 In the Play Ground at Play
- 4.15 Pictures in Classes or learning to Read where that is preferred
- 4.45 Prayer and discharge the School

This daily timetable provides an interesting account of the curriculum of one of the Model Schools of the Home and Colonial School Society. There is little in the timetable that suggests anything radically different from many other schools at the beginning of the 1840s. Nevertheless, such Model Schools were an innovation in infant teacher training. In these schools everything was systematically taught and no student was allowed to give lessons until they had practised in the Normal Schools and shown considerable ability in the art of teaching. The Reverend Cook pointed out in 1853 that although only the Home and Colonial School Society had such a set of schools, it would be desirable

54. From Useful Hints to Teachers, published by the Home and Colonial School Society, 1843, p.4.

for these Model Schools to become a feature of all the training institutions.⁵⁵

The timetable illustrates the priorities in the curriculum of the Model Schools at this time. Religious and moral instruction, combined with arithmetic, reading and play (drill) formed the core of the curriculum. Evidence shows that the Society's Model Schools were divided into four sections, two of which were preparatory, one a model infant school and the other a juvenile section.⁵⁶ The preparatory school dealt with children of two or three years of age, the infant three to seven, and the juvenile the eldest pupils up to the age of ten years.

The juvenile Model School owed its existence to the realisation that there needed to be continuity between the systems of education practised in the infant and juvenile schools. At this time, the practice common throughout the country was for the infant poor, after benefiting from instruction in an infant school, to suddenly find themselves in a juvenile school suffering incompetent instruction from a child monitor of ten or eleven years of age. As pupils often left school by ten years of age, so the importance of an immediate harmony between the substantial gains achieved in the infant school, and those which followed in the instruction given in the juvenile school, was realised.

The Society made special provision for juvenile schools to allow infant school teachers to gain experience in the management and instruction

55. Cook, F. C., op.cit. p.504.

56. See 17th Annual Report of the Home and Colonial School Society, London, 1853. In 1852-53 the Society also established a mixed school intended as a model for parishes in which separate infant and elementary schools for boys and girls could not be maintained. On completion of the school's first year it had 130 children between the ages of two and fifteen years in attendance. See Cook, F. C., op.cit., p.510.

of older children. On leaving the Society, such teachers were often expected to organize neighbourhood schools with children from three to ten years of age.

The Model School sections of the Society, therefore, covered the whole spectrum of education of the poor from two to ten years of age, and in each section the Society defined its objectives.⁵⁷ In the first preparatory school, the object was simply to gain order and obedience, preserving at the same time the parental spirit fostered in the Society. The children entering this section were devoid of discipline, never having experienced the confines of a classroom. The teachers aimed to awaken the first sense impressions and to cultivate the child's religious awareness. In both the preparatory and infant schools the teacher aimed to develop the pupil's sense of observation, which was considered the first faculty developed in the infant mind. This was achieved by the use of pictures and objects.

In the second preparatory school the children were also encouraged to express the ideas gained through their sense impressions and were made aware of differing moral qualities, their own responsibilities and their religious feelings. As the Fifth Report of the Society pointed out, the teaching in these schools was to maintain the character of 'familiar conversation' which closely resembled the living-room environment emphasized by Pestalozzi.⁵⁸

After a few weeks the children moved on to the Model infant school, which formed the third step in the course and the true infant section of the Society. In this school the mode of teaching was more systematic and co-ordinated. Information was given on various subjects of interest

57. Tremenheere, S., op.cit., pp.584-587.

58. Ibid., p.585.

often containing an element of moral value, which were memorized by the pupils. The exercising of memory, therefore, became an important feature. Religious sentiments were intensified and the Bible emerged as the standard by which to live. Emphasis was again placed on developing the mind and senses of the pupils, encouraging them to fully extend their powers of observation and perception.

Finally, in the juvenile section for children ranging from seven to ten years of age, the instruction aimed to build upon that which had been learnt in the infant school and often produced individual children as future assistants or pupil teachers.

In addition to the Model Schools, the Society also had a complete set of Normal (practising) Schools in which boys, girls and infants were instructed by the students in training at the Society. In the Normal Schools experiments were tried and the abilities of students assessed. These lessons were conducted under the superintendence of a mistress and a certificated assistant-teacher. As Cook pointed out, the children in the Normal School were not unnecessarily sacrificed to the progress of the trainee teachers.⁵⁹

The teachers' journals mentioned earlier indicate that the teachers themselves were closely supervised. Indeed, the nineteen rules for infant school teachers advocated by the Mayos were recommended by the Society to be read by all teachers, once every three months.⁶⁰ The training given was strict and any want of order in the classroom was considered the fault and personal failure of the teacher.

While in training, the teachers were arranged in three classes.

59. Cook, F. C., op.cit., p.510.

60. Useful Hints, op.cit., p.43.

Each class consisted of a regular course of instruction, in addition to the teaching practice carried out in the Model Schools. When the full course of training consisted of just twenty weeks, the first class occupied four weeks, the second nine, and the final class was seven weeks.⁶¹

The first course given to the teachers on arrival at the Society involved instruction in the principles and practice of early education. This provided a basic and fundamental introduction to the work of the teacher and particular emphasis was placed on the Mayos' books of Practical Remarks and Model Lessons. This initial course also sought to provide a general improvement in the knowledge of the teacher, with respect to the Bible, grammar, arithmetic, reading and drawing.⁶²

The second course continued the instruction in the principles of early education and the general improvement of the teacher, but also considered in detail the connection between principles and practice. Thus, instruction in gallery lessons was considered and lesson content was critically analysed. The objectives of each lesson were discussed and Pestalozzi and his system of education was now introduced and studied in as much detail as time would allow.⁶³

The final course was concerned mainly with teaching practice. Model lessons were given and witnessed by fellow trainee teachers who were encouraged to criticise their colleagues' mistakes. The training programme progressed from a study of principles and practice to a final period of actual teaching. The modernity of certain aspects of the training system pursued by the Society is highlighted by the fact

61. Tremenheere, S., op.cit., p.575.

62. Ibid., pp.575-576.

63. Ibid., p.576.

that the development of the individual child was impressed upon the teacher. As one book published by the Society points out,

as a child is the future being in embryo, with faculties and powers undeveloped, it is the business of Education rightly to unfold and cultivate these faculties and powers.⁶⁴

A psychological awareness is therefore apparent in the early principles of the Society, which was later to be extended and further developed by the Froebelian training institutes.⁶⁵

In order to promote the principles and practices adopted at the Society, day visits were arranged for the public. At first, such visits were on Wednesdays, but, by 1846, it had changed to a Tuesday afternoon. On these open days, the Society demonstrated with pride the training system they pursued. From the Society's published accounts of these open days it is clear that object lessons formed the basis of their training system.⁶⁶ While for infants object lessons were taught in the gallery, teachers were warned of the disadvantages of imparting too much knowledge, too soon. More important, however, the sketches outlined in these works were not merely superficial accounts of object lessons, for they also indicate that the Society questioned the teachers on the actual objective of each individual lesson.⁶⁷ They were constantly made aware of the importance of self-examination as a prerequisite to more effective teaching. In this way, the Society sought

64. Graduated Course of Instruction for Infant Schools and Nurseries, 3rd edition, 1853, p.VII. (1st edition 1847).

65. For an account of the history of the Fröebel Movement in England see Lawrence, E., (ed.), Friedrich Froebel and English Education, 1969, pp.34-95.

66. See 'A Tuesday Afternoon at the Home and Colonial Schools', being an appendix to Model Lessons for Infant School Teachers and Nursery Governesses, Part II, 3rd edition, 1849, p.161.

67. Ibid., p.181.

to improve standards of teaching by maintaining the teachers' awareness of the objective of each lesson, long after they had finished their training at the Society.

Although the Society had started with only three teachers, it had in its first year 120 applicants for teacher training places, of which 48 were rejected through lack of qualification.⁶⁸ By 1843 between 40 and 50 teachers were in training and approximately 230-250 children were in its Model Schools in Gray's Inn Road.⁶⁹ At first, the teachers in training included single men and women, although it was married couples who were looked on most favourably. The men in particular were seen as better suited to the demands of the Society's juvenile school, which taught the oldest pupils up to the age of nine or ten years. By 1843, however, the Society had become a Female Training Institution.⁷⁰

The Society's need for financial support, however, forced it to consider the desirability of government aid. In 1843 it had invited the Committee of Council to examine the training system and premises in Gray's Inn Road, and the subsequently favourable report by Tremenheere⁷¹ is likely to have influenced the Society's discussions on requesting government aid in 1846-47.⁷² It is clear that the Committee of Council recognised the importance of the Society's work. Tufnell, in his 1846 report, commented:

it is impossible to over-estimate the advantage of thus submitting the whole population to at least four or five years of instruction under intelligent teachers, and the Society that aims at this great end⁷³ deserves our warmest sympathy and regards.

68. Tufnell, E. C., op.cit., 1846, Vol. II, p.544.

69. Advertisement in Useful Hints, op.cit.

70. See following footnotes 4 and 5, pp.155-156.

71. Tremenheere, S., op.cit., pp.573-591.

72. See Bartley, G. C. T., op.cit., p.486.

73. Tufnell, E. C., op.cit., 1846, Vol. II, p.546.

The reports also appreciated that, although the length of the training at the institution had over the years been considerably extended from fifteen to twenty weeks and finally to six months, the period of training was still not sufficient and that a full year's training programme was required.⁷⁴ The shortness of time available for training influenced an attitude at the Society to make trainees

good teachers rather than accomplished ones, to instruct them in the art of managing children, and imparting knowledge rather than to fill their minds with information.⁷⁵

As such, the Society and the Committee of Council accepted that more funds were necessary if a more realistic training programme was to be achieved.

The Committee of Council therefore began in 1847 to issue a grant to the Society for each government examination certificate gained by students who had completed one year in residence. The one-year minimum training period was thus established. No special provisions were made, however, for infant school teachers, who were required to be as well educated as school mistresses of girls' schools and able to achieve the same standard of instruction.⁷⁶ This was not received too enthusiastically at the time. In a leading article in The Times on the Infant School Society, the writer criticised Kay-Shuttleworth's letter as merely informing the world that infant schools were to be admitted on the usual terms to government inspection and aid.⁷⁷ The writer

74. Ibid., p.560.

75. Ibid.

76. See 'Education in Infant Schools' - in a letter from Kay-Shuttleworth and the Committee of Council, addressed to the Home and Colonial Infant School Society, cited in The Times, 13th September 1847, p.5.

77. See 'Infant School Society', Anonymous article in The Times, 13th September 1847, p.4.

emphasized the growing feeling that infant schools represented the most important period in a child's education; a time when moral and religious ignorance could be most easily overcome.

The call for government intervention, however, was in part the result of Pestalozzian influence at the Home and Colonial School Society. The Times article of the 13th September 1847 clearly shows a dissatisfaction with the lack of records compiled as to the success of various forms of infant schools. It viewed the systems of Wilderspin, Pestalozzi and others with suspicion, and saw government intervention as the only way of protecting infants from the 'dubious experiments' at the time being carried out in infant education. As the article points out, even though Tufnell's report was in praise of the Society, it was not prepared to surrender an unqualified adherence to the Pestalozzian system or to what in their opinion looked very much like it.

The acceptance of government aid by the Home and Colonial Infant and Juvenile School Society had the effect of bringing in line the training systems pursued at the Society with those followed elsewhere. As one unpublished letter from the Committee of Council shows, however, the Council was most anxious to avoid being seen as inflicting a particular course of instruction on the teacher training institutes.⁷⁸

While emphasizing

in the most express and emphatic manner,
that it always has been, and always will
be, their Lordships' maxim, to attach
value to the quality, rather than the
quantity of each Candidate's attainments,⁷⁹

the Committee of Council did, nevertheless, indicate the areas of study

78. Copy of a letter from R. R. W. Lingen, Acting Assistant Secretary for the Committee of Council, to J. S. Reynolds, of the Home and Colonial School Society, dated 23rd June 1849. Located at the Public Record Office. File ED 9/12.

79. Ibid., p.2.

they considered necessary in any training course. As the letter also points out,

Sound religious knowledge, clear, consecutive and grammatical composition - a thorough comprehension of the elementary principles of arithmetic - will always occupy the first place, and command the first consideration, in the written examination. 80

The Society's move towards government aid was combined with the emergence of a change in emphasis in the direction of infant education within the Society. In 1836 the Society had been formed to train infant teachers to enlighten the minds of the infant poor. In this sense it was in line with Pestalozzian objectives similar to those pursued at Clindy in 1818. By the late 1840s; however, the Society's members were becoming increasingly interested in the development of infant schools for the middle classes.⁸¹

One such example was the Pestalozzian infant school in Islington, established by Mr. Newcombe. At an evening meeting of this school, attended by members of the Home and Colonial School Society, no less than eight hundred people were present to witness the examination of the pupils.⁸² The Pestalozzian spirit was clearly evident in the atmosphere of the school. As the following description indicates,

the spontaneous and natural answers of the children showed the effective manner in which they had been trained, whilst the cheerfulness which beamed in their countenances proved that the school pursuits were to be the sources of delight, and not as they too frequently are, irksome and disagreeable tasks. 83

80. Ibid.

81. Whitbread, N., op.cit., p.36 indicates that the Society developed a second department for training governesses from 1846.

82. See The Times, 5th October 1847, p.5., and 23rd June 1848, p.6.

83. Ibid., 1847.

The move towards infant schools for the middle classes was the direct result of an appreciation of the value of infant schools to the early education of a child. It also represented a growing middle class interest in education. Government intervention was seen as bestowing respectability on the infant school movement which enhanced the reputation of the training institutes including, the Home and Colonial School Society.

By 1850 the Society was praising the way in which the government examinations had raised the systems of education pursued in all the training institutes. This assisted the change in emphasis within the Society which is shown by the different types of teachers that were then in training. Whereas in the late 1830s and early 1840s the Society had trained teachers for particular patrons or recommended teachers to schools, by 1850 the Society had a variety of teachers in training, amongst whom were a number of young persons who were to be trained as teachers for superior schools or governesses.⁸⁴ By 1871 the number of governesses in training at the Society had reached nineteen.⁸⁵ This development continued until, by 1885, the Society consisted of two distinct branches.⁸⁶

Firstly, there was a college under government inspection for the training of elementary school teachers (girls, mixed and infants), while, secondly, there existed a non-government department for the training of

84. Ibid., 30th April 1850, p.6. The Society had been willing to accept nursery governesses in 1836 but few took up such training at the Society. As Bartley pointed out, however, by 1871 this idea, though fairly successful, had still not been carried out as fully as was originally intended. See Bartley, G. C. T., The Schools for the People, 1871, p.483.

85. Bartley, G. C. T., ibid., p.487.

86. See Home and Colonial School Society Pamphlet, 1885.

those wishing to be governesses or teachers in schools of a higher grade. To the former were attached four model and practising schools containing eight hundred children and, to the latter, a middle class school for two hundred girls and younger boys. The training course by this time had been extended to two years, and an entrance examination in religious and secular knowledge had to be passed by all students. This again restricted the class of candidate that had been formerly entering the institution, and emphasized still further the move towards better-educated applicants, who were invariably middle class.

The transformation of the Home and Colonial Infant and Juvenile School Society from being a Society dedicated to the training of teachers for the infant poor, to one being involved increasingly in middle class training and middle class schools, represents yet again the British culmination of Pestalozzi's efforts being directed to the benefit of the middle classes and to an educated élite as seen with Cheam School. Despite this, the Society, in contrast to the impact of Cheam School, did provide a direct Pestalozzian contribution to the education of the infant poor in Britain. As such, unlike other British Pestalozzian developments, the true spirit and purpose of Pestalozzi's teaching was realised. The exact extent of the Society's influence in British nineteenth century teacher training, however, needs to be examined before the degree of its Pestalozzian contribution to British infant education can be assessed.

3. Influence in Teacher Training

In the 1830s and 1840s the population of the metropolis of London was increasing annually at a rate of 20,000 people.¹ It was

1. Evidence given by the London Diocesan Board of Education, 24th May 1848.

soon realised that there was an immediate need to educate the children of these new urban families in the elementary truths of religion. This stimulated a growing demand for infant schools which, in turn, invariably resulted in greater pressure being put on the infant teacher training institutions. In the early years of the Home and Colonial School Society sceptics had remarked that it had been 'established upon too narrow a basis to effect any extensive good.'² There was, above all, a general belief that its religious foundation would exercise a too restrictive and controlling influence, limiting the Society's benefits to those sharing the same evangelical beliefs. Although the 1841 Clause restricting religious teaching to an adherence to the doctrinal articles of the Church of England seemed to narrow still further the Society's religious foundation, the Society continued to attract applicants from all denominations. Due to a growing national demand for training places the number of trainee teachers entering the Society increased. As a result, the impact of the Society on British teacher training in the nineteenth century was considerable.

The importance of the Society in the training of teachers is clearly demonstrated in the following table compiled by Joseph Fletcher in 1845.³

2. Central Society of Education, 1838, p.377.

3. Fletcher, J., 'Report on British and Foreign Infant Schools', in Minutes, op.cit., 1845, Vol. II, p.226.

Teachers	Whether trained and where							Total of schools
	Untrained	Various Provisional Infant Schools of early date	Messrs. Bilby and Ridgway	British and Foreign Borough Road, London	Normal School, Glasgow	Kildare Place Institution, Dublin	Home and Colonial Schools, Gray's Inn Road, London	
Male	1	4	3		1		2	11
Female	2	3	1	2	1	1	18	28
Total	3	7	4	2	2	1	20	39
Vacant								2
Total of Schools	..	..	..	..	..	..	..	41

In a survey of 41 infant schools Fletcher listed the teacher training colleges in columns according to the periods at which the teachers had received their appointments. The table illustrates the growing dependence in the mid-1840s on trained teachers from the Home and Colonial School Society. The Society had become responsible for the training and supplying of teachers for virtually all of the then current appointments. It is equally clear that the proportion of female teachers was rapidly increasing. Although the female teachers seemed better suited to the needs of the infant schools, they were now being favoured on purely financial grounds. As Fletcher pointed out, cheapness was becoming an important factor in infant school appointments.⁴

4. Ibid., p.227.

The continuing progress of the Home and Colonial School Society mirrored this move towards female infant teachers, as the Society became a Female Training Institution.⁵ The extent to which the Society was increasing in influence can again be assessed from information given by Fletcher in his 1845 Report. In listing twenty schools under teachers trained at the Society, one is immediately made aware that the Society's teachers had made a considerable contribution to the development of infant education, especially in London.⁶

Despite the Society increasing the number of teachers in training in Gray's Inn Road, there remained financial problems. Like the other teacher training establishments, the Society relied heavily on voluntary subscriptions. As the Reverend F. C. Cook's report on the Society in 1851 shows, of a total income of £5,707, the Society received as much as £2,590 through annual subscriptions or donations.⁷ In this respect government grants through examination certificates proved a most needed additional source of income, and their importance to the Society's future welfare encouraged it to seek increasing success through government certificates.

In December 1851 the Society submitted thirty-three students for examination which represented a government grant of £443, more than

5. Bartley, G. C. T., op.cit., p.482 indicates that the training of masters was given up five years after the establishing of the Society.
6. Examples of such schools being: Stockton-on-Tees; North London, or Calthorpe Terrace, Alnwick; Middlesburgh-on-Tees; North Ofram; Broad Street Chapel School, Finsbury; Radnor Street, City Road; South Islington; Abbey Street, Bethnal Green; Hornton Street, Kensington; Park Lane, Kensington; Ann's Place, Hackney Road; Wycliffe Chapel School, Stepney; Finchley; Coggeshall; Chelmsford; East Dereham; Thetford; Cambridge.
7. See Appendix to Cook's 'Report on the Church of England Training Schools for Schoolmistresses', in Minutes, op.cit. 1851, Vol. I, p.354.

enough to cover the salaries incurred in supporting the Society's Model and Practising schools for that year.⁸ The pre-eminence of the Society in the training of teachers at this time is further shown by the respective number of Certificates of Merit that were awarded by the Government to the training institutions. From an 1853 list of government certificates awarded to schoolmistresses in training, twenty-four were to students from the Home and Colonial, ten to Westminster, seven to both Whitelands (National Society's Training School at Chelsea) and Cheltenham, and one or two to the less well-established training institutes.⁹

In naming the schools where the teachers then worked, the list highlights the fact that many of the Home and Colonial School Society's students went on to become teachers in the schools of the National Society. Indeed, many became teachers in elementary schools, rather than specific teachers of infants. Although, as Rich points out,¹⁰ the Society was destined to play an individual part in the development of the training college system, its impact on the supply of trained elementary school teachers must not be overlooked.

The actual examinations for the certificates of merit demonstrate the extent of the Government's interference in the curriculum of the training institutes.¹¹ Besides determining subjects hitherto neglected by the institutes, the results of the government examinations emphasized

8. Ibid.

9. Minutes, op.cit., 1853, Vol. I, p.378.

10. Rich, R. W., The Training of Teachers in England and Wales during the Nineteenth Century, 1933, p.39.

11. See Minutes, op.cit., 1853, Vol. I, pp.527-537 for examples of examination papers.

the particular strengths and weaknesses of each institution.¹² The results contained in the Appendix to Cook's 1851 report shows that of all the Female Training Schools, including the National Society's own training school at Whitelands, the Home and Colonial School Society's students gained the highest marks for religious knowledge and church history. This suggests that the special emphasis on religious awareness seen in the early years at the Society continued to remain a prominent feature in the Society's training course.

The following table, showing the amount of time given to particular subjects at the Society, confirms that religious knowledge continued to dominate the student's timetable.

DISTRIBUTION OF TIME¹³

The time devoted (according to the time tables) by each student weekly to the following subjects:-

								h.	m.
Religious knowledge	..	..	..	..	..	..	..	9	0
Learning to read	..	..	..	..	..	..	..	0	30
Penmanship and book-keeping	..	..	..	..	..	..	..	0	30
Arithmetic	...	..	..	..	..	..	..	4	15
English Grammar	..	..	..	..	..	..	..	3	45
Geography	..	..	..	..	..	..	..	5	45
English history	..	..	..	..	..	..	..	1	45
Music	..	..	..	..	..	..	..	1	45
Model drawing and inventive	..	..	..	..	..	..	..	3	30
Study of the art of teaching	..	..	..	..	..	..	..	6	30
Practice of the art of teaching	..	..	..	..	..	..	..	4	30
Industrial occupations	..	..	..	..	..	..	..	5	0
Recreation	..	..	..	..	..	..	..	9	0
								<hr/>	
								Total	.. 55 45
								<hr/> <hr/>	

Time devoted by each student weekly to subjects other than the above:-

Natural history	3	0
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12. Ibid., 1851, Vol. I, pp.348-349 in Appendix B to F. C. Cook's Report of Results of the Examinations of Christmas 1850.

13. See Cook, F. C., Ibid., 1851, p.355.

Although in Britain Pestalozzi had originally attracted some hostility because of his lack of emphasis on the Bible, it seems likely that, by 1851, the Home and Colonial School Society had established respectability for Pestalozzian methods in terms of its adherence to an acceptable form of religious education.

The results of the government examinations further illustrate the Society's comparatively good performance in Natural history, original essay and vocal music. In the first two of these the Society obtained considerably higher awards than the other colleges. Each of these three successful subjects represent areas where Pestalozzianism had made a contribution.

In all other subjects, except industrial skill, the Society obtained at least parity with the results of other training colleges. In composition and domestic economy, the Society had the distinction of being the only training college with no student being marked below moderate. Overall, the results provide a very favourable account of the training given at the Society.

The relative success of the Society was also a reflection of the ability and expertise of its teaching staff. As the Reverend Cook pointed out, 'the results of the last examination bear striking testimony to the excellence of the teaching.'¹⁴ Besides the involvement of Elizabeth Mayo, the staff included C. F. Reiner who had moved to the Society from Cheam School, Hermann Krüsi (Junior) who, like Reiner, had been a student under Pestalozzi, Mr. Coghlan, Miss Sunter, and Miss Jones who later travelled to America to popularise the

14. Ibid., p.327. In 1851 the total number of full-time staff numbered nineteen. See Returns from the Home and Colonial Training School for Mistresses for the year ending 23rd February, Ibid., 1851, p.353.

Pestalozzian method.¹⁵

Reiner's teaching of natural history, in particular, was considered quite exceptional. The Reverend Cook again remarks:

without undervaluing the lessons in other institutions . . . the lectures given by Mr Reiner at the Home and Colonial Institution are of rare excellence, and unrivalled by any which I have had an opportunity of hearing.¹⁶

This was praise indeed from a government inspector. The efforts made by the Society in the teaching of the natural sciences influenced other training colleges to follow suit and improve their own training methods. The subject matter, in this case Natural history, once again displayed religious overtones and Reiner in particular was commended by the Reverend Cook for the skilful and interesting manner in which he drew the students' attention to this association with religion.¹⁷

Similarly, the Society's efforts in training its students in arithmetic, continued to draw the attention of other training colleges. Based on the Pestalozzian method, it was considered remarkable for the clarity with which every process was explained.¹⁸ Although the arithmetic results of the trainee teachers in the following table¹⁹ reflects favourably on the Home and Colonial School Society, the overall results were considered unsatisfactory, largely because of the trainee teachers' inadequate knowledge of arithmetic on entry to the Society.

15. Miss M. E. M. Jones was involved in the Oswego training school. See The Educational Paper of the Home and Colonial School Society, April 1862.

16. Cook, F. C., op.cit., 1850, Vol. I, p.112.

17. Ibid., p.113.

18. Ibid., p.111.

19. Ibid., 1851, Vol. I, p.335.

Arithmetic	Excellent or Good	Fair	Moderate	Imperfect	Failure
Whitelands	2.12	27.66	42.55	8.51	19.16
Home and Colonial	2.33	20.93	58.12	6.98	11.63
Warrington	.00	45.00	15.00	20.00	20.00
York	.00	15.39	53.85	23.07	7.69
Salisbury	.00	25.00	45.00	15.00	15.00
Cheltenham	.00	9.38	50.00	25.00	15.62

Apart from the Society's eminence in certain subjects, the most influential aspect of its training was that concerning the work of Mr. Robert Dunning, head of the training department.²⁰ His dedicated work to the art and science of teaching as perfected at the Society was considered by the Reverend Cook in 1850 to contain many valuable suggestions which could profitably be incorporated into other training institutes. Cook also realised that the training institutes needed some intelligible system for the teaching of each subject, in order to avoid the diversity of opinions and practice that characterized each training institute.

In particular, the government inspectors appreciated the existence of the Home and Colonial School Society's model and practising schools. They considered that the benefits for students of seeing well-trained teachers at work were considerable.²¹ The Society was seen to have developed by 1851 'the most complete and energetic system' of any of the female training colleges.²² The efforts made in other colleges towards devising

20. Krüsi, H., op.cit., p.226.

21. Cook, F. C., op.cit., 1853, Vol. I, p.504.

22. Ibid., 1851, Vol. I, p.338.

a complete system became a feature of the progress in teacher training in the early 1850s. Cook remarked that the development of such a syllabus as prepared by Dr. W. Knighton of Whitelands Training School expressed a considerable uniformity with the Home and Colonial School Society on points that had hitherto been the subject of protracted and anxious debates.²³ In this way the Society's training methods became part of the common framework of nineteenth century British teacher training.

In so doing, Pestalozzian principles were absorbed into the structure of teacher training. As early as 1849 the Society's journal was proclaiming that

there can be little doubt . . . that the principles of Pestalozzi are gaining ground with the British public; and that Pestalozzi's own conviction, that his system is suited to the English character, and, when known, would be valued by them, is being verified.²⁴

Although Pestalozzi's influence was often not explicitly acknowledged by other training establishments, or by the Committee of Council itself, an indication of Pestalozzi's influence is offered by the respect shown by the Reverend Cook for the work of Professor Stern, then considered to be the most experimental teacher trainer in Germany.²⁵ Stern, a former pupil of Pestalozzi and for thirty years principal of a large practising school at Karlsruhe, was obviously considered by Cook in 1853 to be an eminent authority on the varying aspects of teacher training. In this way, an often-unconscious awareness of Pestalozzi's teachings characterized many of the developments and decisions taken by those involved in teacher training throughout the nineteenth century.

23. Ibid., p.337.

24. Preface to Quarterly Educational Magazine, op.cit., 21st September 1849.

25. Cook, F. C., op.cit., 1853, Vol. I, p.506.

The Home and Colonial School Society was, therefore, more influential than Cheam School in proclaiming the Pestalozzian cause on a wider front. By training its students in the Pestalozzian spirit and educating them in the principles, methods and life of Pestalozzi, the Society spread a knowledge of Pestalozzi throughout British infant schools and into many elementary schools.

The results of this diversification of knowledge is evident in the improved standard of many British infant schools in the nineteenth century. Mr. Bowstead had remarked in his General Report in 1853 that

the best infant schools with which
I am acquainted are conducted in
accordance with the plans of the
Home and Colonial School Society,²⁶

and he emphasized the expertise of the Society's teachers in assisting in this improved method of infant training:

all the most efficient infant schools
in the district, including those at
Tiverton, Banbury, Truro and Wolton-
under-Edge, are taught by mistresses
trained in Gray's Inn Road.²⁷

The Tiverton infant school attracted considerable praise. Fletcher had reported as early as December 1847 that the school under the control of a mistress trained at the Home and Colonial School Society had undergone a marked improvement. Comment was passed on the affectionate relationship between teachers and infants and that, after having received further training at the Society, the teacher's gallery lessons and the cultivation of the perceptive faculties of the children had greatly improved.²⁸

The thorough training given by the Society to its student teachers

26. Bowstead, J., Minutes, op.cit., 1853, Vol. II, p.768.

27. Ibid.

28. Minutes, op.cit., 1847-48, Vol. II, p.268. (Appendix to Mr. Fletcher's 'General Report').

assisted and influenced a rejuvenation in some of the older infant schools. At Hemel Hempstead, for example, the infant school had deteriorated over the years and only through the enthusiasm of a newly qualified teacher from the Home and Colonial Society did the school recover. Fletcher remarked on how, in two years, the teacher had doubled the attendance and quadrupled the school's efficiency.²⁹ By 1848, the school, following the Society's system, had seventy-five children in attendance.

The influence of the Society's teachers was, however, more pronounced in the cities. Besides the many schools supporting the Society's system which opened in London, others, too numerous to mention, were established throughout the industrial cities of Britain. Many of these schools were, however, private establishments founded so as to avoid the denominational disputes surrounding the National and British and Foreign School Society. The Islington House Academy in Salford is one such example. Established in 1855, it had by 1858 developed an infants' department conducted on Pestalozzian principles.³⁰ The emergence in the late 1850s of specific Pestalozzian infant departments represented a new phase in British Pestalozzianism.

The initial enthusiasm for Pestalozzi in the 1820s and early 1830s, seen in the establishment of numerous private Pestalozzian infant schools as at Epsom, Derby and Bristol, was followed by a brief period of inactivity in the early 1840s when the original Pestalozzian supporters had either grown disenchanted with Pestalozzi's system or had simply left educational work. The development therefore seen in the Salford example in the late 1850s, highlights a renewed flourish of interest in

29. Ibid., p.291.

30. Parsons, A. V., 'Education in the Salford District 1780-1870,' M.Ed., University of Manchester, 1963, p.191.

Pestalozzi's theory and practice. This was largely the result of the Home and Colonial's continued influence in teacher training and the emphasis in its training programme on the principles and work of Pestalozzi.

The importance of the Society in providing teacher training courses was not just limited to the period up until 1860. Indeed, the Committee of Council reports of 1872 on the training institutes indicate that the Society's position as an individual training college was still equally strong.³¹ In February 1872 the Society had 140 female students in training, which was the highest single total of any institution. Although its importance in the total supply of trained teachers was by then reduced, owing largely to the numerous Church of England Diocesan training colleges that had been established, the Society maintained a position of importance. In fact, it received from the Committee of Council in 1872 one of the largest grants, and its total annual income for its normal schools for that year remained the fourth highest of any training institution.³²

The Society in 1872 was also achieving the high standard of training that had been such a feature of the Society in the late 1840s and early 1850s. The government examination results for 1872 illustrate this fact. Out of a total of 136 student teachers no fewer than 63 obtained a first division grade. This number was considerably in excess of the results obtained by other female training establishments.³³ Canon Tinling remarked, as his predecessors had done twenty

31. Minutes, op.cit., Tables on Training Schools for the year ending December 1872 and Canon Tinling's Report of that date. Located in the Public Record Office. File ED.17/39.

32. See Income and Expenditure of Normal Schools in the year ending December 1872, in Minutes, op.cit., 1873, pp.292-293. P.R.O. ED.17/39 (5309).

33. Ibid., pp.300-301.

years earlier, that the Society's practising schools were excellent and the teaching and educational training of the Society's students was given with the greatest of care and success.³⁴

It is, therefore, apparent that the influence of the Society on British female teacher training in the nineteenth century was not only substantial, but that it also was sustained by the Society throughout the greater part of the century. During these long and often difficult years, the Pestalozzian emphasis remained strong. This is further substantiated by the reaction of one of the committees of the Society in their 1878 report³⁵ to an Education Department statement that their Department's overriding objective had been to promote the general intelligence of the children, rather than to burden their memories with subjects which were unlikely to be of use to them. This the Society interpreted, with great satisfaction, as a public recognition by the Department of one of the leading principles of Pestalozzi's system.³⁶ Pestalozzianism, therefore, had remained a constant feature and influence on the Society. From its foundation in 1836 the Society had been at the forefront of progress in infant and female teacher training and had assisted in directing a new emphasis on the specialized teaching of the young.

34. Ibid., p.329.

35. 42nd Annual Report 1877-78 of the Home and Colonial School Society, for training teachers, and for the improvement and extension of education on Christian principles, p.15.

36. Ibid.

V. PESTALOZZIAN-TRAINED TEACHERS IN WALES

1. Educational Progress in Wales

Research through numerous records of infant and elementary education in Scotland seems to prove, as Silber pointed out, that there was no Pestalozzianism in that particular country.¹ Wales, on the other hand, provides a far more rewarding example. It is interesting to note that the question of whether Pestalozzianism developed in Wales has not previously been studied. It is possible, however, to demonstrate the impact of the Home and Colonial School Society's Pestalozzian-trained teachers on improvements in infant education in Wales. Before this can be assessed, a brief summary of educational developments in Wales up to 1870 is necessary.

The religious controversy which hindered educational progress in England during the nineteenth century was equally, if not more, apparent in the promotion of schools in Wales. By 1833 the Anglican National Society and the undenominational British and Foreign School Society had established very few schools in Wales.² Education was mainly provided by a large number of private adventure schools³ and by the Sunday schools

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1. Silber, K., Pestalozzi, The Man and his Work, 1960, p.304.
 2. Evans, L. W., Education in Industrial Wales 1700-1900, 1971, p.17 points out that less than twelve British Schools had been established throughout the whole of Wales by 1833.
 3. These were generally set up as a speculation or trade for the benefit of the promoters. Such schools were not specifically designed for the poor but were mainly supported by Dissenters and attended by their children. In 1847 they still represented numerically the main opposition to the Church or National Schools. See Report of the Commissioners of Inquiry into the State of Education in Wales, 1847, Part I, p.59, and Part II, p.16, for examples of their numerical strength.

which were extremely popular.⁴

Although in 1833 the government had authorised £20,000 towards school buildings to be distributed through the National and British and Foreign School Society, it is clear that, despite their involvement in voluntarily organizing educational work, the Societies continued to feel that proprietors and employers were mainly responsible for the education of the poor.⁵ After 1833, however, the National Society, aware of the increasing Nonconformist support, began to embark on a vigorous campaign to establish Church Schools. Williams describes a noticeable increase after 1837 in the number of pupils attending Church Schools in Wales.⁶ The National Society was able to develop a decisive early superiority over the British Society in the number of schools founded in Wales. By 1843, when there existed only two British schools in the whole of North Wales, it has been calculated that, of a total North Wales population of 396,000, districts holding some 320,000 were already served by a numerically adequate Anglican school system.⁷

The National Society's efforts in Wales in these early years were considerably assisted by the organizational structure of the Established

4. See Evans, D., The Sunday Schools of Wales, 1883, and Laqueur, T. W., Religion and Respectability: Sunday Schools and Working Class Culture 1780-1850, 1976.
5. See National Society, 20th Annual Report, 1831, p.16. The works schools provided an important contribution after 1833 to educational provision in South Wales. However, in North Wales their numbers were negligible due to a lack of industrial development. The works schools were invariably established by Anglican industrialists but supported by contributions from the wages of employees who were mainly Dissenters. For an account of the works schools movement in Wales see Evans, L. W., op.cit.
6. Williams, G. A., The Welsh in their History, 1982, p.159.
7. Ibid.

Church with its Diocesan information, education boards and inspectors. The British and Foreign School Society, on the other hand, had no such local administrative support. It relied on the intensity of the Non-conformist reaction. While the National Society strengthened its position in Wales in the 1830s, the British Society made negligible progress towards meeting the Anglican challenge of the National Society in Wales.⁸ Further financial support from the government for school buildings in 1839 was in itself insufficient to assist the British Society to make a significant impact on establishing schools in Wales.⁹

The intense religious excitement aroused by the educational clauses of Sir James Graham's Factory Bill in 1843, in which the management of Factory Schools was to be mainly in the hands of the Anglican Church, gained further support for the Voluntaryist movement which sought to establish their own schools entirely free from state control.¹⁰ The development between 1843-1853 of 'pure' Voluntaryism, especially among Independents and Baptists in South Wales, prevented the British Society from exerting a strong influence in that area.¹¹ Although offering

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8. An account of the activities of the British and Foreign School Society in Wales during these early years is to be found in Jones, I., 'The Voluntary System at Work', The Transactions of the Honourable Society of Cymmrodorion, 1931-1932, pp.72-164.
 9. In 1839 the Committee of the Privy Council under Kay-Shuttleworth offered grants towards school building costs in return for the right to inspect the schools.
 10. This particular movement against government intervention was distinct from the 'Voluntary System' whereby government assisted the voluntary societies in the provision of education.
 11. Hargest, L., 'The Welsh Educational Alliance and the 1870 Elementary Education Act', Welsh History Review, Vol. 10, 1980, No. 2, p.173.

education on an undenominational basis,¹² the British Society was seen to be accepting government aid and was, therefore, not acceptable to those concerned about government intervention in schools.

The climate of opinion in North Wales in 1843, however, was such as to allow the British Society to begin to play a significant role in the establishing of schools. Hugh Owen's letter to the Welsh press in August 1843, urging the people to erect British Schools to counteract Church control in education,¹³ met with an immediate response. The Calvinistic Methodists who formed the heart of Nonconformist support in North Wales,¹⁴ at last saw a means of challenging the dominance of National Society Church Schools in the North. Within a few months of Owen's appeal the British Society appointed, on the 9th December 1843, its first Welsh agent, the Reverend John Phillips.¹⁵

Through the efforts of Phillips the years 1843-1853 witnessed a substantial growth in the number of British Schools founded in North Wales. The Annual Reports of the British and Foreign School Society indicate that thirty-one new schools had been established by 1846 and one hundred and five by 1854.¹⁶ However, the upsurge in the building of British Schools in North Wales was not paralleled in the South.

12. The National Society instructed its children in the Prayer Book and the Church Catechism in addition to the Holy Scriptures. The British Society, however, confined itself to the Scriptures only and allowed its pupils to attend the Sunday School and place of worship of their parents' choosing. Efforts were made in Wales to bring the public's attention to the undenominational nature of the British Society. See The Cambrian, 6th April 1849.
13. See Davies, B. L., 'Sir Hugh Owen and Education in Wales', The Transactions of the Honourable Society of Cymmrodorion, 1971, Part 2, pp.191-199.
14. Jones, I., op.cit., p.87.
15. The Reverend John Phillips was himself a Calvinistic Methodist, who at the time of his appointment was living in London.
16. Jones, I., op.cit., p.89.

Most attempts to found schools there continued to be paralysed by the advocates of Voluntaryism.¹⁷

The strength of the Voluntaryist movement in effect prevented the British Society from appointing a South Wales agent until December 1853, when the Reverend William Roberts was taken on for an experimental period of twelve months.¹⁸ Roberts was to remain as the Society's South Wales agent for a further ten years. His journal during these years provides a detailed account of the difficulties he encountered in attempting to promote British Schools.¹⁹ However, by 1853 the initial national outcry against the scathing attack of the Commission of Inquiry Report on education provision in Wales²⁰ had subsided, and assisted by the efforts of the Inspector for Schools, Joseph Bowstead,²¹ Roberts was to take advantage of the decline in Voluntaryist opposition to British Schools. As a result, in the 1850s the British Society was able to make progress in South Wales towards founding schools. While some 'pure' Voluntaryists continued to provide pockets of resistance,²² by 1860 Roberts was able to record that there were one hundred and two British Schools established in South Wales and Monmouthshire which could accommodate 24,000 children.²³ These figures had increased still further by 1870, with no less than three hundred British Schools

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17. Davies, B. L., 'British Schools in South Wales', The National Library of Wales Journal, XVIII, 1974, p.383.
18. Ibid.
19. National Library of Wales, Mss. Nefydd 7106. See also Davies, B. L., 'British Schools', op.cit., p.384.
20. Report of the Commissioners of Inquiry into the State of Education in Wales, 1847. (Hereafter referred to as the Blue Books.)
21. Minutes of Committee of Council, 1854-1855, pp.635-648.
22. Some resistance was still evident at Pontypool, Newport and Cardiff in 1859. See Jones, E. D., 'Journal of William Roberts (Nefydd), 1853-1862', National Library of Wales Journal, X, 1958, p.316.
23. Mss. Nefydd, op.cit., XV, 275, 5th May 1860, cited in Davies, B. L., 'British Schools', op.cit., p.394.

established throughout Wales with 35,000 pupils in attendance.²⁴

Educational provision in Wales prior to 1870 had, therefore, been deeply divided; a division which allowed for exploitation and seriously restrained educational advancement.²⁵ This was most evident in the attitudes of educational promoters in Wales to teacher training. The Commissioners in 1847 emphasized the desperate need for normal schools and trained schoolmasters.²⁶ Most teachers in Wales were untrained. In Glamorgan in 1847, for example, only fifty teachers out of a total of 375 were found to have received some form of teacher training.²⁷ Most had entered teaching from such occupations as dressmaking or farming and were themselves poorly educated.²⁸

The problem of providing trained teachers for Welsh schools became acute in 1854. Schools were increasing in number but trained teachers were in short supply.²⁹ The cost of sending Welsh students to English training colleges such as Borough Road³⁰ had become too expensive for many educational benefactors in Wales.³¹ The situation was further aggravated by the insistence of some schools on Welsh-speaking teachers, and the comparatively small teaching salaries being offered in Wales compared to schools in England.³²

24. Williams, G. A., op.cit., p.161.

25. Jones, I., op.cit., p.75 supports the view that neither the National nor British and Foreign School Society captured real national enthusiasm in Wales as they were in conflict with deeper national aspirations.

26. Blue Books, op.cit., Part II, pp.28-33.

27. Ibid., Part I, p.57.

28. Ibid., Part I, p.13.

29. See The Educational Record, 1854, p.20.

30. The training college of the British and Foreign School Society.

31. For an insight into the financial considerations that shaped the British Society's attitudes to the training of teachers in Wales see Jones, I., op.cit., pp.95-97.

32. Ibid., p.118.

While the British and Foreign School Society continued as late as 1853 to confirm its policy of sending Welsh students to Borough Road,³³ the National Society had grasped the importance of a teacher training college to its further progress in developing schools in Wales. Consequently, it had established a Normal department at the Caernarvon national school in 1846³⁴ and similarly another at Carmarthen in 1848. Although North Wales had experienced a growth of British Schools during the 1840s, it was only after the impact of William Roberts in South Wales that a movement gathered momentum for a training college to provide teachers for the British and non-Church schools. The result was the founding in 1858 of Bangor Normal College.³⁵

The development of the Welsh training colleges and the particular problems encountered in providing teachers for Welsh schools prevented the Home and Colonial School Society from making a really significant contribution to infant and elementary education in Wales. Although the lists of teachers trained at the Society's headquarters in Gray's Inn Road highlights the fact that Pestalozzian-trained teachers did establish themselves in schools in Wales,³⁶ their numbers were relatively small.³⁷

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33. British and Foreign School Society Annual Report, 1853, p.10.
34. Blue Books, op.cit., Part III, p.25.
35. See Rees, L. M., 'The History of Bangor Normal College from its Inception to 1908', M.A., University College of North Wales, Bangor, 1955. In the early years, the numbers attending the college were adversely affected by the 1862 Revised Code, which caused a reduction in the number of pupil teachers in schools and consequently in the numbers applying for entry to the training colleges. For a discussion on the effects of the Code on the teacher training colleges see Rich, R. W., op.cit., pp.181-199.
36. Quarterly Educational Magazine and Record of the Home and Colonial School Society, 1848-1849, Vol. I, p.94, p.186, pp.285-286, pp.369-370, Vol. II, p.281, p.391, p.393.
37. It is interesting to note here the absence of any teachers who left the Home and Colonial School Society for teaching posts in Scotland. This is largely accounted for by the almost total Scottish support for the infant training system of David Stow in Glasgow.

Nevertheless, the quality and enthusiasm of these teachers enabled them to make a favourable impression and stimulate improvements in infant education in Wales.

2. Developments in Swansea

The fragmentary development and controversy surrounding elementary education in Wales prior to 1870 seriously restricted the promotion of infant schools. As early as 1831, Wilderspin had visited Wales during his campaign to establish schools on his infant system, but his lectures as given in Swansea in April of that year had little effect.¹ Compared to England, progress towards infant education in Wales was a much slower development. By 1847 little real progress had been achieved. In the late 1840s, however, Swansea saw the emergence of two of the best infant schools in Wales. In both cases the teachers had been trained by the Home and Colonial School Society.

In the first example, that of the Swansea Infant School in Trinity Place, its origins are to be found as far back as 1832. It had been established in Orchard Field² on the 1st May 1832 under the patronage of the Duchess of Beaufort.³ It was originally conducted on the plan of that established at Walthamstow by the Reverend Wilson. The first teachers at the infant school, a man and wife, had received their limited training at the Reverend Close's infant school at Cheltenham.⁴ The school was open to the children of parents of all religious denominations and was able to accommodate no less than two hundred

1. The Cambrian, 9th April 1831.

2. This part of Orchard Field later became Richards Place and finally became known as Trinity Place.

3. See The Cambrian, 9th April 1831.

4. Blue Books, op.cit., Part I, p.378.

infants ranging in age from two to six years.⁵ By 1843 the school contained two hundred and fifteen infants,⁶ which was a reflection on the lack of infant schools available and the demand for infant education at that time. Nevertheless, the school was entering a period of decline. By the 16th February 1847 only thirty-four children were present at the school and the master was about to resign.⁷

The following description of instruction in the school in February 1847 partly explains the reasons for the decline:

they divided into classes round their monitors, and began spelling from the cards, with an amount of noise which must have made it utterly impossible for any child to hear anything, and which was greater than need have been made had there been six times the number of children present. ⁸

This unfavourable report highlighting the decline of the infant school was followed by the appointment of Mr. Edward Williams and his wife, Elizabeth, as the new master and mistress. Both had received their teacher training at the Home and Colonial School Society.⁹ This was a significant departure by the school's committee from previous

5. The Cambrian, 11th May 1832. This article also indicates that the school was fifty-five feet long and twenty-two feet wide. A master's cottage was attached to the school. The playground was about seventy-five square feet with two rotating swings which could accommodate eight boys at the same time, two girls' swings capable of holding twelve girls each, and two sets of parallel bars.
6. Lewis, S., A Topographical Dictionary of Wales, Vol. II, 1843, p.385.
7. Blue Books, op.cit., Part I, p.376.
8. Ibid. Reference is also made here to the deaths of some of the early members of the school and consequently the decline in financial support.
9. See Quarterly Educational Magazine, op.cit., 1848-1849, Vol. I, p.94.

practice, as all the former appointments since its opening in 1832 had been teachers trained at the Cheltenham School. This does, to some extent, demonstrate the increasing reputation of the quality of teachers trained by the Home and Colonial School Society.

The Williamses took up their appointment in 1847 and quickly transformed the teaching at the school, reversing its decline. By the 1st May 1848 Mr Fletcher, on a visit to Swansea on behalf of the Committee of Council, was able to comment:

the teachers, man and wife, have had a brief express training at the Home and Colonial Schools, and have entered fully into the spirit of its plans . . . Theirs, nevertheless, is the best infant-school that I have yet seen in Wales.¹⁰

The Swansea Infant School in Trinity Place continued to be conducted entirely on the Voluntary principle as practised by the Voluntaryists, relying on subscriptions and a weekly payment of two pence for the first child and a penny for every subsequent child from the same family.¹¹ By September 1848 the school had regained its popular position and was reported to be in a flourishing condition with two hundred infants on its register.¹² The school continued to remain in operation until 1870 when it was eventually taken over by the School Board who commented

10. Minutes of Committee of Council, 1847-1848, Vol. II, p.283. The school was not under government inspection, but Fletcher had been invited to visit it by the independent committee of the school. The timing of this visit in 1848 would coincide with the beginning of the decline of the Voluntaryists in South Wales.
11. The Cambrian, 22nd September 1848. The Blue Books op.cit., Part I, p.378, indicate that the acting trustee and chief promoter of the school was the banker, William Stroud, one of the leaders of the Swansea Voluntaryists. See The Cambrian, 1st September 1854 for mention of his death.
12. Weaver, J. A., The Development of Education in Swansea 1846-1902, M.A., University College of Swansea, 1957, p.126.

favourably on its premises.¹³

Mr. and Mrs. Williams remained in charge of the school throughout the years 1847-1870. It is likely that the closure of the school in 1870 was the result of the combination of increasing competition from other schools in the neighbourhood, especially the National, Parochial and St. Helen's Infants' Schools,¹⁴ and the arrival of the School Board era. Butcher's directory mistakenly indicates that the Williamses were still teaching at the school in 1873.¹⁵ It is clear, however, that by June 1873 Mrs. Williams had become the School Board's children's officer¹⁶ and that by November 1873 Mr. Williams had become a temporary teacher at the Board's school in Back Street, Swansea.¹⁷ Although the contribution of these teachers should not be overrated, it is important to note that they most certainly made an impression on early infant education in Swansea.

The second infant school established in Swansea under the direction of a teacher trained at the Home and Colonial School Society was the Hafod Copperworks' Infants' School. It was founded in 1848 by Mr J. H. Vivian, M.P., head of the extensive local copper smelting works.¹⁸

13. Minute Books of the School Board No.1140. Swansea School Board Ledger Part I, p.21 located at Glamorgan County Council Records Office, Cardiff.

14. Weaver, J. A., op.cit., p.126.

15. Butcher. G. P., Swansea District Directory, 1873-1874, p.119. This statement is not supported by the Minute Books of the School Board.

16. Minute Books of the School Board No. 1140, School Board Ledger 1871-1881, Part I, p.21.

17. Ibid.

18. A Brief History of the Hafod Copperworks' School, 1905, p.5. Anonymous (but thought likely to be by W. G. Williams, a former teacher at Hafod and writer of numerous local Swansea histories).

The infant school had developed out of the mixed school opened on the same site by Vivian in 1846.¹⁹ Due to rapidly increasing numbers in 1847, the mixed school had been divided into separate schools for boys and girls.²⁰ The overcrowding, however, continued²¹ and, as a result, Vivian decided to form a third department and establish an infant school. The three departments of the Hafod School provide an excellent example of the importance of the works school movement in nineteenth century Wales.²² The Hafod School demonstrates the significance in South Wales of voluntary efforts by industrialists and the fact that many workers relied on their employer to provide some form of schooling for their employees' children.²³

As the Committee of Council reports point out, Vivian had taken considerable interest in the provision of education in the Swansea area prior to the establishing of his Hafod School.²⁴ It is, therefore, not surprising that he was concerned about the quality and training of the teachers he employed.²⁵ In this respect, he travelled to London in

19. Education: Swansea 1870-1970. A Short History of Local Education During the Past One Hundred Years, 1970, p.5. Compiled by the Swansea Association of the National Union of Teachers.

20. A Brief History, op.cit., p.4.

21. The growth in Swansea's population was intimately linked to the development of the local copper smelting industry. Its population had increased from 6,091 in 1801 to 40,000 by 1851. See Census Returns, Part I, 1801, p.479 and 1851, p.438, cited in Evans, L. W., Education in Industrial Wales, 1700-1900, 1971, p.122.

22. For an account of the works school movement and its contribution to education in Wales see Evans, L. W., Ibid.

23. Education Department, Guildhall, Swansea. Register of Boys, Hafod Schools, 1854-1894, with notes by W. G. Williams, cited in Evans, L. W., Ibid., p.126. Williams points out that for admission to the school preference was given to employees' children.

24. Minutes, op.cit., 1849, Longueville Jones's Report on Wales.

25. See Minutes, op.cit., 1848-1849, Vol. II, p.440; and 1853-1854, Vol. II, p.825 for evidence of the training and standard of teaching.

1848 and visited the Home and Colonial School Society.²⁶ During this visit to the Society he offered a Mrs. Elizabeth Ann Finlay the post of headmistress of the new Hafod Infant School which was as yet still to be completed. Mrs. Finlay, who was 'imbued with the Pestalozzian system,'²⁷ apparently hesitated before accepting this challenging post.²⁸ Here again the relative isolation of Wales which continually hindered its educational progress is distinctly evident. Her hesitation was centred on the daunting prospect of travelling by rail to Bristol and then by sea or stage coach to Swansea. Vivian, however, persuaded her to complete her journey on his own ship, the S.S. Morfa.²⁹

Vivian considered the Pestalozzian methods of Mrs. Finlay and the Home and Colonial School Society best suited to the needs of his own infant school and, in his desire to employ Mrs. Finlay at Hafod, he went so far as to provide her with her own house built to her specifications.³⁰ This demonstrates Vivian's enthusiasm for Mrs. Finlay's Pestalozzian method of teaching and the extent he was prepared to go to benefit from her teaching skills at Swansea.

His efforts were rewarded by soon having probably the best infant school in Wales. Mrs. Finlay's contribution appears to have been significant. The infant school, like the two other departments of the Hafod Copperworks' School, organized its religious instruction on the principles laid down by the British and Foreign School Society.³¹

26. A Brief History, op.cit., p.5.

27. Ibid.

28. The Quarterly Educational Magazine, and Record of the Home and Colonial School Society, 1848-1849, Vol. I, p.285 indicates that Mrs. Finlay left the Society for Swansea in 1848.

29. A Brief History, op.cit., p.5.

30. Ibid.

31. Minutes, op.cit., 1848-1850, Vol. II, p.440. Appendix to Mr. Fletcher's report.

This had arisen through Vivian's appreciation of the financial benefits to be had by becoming a National or British School. Vivian decided on adopting the British plan because its undenominational nature would be more acceptable to his employees in the copper smelting works. The combined Hafod School was therefore regularly seen in the ordinary course of inspection by government inspectors visiting British and Foreign Society Schools.³²

The Committee of Council reports indicate the popularity and high standard that the infant school's Pestalozzian system achieved. Fletcher's report remarked that in its very first year in operation the Hafod Infant School had no less than two hundred and two infants in attendance.³³ This number was then already greater than those attending each of the other two departments of the Hafod School.³⁴ Fletcher, although critical on this occasion of the teaching in the Hafod Boys' and Girls' schools, found the infant school far more to his liking. The school was

in a condition of neatness, order, discipline, and complete organization, which under the circumstances of a rude neighbourhood . . . is very creditable to its matron teacher.³⁵

Fletcher was concerned, however, that the numbers in the infant school were too large for one teacher.³⁶ He considered that, as the infants were almost wholly Welsh-speaking, it was essential that several pupil teachers from the Girls' School should be used in the infant school to

32. See for example, Minutes, op.cit., 1847-1850 reports by Mr. Fletcher, and 1852-1854 reports by Mr. Bowstead.

33. Ibid., 1849, p.440. Fletcher had visited the school on the 5th June 1849.

34. Ibid., On the 5th June 1849 the Boys' School contained 185 pupils and the Girls' School 167.

35. Ibid., p.441.

36. The infant school was organised on the gallery system. See Ibid.

enable Mrs. Finlay to efficiently instruct the infants in English.³⁷

Evidence suggests that progress in the infant school was rapid. Only two years after Fletcher's comments highlighting his concern about English teaching and numbers in the school he was able to report that it had made excellent progress in English. He concluded that it

wants only a little adult or adolescent assistance to make its sectional teaching thoroughly good in three different portions, and become an exemplary institution. Its success is already sufficient to decide the value of this class of schools in the struggle against the peculiar difficulties of language especially, which lie in the way of the instruction of the poorer classes in Wales. ³⁸

The progress made in teaching English may in part have resulted from the use of Pestalozzian methods in language teaching. Unfortunately it cannot be ascertained to what extent such Pestalozzian techniques for teaching languages were adopted by Mrs. Finlay. Considering her particular interest in Pestalozzi's teaching, it might be a reasonable supposition that at least some of the remarkable progress achieved in English teaching at Hafod during these two years was due to Pestalozzian influence.

The introduction of pupil teachers as recommended by Fletcher assisted the continued progress of the infant school until, by 1856, it had established itself as one of the most complete and efficient infant schools in Wales. Bowstead in his 1856 report concluded it was 'in a state of the utmost efficiency attainable in such an institution.'³⁹ He considered Mrs. Finlay 'altogether a first-rate infant teacher.'⁴⁰ She continued to demonstrate a clear awareness of

37. Ibid.

38. Ibid., 1850, p.614.

39. Ibid., 1855-1856.

40. Ibid.

the needs of the infant child in a true Pestalozzian spirit throughout her years at Hafod. In 1858, ten years after the opening of the school, the Committee of Council reports indicate that as many as four hundred children were then in attendance in the infant school. Bowstead writes that the infants were receiving

as useful a preparation for the work of the juvenile school as it is practicable to give them, care being taken, on the one hand, that the school shall not degenerate into a mere play-room, and, on the other, that instruction shall never be allowed to press too heavily upon the half-developed faculties of the infant scholars.⁴¹

Only two years after this report Mrs. Finlay died. Her death in 1860 was a great loss to the infant school and to her many friends in Swansea. Her influence on education in Swansea and her stature as one of the town's leading and most respected educationists is expressed by the report on her death and funeral, published in The Cambrian newspaper on the 21st September 1860. The article remarked on

the immense number of persons who attended the funeral, such a number we have seldom noticed attending a funeral of those among the middle ranks of life.

Among the mourners were many teachers, both from the local National and British Schools, scores of parents and hundreds of children. The Cambrian reported on how the mourners felt that they had lost an affectionate friend rather than just a teacher. It paid tribute to the religious element that permeated all her teaching and the happy atmosphere which was so characteristic of her classroom. Her impact, therefore, on education in Swansea is clearly evident and again demonstrates the influence of a Pestalozzian-trained teacher on infant school developments in Swansea.

Besides the work of the Williamses and Mrs. Finlay another Home and

41. Ibid., 1858-1859.

Colonial School Society-trained teacher arrived in Swansea at about the same time. Unlike Mr. and Mrs. Williams who taught in a strictly voluntary school,⁴² or Mrs. Finlay whose school came under the supervision of the British and Foreign School Society at Borough Road, this teacher was appointed to a teaching post in the newly established National School in Swansea. This school was opened on the 28th August 1848 and by Christmas 1849 had as many as three hundred and forty-five infants in attendance.⁴³ This again highlights the demand that existed for infant education in Swansea in the late 1840s:

The lists of teachers leaving the Home and Colonial School Society show that Ann English left Gray's Inn Road in 1848 to take up a teaching post in Swansea.⁴⁴ Hitherto, there was no indication as to which school she was sent. However, amongst the Glamorgan County records on the National Schools there are manuscript notes which show that Ann English was made the infant headmistress to the newly formed National Infant School in August 1848 at a salary of £35 per annum.⁴⁵ In his thesis on 'Church Schools in Swansea 1800-1870' Trott discusses the rules of the Swansea National Infant School.⁴⁶ Unfortunately, the rules quoted by Trott from the 1847 Report of the Commissioners of

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42. The Trinity Place Infant School was supported by the Voluntarists who refused government aid. Consequently, they would not submit themselves to the government inspection clauses attached to the financial contributions available from either the National or British and Foreign School Society.
43. National Schools - Reference Swansea, St. Mary P/123 file located at Glamorgan County Council Records Office, Cardiff.
44. Quarterly Educational Magazine, op.cit., 1848-1849, p.369.
45. See handwritten notes in National Schools - St. Mary P/123 file, op.cit.
46. Trott, A. L., 'Church Schools in Swansea 1800-1870', M.A., University College, Swansea, 1941, pp.128-130.

Inquiry into Education in Wales are, in fact, not those relating to the National Infant School, but to Trinity Place Voluntary Infant School which was taken over by Mr. and Mrs. Williams in 1847.⁴⁷ Indeed, there is very little evidence concerning the Swansea National Infant School except for that deposited at the records office in Cardiff. Nevertheless, some evidence is available.

By the 2nd July 1858, 2,095 infants under seven years of age had been trained at the National Infant School.⁴⁸ It was then conducted by a certificated mistress (Ann English) with the assistance of two pupil teachers.⁴⁹ Other evidence suggests that Ann English was successful in organizing the school.⁵⁰ The Inspector of Schools, Longueville Jones, commented favourably on the discipline in the school.⁵¹ He considered that the children were quiet and cheerful and that no unnecessary harshness was apparent in the treatment of the infants. Gallery lessons were well taught and instruction tended to concentrate on oral lessons rather than on books.⁵² The large numbers that were attending the National Society's Infant School again demonstrate the demand that existed for infant education and the importance of the position held by another Pestalozzian-trained teacher from the Home and Colonial School Society.

Apart from the contribution of those teachers already mentioned,

47. See Blue Books, op.cit., Part I, pp.376-379. (In 1847 the Trinity Place School was commonly referred to as the Swansea Infant School).

48. The Cambrian, 2nd July 1858.

49. Ibid.

50. Minutes, op.cit., 1849, Vol. II, p.249.

51. Ibid.

52. Ibid.

another Pestalozzian development is apparent in Swansea during these years. It concerns the establishing of a private Pestalozzian school by a Miss Smith. It is unfortunate that, due to the nature of such private ventures, records have not survived to demonstrate the extent of Pestalozzian influence. Only from advertisements in The Cambrian and from local directories can limited details of the Pestalozzian school be obtained. Miss Smith, being interested in education, had befriended Mrs. Finlay at the Hafod Infant School and subsequently studied the Pestalozzian system under her guidance.⁵³ It appears that Miss Smith opened her Pestalozzian school on Monday, 5th July 1852 at 6 Clarence Terrace, Swansea.⁵⁴ By September of that same year it had moved to more suitable premises at 7 Rutland Street.⁵⁵ In September 1862 the school finally moved to a more central and permanent location in Melbourne House, Picton Place, Swansea.⁵⁶ The school existed from 1852 to 1881.⁵⁷ By July 1853 it seems to have become fairly well established, relying on 'the patronage already so largely bestowed on them.'⁵⁸ The school admitted children up to eight years of age. Children under four years were charged 10s. per quarter and those under eight years 15s. per quarter.⁵⁹ Some children were boarders at the school⁶⁰ and there seems little doubt it obtained, in its limited way,

53. A Brief History, *op.cit.*, p.6.

54. The Cambrian, 2nd July 1852.

55. Ibid., 1st October 1852.

56. Ibid., 19th September 1862.

57. The last advertisement for the school in The Cambrian appeared on the 23rd July 1880. It was, however, mentioned by Butcher, G. P., Swansea District Directory, 1881-1882, p.151, p.228, p.303. There appears no evidence of any further mention of the school.

58. The Cambrian, 15th July 1853.

59. Ibid.

60. Ibid., 17th January 1862.

some success.

It may be of some significance that the advertisements for the school show a slight change of emphasis during the 1860s.⁶¹ Before 1867 the school was promoted as the Pestalozzian Infant School; however, from the 19th July 1867 it was advertised as a Select Infant School on the Pestalozzian System, the emphasis being changed from Pestalozzian to Select. This is perhaps a reflection of the change in attitude towards Pestalozzi's methods during these years. It may also demonstrate the failing interest in Pestalozzianism in Swansea after the death of Mrs. Finlay and the gradual eclipse of the Trinity Place School as one of the most influential infant schools in Swansea. In January 1875, however, the emphasis was again placed on the 'Pestalozzian' in the advertisement.⁶² Whether this has any special significance or not, the fact remains that this school is the only named Pestalozzian school that can be found in Swansea amongst the meagre records that are available. It is also interesting to note that the school, like Cheam School, offers another example of how British Pestalozzianism often developed in private schools, catering for fee paying children, rather than on true Pestalozzian principles aimed at improving the education of the children of the poor.

Although the number of examples of Pestalozzian-trained teachers involved in the development of infant education in Swansea in the period 1847-1870 may appear small, the fact that few infant schools then

61. For examples of these advertisements up to 1867 see The Cambrian, 2nd July 1852, 1st October 1852, 15th July 1853, 30th September 1853, 7th October 1853, 17th January 1862, 19th September 1862 and 11th January 1867. Throughout these and subsequent years the advertisements tend to appear in January and July prior to the beginning of the school term.

62. Ibid., 15th January 1875.

existed in Swansea increases the relative importance of these teachers to improving standards in local infant schooling.

3. Contribution to Infant Education

Apart from the developments that were taking place in Swansea, other Pestalozzian-trained teachers from the Home and Colonial School Society were assisting in the improvement of infant education in Wales. However, it is noticeable that few of the Society's teachers settled in North Wales.¹ The 1847 Report of Inquiry into the State of Education in Wales highlighted the fact that of 643 teachers conducting schools in North Wales only 65 had received any training.² The Home and Colonial School Society, however, was unable to secure teaching appointments in North Wales for many of its students because of two important developments. Firstly, the establishing in 1846 of the National Society's Normal Department at Caernarvon³ strengthened the National Society's own position in North Wales and its ability to provide trained teachers for National Schools in that particular area.⁴

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1. See Quarterly Educational Magazine, op.cit., 1848-1849, Vol. I, p.370 and Vol. II, p.281 for two exceptions who both took up temporary positions in Caernarvon. The Minutes of Committee of Council, Appendix to Annual Calendars, lists teachers achieving certificates of merit and indicates the destinations of Home and Colonial School Society trained teachers.
 2. Blue Books, op.cit., Part III, p.27. The Commissioners' findings indicated that the majority of trained teachers had received their training at Borough Road.
 3. Ibid., p.25. See also Sturt, M., The Education of the People, 1967, pp.155-157.
 4. The Home and Colonial School Society did, however, manage to place a few students in National Schools in North Wales. Minutes of Committee of Council, 1853-1854, Vol. I, p.379, Appendix to Annual Calendar indicates that Matilda Jenkinson secured a position in the National School at Rhyl. Other examples of the Society's teachers in Church Schools in North Wales are to be found in the records for Flint in Blue Books, op.cit., Part III, Appendix A, p.113.

Secondly, from 1843 the efforts of the Reverend John Phillips for the British and Foreign School Society focused attention onto that Society and their own trained teachers.

Throughout the rest of Wales a small number of Pestalozzian-trained teachers from the Home and Colonial School Society established themselves in infant and elementary schools. In Llanelli, for example, a teacher from the Society secured a position in the local Llanelli Copperworks' Girls' and Infants' School.⁵ In 1847-1848 she was, as reported by the Committee of Council, making the first steps in organization and discipline which was viewed as a very promising effort.⁶ In May 1848 the Infant School had an average attendance of one hundred and sixty pupils.⁷ Similarly, in Newport, another teacher from the Society was making her impact on the local British infant school which had sixty-five infants in attendance.⁸

In Cardiff, however, there appears no evidence of any Home and Colonial School Society teachers. This can partly be explained by the population distribution in Wales prior to 1860. As David Williams has pointed out,⁹ the Census Returns for 1801 show Merthyr to be the largest town in Wales, with a population of 7,700. By 1861 its population had risen to 50,000 and while remaining the largest town, it was being

5. Minutes, op.cit., 1847-1848, Vol. II, p.300. This school was established by the prosperous Neville family of Llanelli. The master of the Llanelli Copperworks' Boys' School, similarly under the patronage of the Nevilles, had spent two months in training at the Church Normal School in Carmarthen. See Minutes, op.cit., 1850-1851, Vol. II, p.614.

6. Ibid., 1847-1848, Vol. II, p.300.

7. Ibid., p.247.

8. Ibid., p.247 and p.302.

9. Williams, D., History of Wales 1485-1931, 1948, (2nd ed.), p.78.

challenged by Swansea which was the second largest town and rapidly increasing in size. Cardiff, on the other hand, was still a small country town. In 1801 it had a population of only 1,870 and even in 1861 it was smaller than Swansea.¹⁰

In the South Pembrokeshire town of Tenby, teachers from the Home and Colonial School Society were making an impact on local infant education. The Society's lists of teachers indicate that a Fanny Coote and an Ann McLoughlin were both sent to Tenby from the Society in 1848.¹¹ It seems that it was Fanny Coote who really stamped her mark on infant education in Tenby. As the Society's lists show, she returned on several occasions to the Society to improve her method.¹² In his report of 1849 Longueville Jones praised Fanny Coote's work at the Tenby Infant School.¹³ In his inspection of the school on the 22nd February 1849 he commented on the mild nature of the discipline in the school, and the resulting cheerfulness and enthusiasm of the children.¹⁴ The school itself was organized on the basis of two galleries and one classroom. Jones remarked that he considered Miss Coote to be of a superior education, 'very methodical and prompt in her instruction.'¹⁵ She was seen to communicate in a decidedly clear manner and was, Jones pointed

10. Hargest, L., 'The Welsh Educational Alliance and the 1870 Elementary Education Act', Welsh History Review, Vol. X, 1980, No. 2, p.204 points out, however, that from 1870 Cardiff played an important role as the bastion of the Welsh Educational Alliance which had been formed in 1870 because of Liberal concern as to government intentions in elementary education.

11. Quarterly Educational Magazine, op.cit., 1848-1849, Vol. I, p.186.

12. Ibid., Vol. II, 1849, p.393.

13. Minutes, op.cit., 1848-1850, Vol. II, p.249.

14. Ibid.

15. Ibid.

out, loved by all the children.¹⁶

The Tenby Infant School was, however, more than just an ordinary infant school; according to Jones, it contained pupils of twelve and thirteen years of age.¹⁷ The tabulated reports for 1849 show that Tenby Infant School had in excess of one hundred and ten pupils in attendance of whom eighty-nine were seven years of age or under, eighteen children were eight years and of the others, three were as old as fourteen years.¹⁸ Consequently, many of the pupils were learning subjects which, the report points out, were not being taught in other infant schools.¹⁹ The report indicates that the pupils were learning subjects befitting any elementary school and that Fanny Coote was able to combine her infant instruction with the more advanced requirements of her older pupils.

On the 5th July 1853 Longueville Jones inspected the Tenby Infant School again. The instruction being given was now considered to be of a 'very good standard.'²⁰ It is clear that Fanny Coote had become better organized, and probably as a result of her frequent courses at Gray's Inn Road, she had developed her teaching method. In his report for that day he considered the buildings, furniture, playground, books, apparatus, organization and methods to be 'thoroughly good'. The discipline was now excellent and the instruction effective. He concluded, 'everything in this school is well ordered. This is the best infant school in Wales.'²¹

16. Ibid.

17. Ibid.

18. Ibid.

19. In particular there was an emphasis on the reading of the Holy Scriptures and on differing aspects of arithmetic. See ibid., p.248.

20. Ibid., 1853-1854, Volume II, p.685.

21. Ibid.

A number of smaller schools also had teachers who had been trained by the Home and Colonial School Society. At Aberystwyth in 1846, for example, a twenty-six-year-old teacher from the Society was mistress of seventy-nine children in an infant school of which sixty-eight were under five years of age.²² The school had been established in 1842 and was based on the monitorial system, using simultaneous instruction as developed by Pestalozzi.²³ The Jeffreston School near Saundersfoot, described by the Committee of Council inspector as a National Church of England School, possessed a master and mistress who had both received a full six months' training at Gray's Inn Road in 1845.²⁴ Similarly, Kilvey Infant School in Llansamlet (near Swansea), which had been established in 1839, acquired the services of a young nineteen-year-old teacher who had spent six months in training with the Society in 1841.²⁵

The Llandovery Infant School in 1851 also pursued teaching methods based on those of the Home and Colonial School Society.²⁶ Reporting on his visit to the school on the 18th September 1851, Fletcher commented 'this is one of a class of schools deserving all encouragement in Wales'.²⁷ He was impressed with the zealous enthusiasm of the teacher who had recently been trained at Gray's Inn Road.²⁸ Although the

22. Blue Books, op.cit., Part II, pp.222-225, in Report on Education in Brecknock, Cardigan and Radnor.

23. Ibid.

24. Ibid., Part I, pp.116-117. Report on Pembrokeshire.

25. Ibid., Part I, pp.56-57, Report on Glamorgan.

26. Minutes, op.cit., 1851-1852, Vol. II, p.555.

27. Ibid.

28. Although Fletcher does not name the teacher, it is likely that she was Elizabeth Webber, as her name appears alongside Llandovery School in an 1850 list of teachers leaving the Society. See Minutes, op.cit., 1851-1852, Vol. I, p.356.

teacher lacked experience and had no assistant, Fletcher praised her devotion to educating her infants despite their poor knowledge of English and her total lack of Welsh.²⁹

Finally, it is apparent that by the beginning of the 1840s some patrons of schools in Wales were willing to finance particular students to attend training at the Home and Colonial School Society. At Porthkerry Church of England School, established in 1842, the patron Edward Romilly sent the newly-acquired teacher, a forty-nine-year-old former mason, for an eight-week course to the Society in 1842 which was followed by a further two-week course in 1849.³⁰ A similar example is also provided in Flint where, in 1847, the Pantassa School was employing a temporary teacher from the Society while the established schoolmistress was herself on a three month training course at Gray's Inn Road.³¹ A teacher trained by the Society had also been recently appointed to the nearby Limebank School which in 1847 had seventy-four pupils in attendance.³²

While it is difficult to assess the individual contributions of the above-mentioned Pestalozzian-trained teachers, it appears from the evidence available that the majority of these teachers attracted favourable comments on their teaching capabilities from government inspectors. The collective contribution of these teachers illustrates the growing influence of the Home and Colonial School Society on improving standards in infant schools, especially prior to 1850. They

29. Minutes, op.cit., 1851-1852, Vol. II, p.555.

30. Blue Books, op.cit., Part I, pp.52-53, Report on Glamorgan. The school had fifty children in attendance ranging in age from five to ten years.

31. Ibid., Part III, p.113. Report on Flint - Appendix A. This school had sixty-eight children on its register of whom twenty-two were over ten years of age.

32. Ibid.

provide an insight into the Society's particular contribution to developments in Welsh education at a time when it was in a clear state of neglect. The Society's impact in Wales, although not on a large scale, was an important feature in improving educational standards in Wales in the early 1840s; and in the period immediately following the publication in 1847 of the Report of the Commissioners of Inquiry into the State of Education in Wales.

VI. THE DEVELOPMENT OF PESTALOZZIAN IDEALS

1. Child-Centred Education

Although utilitarian attitudes towards childhood tended to dominate educational practice in the first half of the nineteenth century and were to remain a prominent feature of educational decision-making in the years after 1850, progress towards child-centred education was also gathering momentum. The extent to which such progress in Britain was inspired by Pestalozzi must now be assessed.

Stewart and McCann discuss¹ the early experiments from 1752 of William Gilpin² and David Manson,³ and how these individuals were pioneers of the progressive tradition in English education. While Gilpin and Manson were not influenced by Continental theorists, other developments in child-centred education prior to 1790 can be seen as a direct result of Rousseau's influence.

The publication of Rousseau's Émile in 1762⁴ was of particular importance, in that it concentrated on the need to educate according to nature and focused attention on to the development of the individual child and the innocence of childhood, challenging the classical

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1. Stewart, W. A. C., and McCann, W. P., The Educational Innovators, Volume I: 1750-1880, 1967, pp.3-23.
 2. William Gilpin was headmaster of Cheam School from 1752 to 1777. For an account of his importance to the development of the school see Peel, E., Cheam School From 1645, 1974, pp.34-70.
 3. Details of Manson's innovations are to be found in Marshall, J. J., 'David Manson, Schoolmaster in Belfast', Ulster Journal of Archaeology, Volume XIV, 1908, pp.59-72.
 4. An English translation of Émile also appeared in 1762. The availability of Rousseau's work is in sharp contrast to the problems associated with the translation and publication of Pestalozzi's writings.

Christian approach⁵ with its belief that the child was evil by nature and that childhood was a preparation for adult life requiring lessons offering moral and intellectual training.

Emile gave birth to a number of British educational novels which stressed the importance of the natural development of the child. The most famous of these was Thomas Day's Sandford and Merton, emphasizing Rousseau's 'negative education' which allowed the child to develop without formal lessons or an adherence to book-learning. Literary contributions were also made by other British Rousseauites including David Williams who established in 1774 the Laurence Street Academy in Chelsea,⁶ and Maria Edgeworth, whose father Richard Lovell Edgeworth attempted to educate his son on strict Emilian lines.⁷ Indeed, as Stewart and McCann point out,⁸ England experienced between the 1760s and 1790s an outbreak of Rousseauomania.

Although Rousseau's views found wide support in the philosophical societies,⁹ Rousseauite educational experiments in Britain only occurred on a limited front. Such experiments tended to be centred on individual children or, as in the case of David Williams' school, on the sons of upper-class parents. Through these experiments, important attention was directed onto the development of the individual child. However, Rousseau's ideas were not initially addressed to the problems of popular education nor to the specific needs of the working-class infant child.

5. See Stewart, W. A. C., and McCann, W. P. op.cit., p.34.

6. An interesting account of the methods adopted in this school is given in ibid., pp.35-52. For a more detailed analysis of Williams' work see Phillips, C. J., 'The Life and Work of David Williams', Ph.D., University of London, 1951.

7. Edgeworth, R. L., Memoirs, Volume I, 1820, pp.177-179.

8. Stewart, W. A. C., and McCann, W. P., op.cit., p.34.

9. Ibid., pp.30-31.

It was Robert Owen who fused the ideas of Rousseau, the eighteenth century Enlightenment and working-class education. Owen believed that through education and environment human character could be transformed and society remodelled. The educational innovations initiated by Owen in New Lanark¹⁰ and his ideas contained in A New View of Society written between 1812 and 1813, were an expression of Owen's belief in child-centred education and how such treatment could lead individuals to become rational members of society.

For Owen, education became all-powerful and, unlike the Rousseauites, a means to social reform. His views on education can be traced back to his involvement in the Manchester Literary and Philosophical Society in the 1890s. Indeed, Owen himself remarks on his regular attendance at the Society's meetings and comments that they were

very pleasant and useful to me; making me familiar with the ideas, habits, and prejudices of a new class in society.¹¹

Silver describes¹² how it is likely that Owen was exposed to the liberal views of Godwin, Paine and Wollstonecraft during his membership of the Society.¹³ It is possible that the work of Helvétius was also available in the Society, which clearly influenced Godwin's Political Justice.

10. For details of the methods and system pursued in the New Lanark schools see Beer, M., (ed.), The Life of Robert Owen, 1920, pp.192-196, (hereafter referred to as Life); Owen, R. D., 'An Outline of the System of Education at New Lanark', in Silver, H., Robert Owen on Education, 1969, pp.149-164.

11. Life, op.cit., p.53.

12. Silver, H., The Concept of Popular Education, 1965, p.85.

13. Each produced significant works in the first few years of the 1790s. Tom Paine's The Rights of Man appeared in 1791; Mary Wollstonecraft's A Vindication of the Rights of Women in 1792 and William Godwin's Enquiry Concerning Political Justice in 1793. Such works were part of the political radicalism of the 1790s which made education a central theme.

The work of Helvétius and Godwin stressed the importance of external circumstances and the power of education to determine the actions and dispositions of mankind, progressing to a rational society.¹⁴ Although Stewart and McCann point out¹⁵ that intellectual stimulation was still available to Owen when he took over the management of the New Lanark mills in 1800, it was mainly through the impact of the French Enlightenment on Godwin that Owen was made aware of the rationalist tradition.

On 1st January 1816 Owen was able to commence his Institution for the Formation of Character.¹⁶ Although educational provision had been made by Owen in New Lanark prior to 1816, the schools of the 'Institution' and the methods employed were indicative of Owen's progressive approach to the education of children. Stewart and McCann¹⁷ refer to Owen's principles as 'strongly reminiscent of the work of David Williams and the new school of educationists rather than directly of Rousseau', while Silver views the New Lanark schools as representing a 'triumph of eighteenth century rationalism and the "revolutionary leaven" of the Godwinian 90s'.¹⁸

It seems clear, therefore, that prior to 1816 Pestalozzian influence on British attitudes towards child-centred education was very limited. Indeed, apart from references to Pestalozzi by Elizabeth Hamilton and certain foreign literature that publicized Pestalozzi's work,¹⁹ there

14. For further discussion on the contribution of Helvétius to educational ideas see Cumming, I., Helvétius: His Life and Place in the History of Educational Thought, 1955.

15. Stewart, W. A. C., and McCann, W. P. op.cit., p.57.

16. Life, op.cit., p.163.

17. Stewart, W. A. C., and McCann, W. P. op.cit., p.63.

18. Silver, H., op.cit., p.126.

19. See Chapter II, p.33.

appears no evidence to suggest that Pestalozzi's ideas and methods were generally known in Britain at this time. Although Stewart and McCann indicate²⁰ that Owen bears a debt to Rousseau, Pestalozzi and Fellenberg, Owen's important educational innovations in New Lanark and his ideas expressed in A New View of Society were achieved before he came into contact with Swiss ideas and experiments on his Continental tour in 1818.²¹ As Silver remarks,²² Owen's educational contributions up to this time can be traced back to eighteenth century French ideas rather than to nineteenth century Swiss practice.

The importance of Owen's work in contributing to an awareness of child-centred education is treated rather differently by Pollard.²³ He describes the years from 1789 to 1815 as a bleak period in Britain's educational history, when 'we were blind to the value of pedagogical experiment and indifferent to the welfare of youth.'²⁴ Bell and Lancaster's monitorial systems are singled out as the only new developments.²⁵ Pollard's book places special importance on the period after 1815 when there was contact between British reformers and Continental reformers such as Pestalozzi. The tide of national insularity is seen to be checked by the efforts of British educationalists who had been directly influenced by their experience of Continental practice.²⁶ This, however, ignores the impact of the British Rousseauites and the influence of the French Enlightenment and its radical approach to

20. Stewart, W. A. C., and McCann, W. P., op.cit., p.270.

21. Life, op.cit., pp.240-247.

22. Silver, H., op.cit., p.154.

23. Pollard, H. M., Pioneers of Popular Education, 1956.

24. Ibid., p.144.

25. Ibid.

26. Ibid., p.273.

education. As Silver has shown,²⁷ it neglects the significance of the period 1789 to 1815 when there was substantial contact between reformer and ideas.

Pollard, however, is partly justified in seeing the period after 1815 as the one in which some Pestalozzian influence in Britain first appears; as mentioned earlier,²⁸ it was Synge's visit to Pestalozzi in 1815, and his subsequent written works, which led to the involvement of Greaves and the Mayos in Pestalozzian education. But a tangible contribution by Pestalozzi and the British Pestalozzians to child-centred education came later, with the return of Greaves and Mayo from Yverdon after 1822, and even then the influence was on a small scale initially.

Although Mayo established his Epsom School in August 1822, it was the involvement of Greaves in the Infant School Society²⁹ from June 1824 which marks the first significant attempt by the British Pestalozzians to become directly involved in the emerging infant school movement. While Pestalozzi himself had not advocated infant schools,³⁰ his respect for childhood and the importance he attached to the relationship between teacher and child based on his 'living-room' philosophy, influenced the British Pestalozzians to link his ideas on education with the specific requirements of younger children as recognised in the new infant schools.

Mayo's lecture to the Royal Institution in May 1826³¹ highlights

27. Silver, H., op.cit., p.155.

28. Chapter II, p.38, footnote 20.

29. Details on the composition and role of the Infant School Society are to be found in Chapter IV, pp. 116-118.

30. See Ibid., p.110.

31. Mayo, C., Observations on the Establishment and Direction of Infant Schools, (being the substance of a lecture delivered at the Royal Institution, May 1826), 1827.

the special importance which Mayo had attributed to the infant school movement. Although his lecture indicates that he was excessively concerned with the importance of infant education as a means of preparing the young for moral and religious training, he did appreciate the child-centred element inherent in the infant school movement.³² In view of the demise of the Infant School Society, which closed in 1828, just four years after its promising commencement, Mayo's lecture and the involvement of the British Pestalozzians take on more significance. The spirit of Pestalozzian pedagogy provided a stimulus and source of inspiration to those interested in infant education, at a time when the infant school movement was in danger of losing its direction.

While Mayo's lecture served as a means of focussing attention onto the aims of infant education, it was Elizabeth Mayo's object lessons which added weight to the British Pestalozzians' involvement in child-centred education. Her object lessons placed significance on the psychological basis of Pestalozzi's work and his emphasis on sense-training. By such methods an appreciation by educationists of the importance of sensory experience was developed. To the British Pestalozzians object lessons served to compensate for the uninspiring environment in which many children lived, by drawing attention to tangible objects whose properties would otherwise have escaped their notice. Such a 'system' could provide a more rewarding and stimulating learning situation than a mere study of pictures and engravings. However, this necessitated a change in educational outlook, for no longer was it sufficient to think exclusively in terms of what subject should be learnt, but now consideration had to be given to the ways in which it was learnt.

32. Ibid., p.10.

The object lesson approach, in stressing the importance of the child's senses and Pestalozzi's emphasis on Language, Number and Form, directed attention onto a particular method of teaching and the role of the teacher in the classroom situation. By 1839 one enthusiastic supporter was claiming that

things rather than words, or, at all events, things and examples before words and explanations, must be the cause of the Infants' School teacher.³³

Although the spontaneity inherent in Elizabeth Mayo's original object lessons degenerated into formalised lessons based on verbalism,³⁴ assisted by the over-intellectual infant teaching encouraged in later years by payment by results, the impact of Miss Mayo's Lessons on Objects in 1831 was such that it enabled her to stand out from the shadow of her brother and become effectively involved in the Home and Colonial Infant School Society, working towards improved standards in infant teacher training and more child-centred methods of teaching.

It would be misleading, however, to suggest that from the 1830s early childhood education developed on truly child-centred lines.

Although the Glasgow Herald in 1835 commented that in infant schools

all is joyous activity - only pictures and objects are in use, and one-third of their time is spent in amusements in the playground,³⁵

such passages tend to give a false impression as to the overall acceptance of the child-centred approach in the nineteenth century. In fact, most infant classes, up to the beginning of the twentieth century, were still fitted with fixed tiered galleries, in which large numbers

33. Baker, C., 'Infants' Schools', in Central Society of Education, Third Publication, 1839, p.7.

34. See Chapter III, p.85.

35. Cited in Whitbread, N., The Evolution of the Nursery-Infant School, 1972, p.25.

of children were seated in rigid rows. One example of the excessively large numbers of children in infant classes is provided by an unpublished architect's certificate for Swansea's Hafod Copperworks School in 1905. This indicates that although the school consisted of a large infants hall and six classrooms, each class contained forty-four to sixty pupils while the hall itself was used for one infants class of no less than ninety children.³⁶

The range of methods and subjects taught in infant schools in the 1840s is evident from the 'Special Questions on Infant Schools' issued by the Committee of Council on Education in August 1840.³⁷ These indicate that apart from reading, singing, drawing, gallery lessons and physical exercises, there was by 1840 a widespread acceptance that natural objects were suitable teaching material in infant schools. Subsequent reports by Fletcher³⁸ and Bowstead³⁹ also highlight the support that infant schools were attracting, and, in Fletcher's case, the importance that was being attached to the improved methods of infant teacher training as given by the Home and Colonial School Society.

As Rusk points out,⁴⁰ the Minute of 29th April 1854 was a landmark in the development of British infant education. Under this Minute training colleges, if they were to receive the new certification grants, had to provide a separate infant training course of at least one year's duration. The Minute of 24th April 1857 also established Queen's scholarships of the second class to those entering infant training

36. See Public Record Office Education File, ED21/22718.

37. Minutes of the Committee of Council on Education, 1839-1840, pp.43-45.

38. *Ibid.*, 1845, Volume II, pp.212-237. In this report Fletcher also drew attention to the increasing tendency on financial grounds for female teachers to be preferred to male infant teachers.

39. *Ibid.*, 1853-1854, pp.1088-1089.

40. Rusk, R. R., A History of Infant Education, 1933, pp.173-175.

departments.

The significant progress towards acceptance of infant education as an important stage in early childhood education as distinct from elementary education was, however, effectively restricted by the 1862 Revised Code,⁴¹ which instituted a system of Standards corresponding to the child's school life from the infant school to twelve years of age. Although the Newcastle Commission had favourably commented on infant schools,⁴² its emphasis on securing sound and cheap elementary instruction and certain standards in the three Rs through payment by results, had repercussions on infant schools. The Newcastle Commission had proposed that pupils under seven years of age should be exempt from the payment by results clause and free from examination, with grants for the under-sevens being assessed on the basis of the average number of children in daily attendance at a school.⁴³ However, under the Revised Code of 1861 a narrower view was taken and it was decided that children aged three to seven years were to be individually examined.⁴⁴ Although through late pressure the amended Revised Code

41. For details of the effects of the Revised Code on elementary schools and the differing interpretations as to whether it improved instruction in basic subjects, restricted the curriculum, or was to the benefit of the average child, see Adamson, J. W., English Education 1789-1902, 1930, pp.228-233; Smith F., A History of English Elementary Education 1760-1902, 1931, pp.249-276; Hollingworth, B. C., 'Developments in English Teaching in Elementary Schools under the Revised Code, 1862-1888', Journal of Educational Administration and History, June 1972; Sargant, W. L., 'On the Progress of Elementary Education', Journal of the Royal Statistical Society, 1867, p.113. Comment on Lowe's contribution is to be found in Johnson, B. J., 'The development of English education, 1856-1882, with special reference to the work of Robert Lowe', M.Ed., University of Durham, 1956; Sylvester, D. W., Robert Lowe and Education, 1974. For an account of the Code's effects on teacher training see Rich, R. W., The Training of Teachers in England and Wales during the Nineteenth Century, 1933, pp.181-194. Contemporary evidence of the classroom implications of the Code is contained in Sandford, F., (ed.), Reports on Elementary Schools 1852-1882 by Matthew Arnold, 1889.
42. Report of Commissioners appointed to Inquire into the State of Popular Education in England, 1861, Volume I, pp.31-32.
43. Ibid., p.330.
44. Minute of the Committee of the Privy Council on Education establishing a Revised Code of Regulations, ordered to be printed 6th August 1861, Articles 43 and 44.

of 1862 changed this regulation⁴⁵ and allowed children under six years of age in schools where special provision was made for infant education to be exempt from individual examinations, damage was done to the separate identity of the infant school through the Code's insistence on examinations at six years of age.⁴⁶

As a result of the Revised Code there was a tendency for infant teachers to concentrate on six-year-olds in the infant school to prepare them for grant-earning examinations. Consequently, the child-centred tradition that had been fostered in the infant schools was challenged by examination pressures and financial considerations.⁴⁷ Nevertheless, the infant schools were more free to develop than schools for older pupils, which were conditioned by the requirements of the Code's Standard examinations. Although Whitbread discusses the Revised Code as a serious setback to the expansion and development of infant education,⁴⁸ it is clear that recognition of the importance of infant schooling was largely maintained. In 1871, for example, the Committee appointed by the first London School Board outlined a new system of school organisation which included infant schools as part of the provision for pupils under ten years of age.⁴⁹

A new Code issued on 7th February 1871 similarly discussed infant education and reaffirmed the upper age-limit at seven years of age.⁵⁰

45. See Article 43.

46. The infant school covered children up to seven years of age. Therefore the Code's regulation that six-year-olds should be examined forced infant schools to become part of the payment by results system.

47. See Whitbread, N., op.cit., p.27.

48. Ibid., p.26.

49. Minutes of School Board for London, Volume I, pp.155-161.

50. Rusk, R. R., op.cit., p.184.

Gradual changes in the system of payment by results continued. Modifications in 1882⁵¹ further assisted infant schools. As a result, as Smith points out,⁵² 'kindergarten methods, practical occupations, singing, dancing and play were coming into greater prominence'. The eventual removal of payment by results in 1897 assisted in the redevelopment of infant schools on child-centred lines.

Although, as this thesis has shown, British Pestalozzianism had developed from the 1820s mainly as a consequence of the influence of the Mayos and the Home and Colonial School Society, there appears a brief inert period during which time Pestalozzianism failed to exert any impact on developments in child-centred education. This period of inactivity, which is apparent in the early 1850s, was brought to an end by the appearance of Herbert Spencer's Education: Intellectual, Moral and Physical, published in 1861.⁵³

The four essays which constitute the book secured Spencer an influential position as one of the leading educational thinkers of his time.⁵⁴ Birchenough comments⁵⁵ on how the book inspired the work of the Code Reform Association and stimulated the demand for changes in the standards and curriculum imposed by the Education Department. It called for realism and science in education, and challenged the rote learning and formalism which Spencer believed was at variance with the

51. See Report of Committee of Council on Education, 1881-1882, pp.111-144.

52. Smith, F., op.cit., p.318.

53. This work consisted of four separate essays published between 1854 and 1859. See Birchenough, C., History of Elementary Education in England and Wales From 1800 to the Present Day, 1938, p.305.

54. For a revealing insight into Spencer's life and work see The Herbert Spencer Papers, deposited by the Athenaeum, University of London Library, MS.791.

55. Birchenough, C., op.cit., p.305.

laws of Nature. Cavenagh points out that

with the exception of Locke's Thoughts,
it is the most widely read treatise on
education that England has produced.⁵⁶

Within twenty years of its publication it had been translated into numerous languages and was, in Cavenagh's opinion, influencing educational thought from America to the Far East. Moreover, Spencer's writings were a condemnation of existing British education and an indication of the strength of his belief in the need for considerable educational reforms. Barnard describes them as representing the 'progressive, individualistic, utilitarian, mid-Victorian point of view which was highly critical of contemporary educational methods'.⁵⁷

Spencer's rise to prominence also signalled the rebirth of a new generation of British Pestalozzianism, which was characterized more by popular acceptance of Pestalozzian theory than by individual attempts at innovations in educational practice. In this respect, Spencer can be seen as instilling a new vitality into Pestalozzian doctrine. In his essay Intellectual Education, he specifically refers to Pestalozzi and to his theory that education must conform with the natural process of mental evolution.⁵⁸ In supporting Pestalozzi's views, Spencer maintained that there was a certain sequence in which the child's faculties spontaneously develop, and a certain kind of knowledge which each requires during that development.⁵⁹ He therefore argued that there was a need to ascertain this sequence and to supply the requisite

56. Cavenagh, F. A., (ed.), Herbert Spencer on Education, 1932, p.xx.

57. Barnard, H. C., A History of English Education From 1760, 1971, p.142.

58. Spencer, H., Education: Intellectual, Moral and Physical, 1861, (1878 edition) p.66. For an account of Pestalozzi's belief in this natural process see Pestalozzi, J. H., Enquiries Concerning the Course of Nature, 1797.

59. Spencer, H., op.cit., p.66.

knowledge. Consequently, he focused attention on to the importance of the psychological and sequential development of the child.

Spencer used psychology as a means to highlight the fundamental value of spontaneous education in the early years of childhood. His assertion that

a child's restless observation, instead of being ignored or checked, should be diligently ministered to, and made as accurate and complete as possible,⁶⁰

emphasized the value of psychology, not merely as a deductive form leading on to mere theorising, but as a science whose induction stemmed from Nature itself. Drawing on this idea, Spencer argued that in all instruction

nearly every subject dealt with is arranged in abnormal order: definitions and rules and principles being put first, instead of being disclosed, as they are in the order of nature, through the study of cases.⁶¹

His criticism was, therefore, indirectly aimed at the lack of effort that had previously been directed to a study of the best methods of applying knowledge. With some relief he points out:

after long ages of blindness, men are at last seeing that the spontaneous activity of the observing faculties in children, has a meaning and a use.⁶²

In this sense, Spencer foresaw the need to reorganize learning situations, so as to facilitate the educational needs of the individual child. In viewing happiness as a legitimate aim, he considered that in such a learning environment the acquisition of knowledge would become a pleasurable experience to the child.

60. Ibid., p.29.

61. Ibid., p.30.

62. Ibid., p.63.

Spencer's views have an affinity with Pestalozzi's. Indeed, Spencer continued to advance and support Pestalozzian doctrine with the recommendation of seven principles that he considered should be the subject of further research.⁶³ Emphasis was placed on education proceeding from the simple to the complex,⁶⁴ from the concrete to the abstract,⁶⁵ in effect, from vague to definite ideas. Encouragement was given to the process of self-development, with children being led to make their own investigations and draw their own inferences.⁶⁶ Through such methods. Spencer implied that discovery learning should become a prominent feature in child-centred education.

In his essay on Intellectual Education, while frequently remarking on the desirability of Pestalozzi's theories and principles, Spencer contrasted them with the systems and practices used by former British Pestalozzians to give practical expression to Pestalozzi's ideas. He remarks⁶⁷ that 'the Pestalozzian system seems scarcely to have fulfilled the promise of its theory'. This he attributed to the contemporary neglect and ignorance of psychology. As Spencer points out,

Knowing so little as we yet do of psychology, and ignorant as our teachers are of that little, what chance has a system which requires psychology for its basis?⁶⁸

Nevertheless, this did not inhibit Spencer in his criticism of

63. Ibid., pp.73-80.

64. Ibid., p.73.

65. Ibid., p.74.

66. Ibid., p.77.

67. Ibid., p.69.

68. Ibid., p.70.

Pestalozzian practice. He believed Pestalozzi himself was guilty of wrongly applying his ideas and, in particular, drew attention to the formalism in Pestalozzi's nursery-method and his teaching of language.⁶⁹ Object lessons, as conducted in contemporary schools, were also considered by Spencer to be wholly at variance with the method of Nature.⁷⁰ The concentration on verbalism and teacher-direction was seen as restricting sense-training and the development of individual powers of observation. Despite seeing them as an ill-conducted system, he believed that they were well conceived.⁷¹ Indeed, he viewed the object lesson as an important means of advancing a knowledge of science, which he considered a priority in education.⁷² Therefore object lessons should, he believed, be changed in style and extended in the range of objects covered. Above all, he argued that they

should not cease with early childhood;
but should be so kept up during youth,
as insensibly to merge into the investi-
gations of the naturalist and the man of
science.⁷³

The emphasis on Nature throughout Spencer's writings reiterated a belief in the importance of conducting the learning process through interesting and pleasurable sensations. Associated with this belief was a strong conviction as to the value of freedom in the learning

69. Ibid., p.71. Spencer's awareness of Pestalozzi's own practices stemmed from his reading of the critical accounts given in Biber, E., Henry Pestalozzi and His Plan of Education, 1831.

70. Spencer, H., op.cit., p.83.

71. Ibid., p.63.

72. The emphasis on science forms the basis of Spencer's essay, What Knowledge is of Most Worth? constituting Chapter I of his book Education.

73. Spencer, H., op.cit., p.86.

environment. As Grabar points out,⁷⁴ Spencer's work, in essence, means that the education of the young must depend upon the systematic observation of the facts of human behaviour and the rationalization of that observation into a system. The expression of such views, partly influenced by the ideas of Pestalozzi, increased the momentum towards a reappraisal of early childhood education and more enlightened attitudes to elementary education.

In challenging the rigidity and formalism of contemporary education and by highlighting Pestalozzi's ideas, Spencer provoked other educational writers into reassessing their own beliefs on the fundamental principles of education. Consequently, Spencer made an important contribution to developing a new interest in Pestalozzianism.

At this time there appeared several new works emphasizing the application of Pestalozzi's ideas. Henry de Laspee, for example, gave a detailed account of the application of Pestalozzi's principles to physical education.⁷⁵ The work consisted of more than two thousand illustrations on the physical structure of the human body, which, de Laspee asserted, was a methodical course, fully worked out from its elements to its results. He considered the Pestalozzian method to be most useful primarily in the culture of the faculties and senses, and saw his own work as producing results answering to the process of nature.⁷⁶ Similarly, William Parker's 1866 publication emphasized the importance of the microscope and the value of rudimentary instruction in science teaching in Pestalozzian schools.⁷⁷ This highlighted an

74. Grabar, T. H., "'Scientific' Education and Richard Feverel", Victorian Studies, Volume XIV, No. 2, 1970, p.130.

75. Laspee, H. de, Calisthenics, or The Elements of Bodily Culture on Pestalozzian Principles, 1856.

76. Ibid., p.III.

77. Parker, W., The second part of microscopical science under six series of subjects, 1866.

interest in Pestalozzian schools for science-based education. Such works, however, were not as influential as the more general works on education published at this time.

One of the most significant writers on education during these years was Joseph Payne. In his published lecture entitled The Curriculum of Modern Education, 1866, Payne describes his own views on Spencer's essays on education but, strikingly, fails to discuss their Pestalozzian content. It is clear from Payne's work that, despite his life-long interest and involvement in teaching, he was comparatively unfamiliar with Pestalozzi's work. The appearance of Spencer's works, however, soon changed this. In his treatise on Educational Methods, 1870, Payne indicates an increasing interest in Pestalozzi.⁷⁸ This was quickly followed by two further works which highlight his efforts to arrive at a suitable format for science teaching, with a special emphasis on the importance of observation, as advocated by Pestalozzi.⁷⁹ By 1875 Payne had become conversant with Pestalozzi and so enthusiastic for his work that he decided to publish his own study of the Swiss educator.⁸⁰

While Spencer's appreciation of Pestalozzi's work rested largely on Biber's account, so Payne's was largely indebted to Raumer's work entitled The Life and System of Pestalozzi which had been translated

78. Payne, J., Educational Methods, 1870, in Lectures on the Science and Art of Education with other lectures and essays, with an introduction by R. H. Quick, 1880, p.73.ff.

79. See Youmans, E. A., Essay on the Culture of the Observing Powers of Children, edited and extended by J. Payne, 1872, and his own True Foundation of Science Teaching, 1873.

80. Payne, J., Pestalozzi. The Influence of His Principles and Practice on Elementary Education. A lecture delivered at the College of Preceptors, 20th February 1875. See also Payne, J. F., (ed.), Lectures on the History of Education, 1892.

from the German by J. Tilleard. Published in 1855 and used by Payne as a continual source of reference on Pestalozzi, the work was, like Biber's, of considerable importance in influencing a rather confused and misguided appreciation of Pestalozzi's views and methods. Nevertheless, the work of Spencer and Payne led their British readers to consider and reappraise the ideas that Pestalozzi had evolved some seventy years earlier. This reassessment in Britain of Pestalozzi's work owed little, however, to the elements of Romanticism that had appealed to many of those who adopted Continental methods in the first half of the nineteenth century. The renewed enthusiasm for Pestalozzian ideas initiated after 1860 was more an expression of scientific interest in the value of Pestalozzi's emphasis on sequential development, observation and intuition. As such, British Pestalozzianism entered a new phase; its practical viability to a large extent had already been absorbed into the then classroom practice, but now its intellectual basis emerged as a potentially new-found science for child-centred education.

Towards the close of the nineteenth century, British interest in Pestalozzi was maintained by the publication of two further works, and by celebrations in 1896 to commemorate the hundred and fiftieth anniversary of Pestalozzi's birth. In 1890 the Reverend R. H. Quick, a close associate of Payne at the College of Preceptors, produced a new edition of Essays on Educational Reformers.⁸¹ This work again emphasized Pestalozzi's contribution, but unlike the submissions of Spencer and Payne, Quick supported a conviction that Pestalozzi was not only a great thinker, but also a skilled practitioner.⁸² While Spencer and

81. This work was first published in 1868 and gave detailed accounts on the ideas of both Pestalozzi and Spencer.

82. Quick, R. H., Essays on Educational Reformers, 1890, p.312.

Payne had been influenced by the accounts of Pestalozzi by Biber and Raumer respectively, so Quick was in debt to the more analytical criticism and conclusions drawn by Roger de Guimps in his Life of Pestalozzi. Unlike earlier accounts, de Guimps relied on actual documents and manuscripts rather than on personal opinions and memories of Pestalozzi's contemporaries. As a result, Quick's account is less inclined to denounce the methods used to practise Pestalozzian ideas.

The reliance of English educational writers on second-hand accounts of Pestalozzi's work influenced Lucy E. Holland and Francis C. Turner to begin a translation of Pestalozzi's How Gertrude Teaches Her Children, the first edition of which was published in 1894. Edited by another with Pestalozzian sympathies, Ebenezer Cooke, the work attempted to offer the English reader a first-hand account of Pestalozzi's writings and thoughts. In this way the translators hoped to avoid the destructive statements on Pestalozzi which had previously characterized educational writings, and to clarify Pestalozzi's actual theory and the depth of his psychology. This work, apart from an early translation of Leonard and Gertrude in the 1820s⁸³ and Pestalozzi's Letters to Greaves in 1827, was the only British attempt to translate Pestalozzi's writings into English in the nineteenth century. Its late arrival is evidence of the slowness with which British Pestalozzians were able to provide a satisfactory translation of Pestalozzi's works. This is largely accounted for by the confusing and often difficult style of Pestalozzi's writings. However, further editions of Holland and Turner's work in 1900 and 1904 provide some indication as to the popularity and interest in

83. Leonard and Gertrude, or A Book for the People. Translated anonymously. 2 Volumes. London, 1825.

Pestalozzi and his ideals in Britain, towards the close of the nineteenth century.

On the 7th October 1896 a memorial conference to celebrate Pestalozzi's birth was held at the College of Preceptors.⁸⁴ The success of this conference again demonstrates the degree of interest in Pestalozzi at this time. Evidence suggests that despite bad weather, the rooms were crowded to their utmost capacity and the lectures were received with manifest appreciation.⁸⁵ Speakers included Sir Joshua Fitch,⁸⁶ John Russell,⁸⁷ Ebenezer Cooke,⁸⁸ Michael Sadler,⁸⁹ Miss E. P. Hughes⁹⁰ and Mrs. S. Bryant.⁹¹ The lectures, apart from giving an historical background, highlight the significance of Pestalozzi in contributing to child-centred education.

As a result of the memorial conference a Pestalozzi Society was formed in 1897.⁹² Michael Sadler was president of the new society and

84. Joseph Payne had been closely involved with the College, becoming in 1873 its first Professor of Education. See Hughes, M. E., 'The Training of Teachers', in Roberts, R. D., (ed.), Education in the Nineteenth Century, 1901, p.179.
85. See The Educational Times and Journal of the College of Preceptors, 1st November 1896, p.492. An account of the conference is given on pp.492-497.
86. Fitch's lecture on Pestalozzi is contained in Fitch, J. G., Educational Aims and Methods, 1900, pp.358-364.
87. Russell was responsible for the translation in 1890 of de Guimps' Life of Pestalozzi.
88. See pp.103-104 for details of Cooke's involvement in art education.
89. Sadler from the Education Department and later Professor of Education at the University of Manchester, had been invited to attend in view of the interest aroused by his lecture on Pestalozzi at the Cambridge summer meeting in 1896. See The Educational Times, op.cit., 1st October 1896, p.455.
90. Miss Hughes was the first principal of the Cambridge Training College founded in 1885.
91. Miss Bryant, D.Sc., was a member of the council of the College of Preceptors.
92. Child Life, Volume I, 1899, p.56.

Ebenezer Cooke was its secretary.⁹³ The few details that are available on the Society indicate that its object was to promote the study of Pestalozzi's writings and a better understanding of his child-centred theories.⁹⁴ Further recognition of Pestalozzi's efforts was given on Wednesday, 4th January 1899, with an evening meeting at the College of Preceptors to commemorate the start of Pestalozzi's Stans school.⁹⁵ The meeting was very well attended with the main hall being 'filled with teachers and others including members from the Pestalozzi Society'.⁹⁶

The conferences and public meetings, together with the publications mentioned above, helped to sustain enthusiasm for Pestalozzi's work into the early years of the twentieth century.⁹⁷ The Pestalozzian emphasis on child development assisted in influencing a gradual change in nineteenth century infant schools towards a broader, more child-centred education. Although such progress was still largely to be achieved in elementary schools,⁹⁸ change, albeit slowly, was taking place. The increasing realisation of the importance of the early years of childhood, and of the need for educationally more stimulating classroom environments, in turn influenced teachers' approach to children

93. The Times, 5th January 1899, p.8.

94. Ibid.

95. The Times, 4th January 1899, pp.5 and 7. See also 5th January 1899, p.8.

96. Ibid., 5th January 1899, p.8. One such member was Lady Isabel Margesson who was to become honorary secretary of the Sesame Club.

97. Note the works of Hayward, 1904; Green, 1905-1913; Holman, 1908; and Jago's translation of Compayré's Pestalozzi in 1907.

98. For an insight into the conditions and practices in nineteenth century elementary schools refer to Burnett, J. (ed.), Destiny Obscure: Autobiographies of Childhood, Education and Family from the 1820s to the 1920s, 1982.

and consequently the role of the teacher in the classroom. The child-centred spirit of Pestalozzian education was, at long last, achieving fruition in the emergence and acceptance of developmentalists who held, in essence, favourable attitudes towards child-centred education.

2. The Female Teacher

In his views on education, Pestalozzi attached special significance to the role of the woman and mother. Throughout his writings there is a deep reverence for their importance in early childhood education. His popular novel Leonard and Gertrude published in 1781 portrays Gertrude as the ideal mother and woman. The book demonstrates Pestalozzi's belief in an 'organic order',¹ and his emphasis on the desirability for mothers to establish close relationships with their young children to support their emotional and educational needs. In so doing, Pestalozzi highlighted the supreme influence of the mother and woman in early childhood education, and focused attention onto the concept of an ideal woman who could be entrusted with the education of young children.

Pestalozzi was aware that in many homes the emotional and educational relationship between mother and child was inadequate. In such circumstances, he realised, the school could play an important supportive role. Although he viewed schools in some respects as a necessary evil imposing on the traditional inner circle of family life, he saw their potential as a means to provide an acceptable alternative to education at home. He was aware, however, that if his concept of the ideal mother was ever to materialize, there would need to be greater emphasis

1. This concept forms an important part of his work The Evening Hours of a Hermit, 1780. See Green, J. A., and Collie, F. E., Pestalozzi's Educational Writings, 1912, pp.15-22.

on the education of girls and improved methods of teaching and training. The development of these in Britain provides an interesting account alongside the activities of British Pestalozzians mainly associated with the Home and Colonial School Society.

Although, as Tomaselli indicates,² Fénelon's Traité de l'Education des Filles in 1687 was the point of departure for most of the writings on the education of women during the Enlightenment, it was the writings of Mary Wollstonecraft in the 1790s which made the education of girls and women an important issue in Britain.³ Her book A Vindication of the Rights of Women, published in 1792, demonstrates the Enlightenment emphasis on reason, the environment and equality of rights.⁴ She was also aware of the need to encourage observation in children and, as her biographer points out,⁵ her views on infant education resembled those advanced by Pestalozzi.

Banks indicates⁶ that the Enlightenment tradition was joined in the drive for change in the education of girls by an evangelical

2. Tomaselli, S., 'The Enlightenment Debate on Women', History Workshop Journal, 20, 1985, p.123.
3. An overall assessment of female education is provided by Percival, A. C., The English Miss Today and Yesterday, 1939. See also Zimmern, A., The Renaissance of Girls' Education in England: A Record of Fifty Years' Progress, 1898; Burstyn, J. N., 'Women's Education in England during the Nineteenth Century: A Review of the Literature', History of Education, Volume 6, No. 1, 1977, pp.11-19.
4. However, as Kramnick states in the Pelican edition of Wollstonecraft, M., A Vindication of the Rights of Women, 1975, p.52, 'much of the Vindication is a refutation of Rousseau's theories about women, and clearly, to Wollstonecraft, Rousseau's acceptance of traditional attitudes about female inferiority is a more painful betrayal of liberalism than the platitudinous fatherly preachings of a Gregory or a Fordyce'.
5. Nixon, E., Mary Wollstonecraft, Her Life and Times, 1971, p.93.
6. Banks, O., Faces of Feminism, 1981, pp.7, 40.

Christian pressure in the late eighteenth and early nineteenth centuries towards social reforms. Contributions by the Unitarians, a group which included Wollstonecraft,⁷ by the Saint-Simonian missionaries who were very active in London in the 1830s,⁸ and by Owenites in the 1830s and 1840s who voiced their views on women's rights,⁹ all assisted the cause of feminine social and educational reform.¹⁰

Influenced in part by demographic pressures,¹¹ the plight of unmarried middle-class ladies in finding suitable careers formed the basis on which developments in British female education were to take place. In 1843 the Governesses' Benevolent Institution was established to provide a registry for governesses seeking employment. In its attempt to gain respect for governesses and improve their social image, the Institution recognised the need for certain educational standards, and so on the 1st May 1848 it opened Queen's College in Harley

7. Ibid., pp.30-31. See also Holt, R. V., The Unitarian Contribution to Social Progress in England, 1938.
8. For further details see Pankhurst, R. K. P., The Saint Simonians: Mill and Carlyle, 1957; Cohn, N., 'The Saint-Simonian Portent', Twentieth Century, Volume CLII, 1952, pp.330-340; Pankhurst, R. K. P., 'Saint-Simonism in England', Twentieth Century, Volume CLII, 1952, pp.499-512.
9. As Harrison, J. F. C., Robert Owen and the Owenites in Britain and America, 1969, p.55 points out, Owen's advocacy of a communal system as an alternative to the individual family was seen as a means of freeing women from the ties of the traditional home.
10. The background to feminism in these movements is discussed in Taylor, B., Eve and the New Jerusalem: Socialism and Feminism in the Nineteenth Century, 1983.
11. Sanderson, M., Education, Economic Change and Society in England 1780-1870, 1983, p.54 shows that the proportion of women in the population was steadily rising from 1,036 females per 1,000 males in 1821 to 1,054 per 1,000 in 1871, which forced many detached single women to consider financial security outside marriage and to think in terms of earning their own living. For further discussion on the reasons for the increased number of women in need of employment see Banks, J. A. and O., Feminism and Family Planning in Victorian England, 1964, pp.27-30.

Street.¹²

The priority given to establishing examinations resulted in the College's resolution to compose a committee of gentlemen who could examine candidates in every branch of knowledge.¹³ The subsequently-formed committee made up of Professors from King's College, including Frederick Maurice¹⁴ and Charles Kingsley, realised that in order to be able to fit governesses for examinations, they must first provide them with an education¹⁵ which, they concluded, should be made available to all ladies attending the College. In view of the fact that the College was merely a form of girls' secondary school, catering for other young ladies apart from intending governesses, this was a remarkable development which, Gordon indicates,¹⁶ had implications for female education as a whole.

The College proved an immediate success. Initially it offered classes to young ladies over twelve years of age at a charge of £1 11s. 6d. for those attending twice a week, and £1 1s. for those

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12. For accounts of the history and activities of the College, see Gordon, S. C., 'Studies at Queen's College, Harley Street, 1848-1868', British Journal of Educational Studies, III, No. 2, May 1955, pp.144-154; Grylls, R. G., Queen's College, 1848-1948, 1948; Kaye, E., A History of Queen's College, London, 1848-1972, 1972. Contemporary details are provided in 'Queen's College, London', The Quarterly Review, 86, 1850, pp.364-383; Maurice, F. D., 'Queen's College, London; its Objects and Method', in Maurice, F.D., Introductory Lectures Delivered at Queen's College, London, 1849.
13. Queen's College, its Origin and Progress, 1849, p.5 cited in The Quarterly Review, op.cit., p.364.
14. Maurice was to play a significant part in the development of Queen's College. Kaye, E., op.cit., pp.25-26 indicates that Maurice was an admirer of Pestalozzi. His enthusiasm for Pestalozzi's work is seen by Kaye as stemming from his sister Mary's visit to Cheam School to study the Pestalozzian method with Miss Mayo.
15. Maurice, F. D., Introductory Lectures, op.cit., p.4.
16. Gordon, S. C., op.cit., p.145.

meeting only once.¹⁷ By 1850 two hundred and fifty ladies were attending, and a preparatory class for those over nine years of age had been formed.¹⁸ The subjects studied at the College included the three Rs, drawing, geography, history, Latin, natural history and vocal music.¹⁹

Within one year of the founding of Queen's College another female college, namely Bedford College, London, had been established in 1849.²⁰ It was a non-denominational college and, unlike Queen's, had both men and women involved in its management. Although both colleges were initially just forms of secondary schools, Neff describes how they manifested a new consciousness of the importance of intellectual training for women.²¹ Further developments such as the establishing of the North London Collegiate School in 1850 and Cheltenham Ladies' College in 1853, also assisted in securing a higher standard for women teachers.²²

Pestalozzian involvement in these developments is rather patchy. Nevertheless, some influence is apparent. Apart from the impact of Miss Mayo's writings in gaining publicity for female involvement in

17. The Quarterly Review, op.cit., p.365.

18. Ibid.

19. Gordon, S. C., op.cit., p.146; Kaye, E., op.cit., p.44.

20. For details of Bedford College see Tuke, M. J., A History of Bedford College for Women, 1849-1937, 1939.

21. Neff, W. F., Victorian Working Women: An Historical Account and Literary Study of Women in British Industries and Professions, 1832-1850, 1929, (1966 edition), p.177.

22. See Hughes, E. P., 'The Training of Teachers' in Roberts, R. D., (ed.), Education in the Nineteenth Century, 1901, p.179.

teacher training,²³ it is clear, for example, that in later years a Pestalozzian contribution was made to Queen's College.

As the College increased its female staff and introduced a specific method of teaching, so it looked for already-trained women teachers to fill the new lecturing positions. In this respect, as Gordon points out,²⁴ it secured the services of a number of female teachers trained at the Home and Colonial School Society. The Society's teachers were singled out because they had benefited from attending the Society's special training course for female teachers destined for higher-grade schools.²⁵ Also, by 1860, Queen's College had developed an experimental preparatory class for girls over six years of age, which was specifically organized on Pestalozzian lines.²⁶

In the development and improvement of female education and teaching, two particular teachers influenced by Pestalozzian methods made an impression. Firstly, Frances Mary Buss²⁷ was responsible for the establishing and success of the North London Collegiate School. Miss Buss was greatly influenced by her mother who had attended a short training course at the Home and Colonial School Society in the early

23. Female teachers had, of course, been accepted for training at the National and British and Foreign School Society. For further details on female applications to the latter see Bartle, G. F., 'Early Applications by Women Candidates to the Borough Road Normal College', History of Education Society Bulletin, No. 18, Autumn 1976, pp.35-41.

24. Gordon, S. C., op.cit., p.153.

25. Refer to Chapter IV, pp.152-153.

26. Gordon, S. C., op.cit., p.153. As Kaye, E., op.cit., p.111 indicates, a kindergarten class was also added at this time and organized by Rosalind Hosking who ran it according to Pestalozzi's ideas.

27. Miss Buss was to become the first President of the Association of Head Mistresses in 1874. For details of her contribution to education see Ridley, A. E., Frances Mary Buss and her work for Education, 1895.

1840s. In an advertisement for her own school Mrs. Buss emphasized that the system of education pursued was based upon that of Pestalozzi.²⁸ Indeed, as Kamm indicates, Mrs. Buss imbued her daughter with an admiration of the theories of Pestalozzi.²⁹

Miss Buss received relatively little teacher training prior to the establishing of her Collegiate School. She was, however, one of the first to attend the series of evening lectures for existing governesses organized in 1848 by Queen's College.³⁰ The Collegiate School offered a secondary education to middle class girls. The curriculum was designed on broad lines including the study of natural philosophy and other branches of science.³¹ Emphasis was placed, however, on religious instruction and scripture. The aim of the school was to educate the whole person, stressing the development of each girl as an individual.³² Miss Buss also appreciated the importance of training for those to become teachers in secondary schools and, therefore, arranged courses for her students at the Home and Colonial School Society.³³

Although the Collegiate School did on occasions take boarders, the school was pre-eminently a day-school. Indeed, Miss Buss in the

28. See North London Collegiate School Archives cited in Kamm, J., How Different From Us: A Biography of Miss Buss and Miss Beale, 1958, p.19.

29. Ibid.

30. Kaye, E., op.cit., p.49.

31. Anderson, K., 'Frances Mary Buss, the Founder as Headmistress 1850-1894', in The North London Collegiate School 1850-1950: Essays in Honour of the Centenary of the Frances Mary Buss Foundation, 1950, p.31.

32. Ibid.

33. Childs, E. M., 'Reminiscences of the School', in ibid., p.55.

Pestalozzian tradition placed special importance on the value of home life especially in the upbringing of girls,³⁴ advising mothers that girls should only be sent to boarding school when it was unavoidable.³⁵ The importance of Miss Buss and the Collegiate School rests on their success in entering girls for public examinations. In this way the school assisted in the opening up of local school examinations to girls in the late 1860s, which in turn, alongside improvements in girls' secondary education, helped in solving the shortage of teachers for middle class infant schools.³⁶

The second teacher influenced by Pestalozzian methods who made a valuable contribution to the advancement of women's education was Anne Jemima Clough. She briefly attended a training course at Borough Road but was unhappy with the training and the unruliness of the children.³⁷ In 1849 she commenced her training with the Home and Colonial School Society. She was aware that there was a stronger religious emphasis in the training at the Society than at Borough Road. She considered that the Borough Road teachers had more 'mechanical knowledge' of teaching but that the Society's teachers tended to understand to a greater extent the learning process which allowed children attending their lessons to acquire a greater love for information.³⁸

On completion of her training course Anne Clough established a school in Ambleside. In 1862 she moved to London and began agitating

34. Sanderson, M., op.cit., p.56.

35. Kamm, J., op.cit. p.44.

36. Even in 1861 it was considered that the numbers of teachers being trained for infant schools in general was totally inadequate to meet the existing demand. See The Newcastle Commission, Volume I, 1861, p.166.

37. Clough, B. A., Memoir of Anne J. Clough, 1897, p.72.

38. Ibid., p.73.

for changes in the secondary education of girls.³⁹ In particular she aimed to extend the range of subjects available to girls by arranging specific lectures to be attended by senior pupils from local schools.⁴⁰ In 1866 she returned to her home town of Liverpool. Here her ideas were quickly appreciated and resulted in a successful lecture scheme operating between Liverpool, Manchester, Sheffield and Leeds.⁴¹ This led to the creation in 1867 of the North of England Council for the Promotion of the Higher Education of Women. Anne Clough acted as secretary to the Council which, by 1870, was responsible for organizing lectures in twenty-five towns in the North of England.⁴²

The Council's activities prompted, in 1868, the successful petitioning of Cambridge University to arrange a higher examination for women. Subsequent developments in university lectures for women in Cambridge assisted in the eventual formal opening of the Tripos examinations to women in 1881. Anne Clough was one of those at the forefront in the emergence of women's education in the University. Her move to Cambridge in 1871⁴³ to take responsibility for a house of resident female students marks the beginning of Newnham College, Cambridge.⁴⁴ Anne Clough and the North of England Council, therefore, played a significant role in the progress towards female entry into the Universities and to improvements in the higher education of women.

The efforts of Buss and Clough, alongside the significant

39. For details of Anne Clough's ideas on educational reform see McWilliams-Tullberg, R., Women at Cambridge, 1975, pp.51-52.
40. See letter Mrs Sidgwick to her son William, dated 5th November 1866 in the Sidgwick Papers, File 101/172, deposited in the Wren Library, Trinity College, Cambridge.
41. McWilliams-Tullberg, R., op.cit., p.51.
42. Ibid., p.53. Another important development was the founding in 1871 of the Women's Education Union which established the Girls' Public Day School Trust.
43. Clough, B. A., op.cit., p.103.
44. A college for girls had earlier been established at Hitchin in 1869 and as Girton College moved to Cambridge in 1874.

contribution made by Dorothea Beale⁴⁵ and Emily Davies,⁴⁶ both formerly trained at Queen's College, assisted the rapid progress in the education of female teachers from the 1860s. In this respect the Taunton Commission in 1864 proved an important landmark.⁴⁷ Marks points out⁴⁸ that it was the first occasion on which a government report explicitly distinguished between boys' and girls' education. In an interesting exchange of views between Emily Davies and Lord Lyttelton in the minutes of evidence,⁴⁹ it is clear that there was contemporary concern to establish a system of examinations for women generally, and not specifically for schoolmistresses. The subsequent Endowed Schools Act in 1869, by reforming grammar school endowments and reallocating funds to girls' education, helped to extend further educational opportunities for girls.

The Schools Inquiry Commission also gave support to the view that deficiencies in the intellectual standards of girls was a result of inferior education⁵⁰ and not, as was often believed, a consequence of the moral superiority of the female⁵¹ being balanced by a corresponding

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45. Principal of Cheltenham Ladies' College from 1858-1906. For details of her contribution to girls' education see Raikes, E., Dorothea Beale of Cheltenham, 1908.
46. Emily Davies, later to be principal of Girton College, Cambridge, was particularly active in the feminist struggle for higher education. For an insight into her views see Davies, E., The Higher Education of Women, 1866; Thoughts on Some Questions Relating to Women, 1860-1908, 1910.
47. For details on the impact of the Commission see Fletcher, S., Feminists and Bureaucrats, 1980.
48. Marks, P., 'Femininity in the Classroom' in Oakley, A., and Mitchell, J., (eds.), The Rights and Wrongs of Women, 1976, p.186.
49. Schools Inquiry Commission, Parliamentary Papers, Reports from Commissioners 1867-1868, Volume 13, Part 4, p.239.
50. See Digby, A., and Searby, P., Children, School and Society in Nineteenth Century England, 1981, p.49.
51. For further discussion on the superiority theme refer to Banks, O., Faces of Feminism, 1981, pp.85-102.

intellectual infirmity.⁵²

It is clear that British developments towards better education for girls in the nineteenth century faced considerable opposition.⁵³ The views expressed in the demands for improved female education were often worded so as to limit the extent of the criticism.⁵⁴ As McGuinn indicates,⁵⁵ Wollstonecraft had to base her pleas on the need to prepare women to become better wives and mothers. Similarly, Queen's College was also seen as a means of preparing future wives and mothers for a better performance of their traditional roles,⁵⁶ while John Ruskin in the conservative moralist tradition aimed to improve women's education in order to assist them to perform a supportive but subordinate role.⁵⁷ Indeed, by the 1840s an emphasis on the domestic virtues of women had 'blossomed into a cult of domesticity'⁵⁸ with a doctrine of separate

52. More, H., Strictures on the Modern System of Female Education, 1799, Volume II, p.26; Romanes, G. J., 'Mental Differences between Men and Women', Nineteenth Century, XXI, 1887, pp.655-659, cited in Digby, A., and Searby, P., op.cit., p.49.
53. See Burstyn, J. N., Victorian Education and the Ideal of Womanhood, 1980.
54. One of the few to recognise the shortcomings in other radicals' ideas on women was William Thompson, who attacked marriage, the bourgeois family, capitalism and women's domestic labour. These views appear in Appeal of one half of the Human Race, Women, against the pretensions of the other half, Men, to retain them in political and thence in Civil and Domestic Slavery, 1825. For further details see Taylor, B., op.cit., pp.22-24, and Rowbotham, S., Women, Resistance and Revolution, 1972, pp.47-50.
55. McGuinn, N., 'George Eliot and Mary Wollstonecraft', in Delamont, S., and Duffin, L., (eds.), The Nineteenth Century Woman, Her Cultural and Physical World, 1978, pp.189-190.
56. Peterson, M. J., 'The Victorian Governess: Status Incongruence in Family and Society', Victorian Studies, Volume XIV, No. 1, 1970, p.22.
57. Pedersen, J. S., 'Some Victorian Headmistresses: A Conservative Tradition of Social Reform', Victorian Studies, Volume XXIV, No. 4, 1981, p.464.
58. Banks, O., op.cit., p.85.

spheres that viewed the home as a sanctuary which was the woman's responsibility to preserve. This demonstrates the strength of contemporary attitudes towards the connection between femininity and the home, views which were to some extent consistent with Pestalozzi's emphasis on the mother-child relationship as the ideal learning situation.

The ideology of domesticity and the link between femininity and child care is seen by Purvis⁵⁹ as significant in assisting the entry of women into teaching. Although activists such as Dorothea Beale viewed teaching as a religious calling and a divine ministry,⁶⁰ others shared a belief that it was a 'natural' part of femininity and an acceptable feminine activity.⁶¹ In particular, stress was placed on the female's suitability for teaching younger children.

Through the gradual development of infant schools in the 1820s, early childhood education was given some relevance and consequently there was, in turn, a growing demand for qualified teachers. Although the first infant schools tended to be the domain of male teachers,⁶² female involvement was increasing. As was mentioned earlier,⁶³ the Home and Colonial School Society played a significant role in contributing to the development of training female teachers for infant schools.

59. Purvis, J., 'Women and Teaching in the Nineteenth Century', in Dale, R., Esland, G., Fergusson, R., and Macdonald, M., (eds.), Education and the State, Volume II, 1981, p.372.

60. Beale, D., Addresses to Teachers, 1909, p.12. Similar attitudes were also held by many Victorian girls' school headmistresses. See Pederson, J. S., op.cit., p.466.

61. See Butler, G., 'Education considered as a profession for women', in Butler, J., (ed.), Women's Work and Women's Culture, 1869, p.52.

62. For example Buchanan, Wilderspin and Goyder.

63. See Chapter IV.

Although the Society had been formed in 1836 to train both male and female teachers, it had by 1843 become an all-female institution.⁶⁴

By 1853 female participation in teaching was such that the Society was in competition with no less than seven other female training colleges,⁶⁵ which, by 1872, had increased to a total of twenty-two.⁶⁶ Again, such progress towards female teaching did not escape criticism. Indeed, as women continued to enter infant education in increasing numbers, there developed in some circles a feeling that qualifications arising out of specialized training were unnecessary attributes for successful infant teaching.

While Charles Mayo had remarked in the First Report of the Home and Colonial School Society in 1839 that no uneducated or undisciplined mind could supply the incessant care, watchful diligence or unwearied patience necessary to manage small children, the Reverend Muirhead Mitchell in 1854 continued to argue that

a healthy frame, a good voice, a kindly, firm disposition, a graceful air, a pleasing manner, tidiness of person and sound general sense,⁶⁷

were the only necessary qualifications for those entering infant teaching. The growth of such attitudes tended to weaken the prestige of infant teaching which continued to be viewed by many as a relatively unimportant period in a child's schooling. In so doing, the efforts of female

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64. Bartley, G. C. T., The Schools for the People, 1871, p.482.
65. Namely: Brighton, Cheltenham, Derby, Salisbury, Warrington, Whitelands and the combined college of York and Ripon.
66. As listed in Minutes of Committee of Council on Education, 1872. See Public Record Office, File ED17/39 (5309), p.290.
67. Cited in Lawrence, E., (ed.), Friedrich Froebel and English Education, 1952, p.39. For a further discussion on this see Roberts, A. F. B., 'The Development of Professionalism in the Early Stages of Education', in British Journal of Educational Studies, No. 3, October, 1976, pp.254-262.

teachers in infant schools were undermined.

Female teachers had, of course, been involved in dame schools and were active in the monitorial elementary schools. Nevertheless, in the elementary schools women teachers also faced opposition. In particular, it was thought undesirable for women to be responsible for the education of boys over nine years of age. In a letter⁶⁸ dated 9th January 1854, from Mr. Lingen of the Committee of Council to the Dean of Hereford, concerning education in rural districts, Lingen remarks on the fact that

so far as the Education of Boys is concerned, it requires much stronger evidence than any yet before my Lords to prove that a woman is in general fit to manage boys after their 9th year.

It is clear from the letter that the main area of contention concerned instruction in science-based subjects given by female teachers. Such areas of the curriculum as agricultural chemistry, geography or mathematics were strongly considered to be an encroachment on a male teacher's responsibility for educating young men in subjects which were directly linked to their future industrial occupations.

Similarly, female teachers were expected to take girls for lessons in domestic economy which included sewing, knitting and cooking.⁶⁹ As Ball points out,⁷⁰ domestic economy formed an important practical subject for girls in elementary schools. Many books were published on this subject in the 1850s, the most popular manual in use being W. B. Tegetmeier's A Manual of Domestic Economy which had been prepared under the direction of

68. Located at the Public Record Office, File ED 9/12, pp.311-312.

69. For a discussion on how a hidden curriculum operated to the detriment of girls see Digby, A., and Searby, P., op.cit., pp.46-47.

70. Ball, N., 'Practical Subjects in mid-Victorian Elementary Schools', History of Education, 1979, Volume 8, No. 2, pp.109-120.

the committee of the Home and Colonial School Society.⁷¹ First published in 1853, the manual was extensively employed as a textbook for students in the various training institutions.⁷² It had appeared in a fourth edition in 1858 and had reached a fourteenth edition by 1894.

In pursuance of specialized subjects for boys and girls the state therefore encouraged a sexual division of labour in the elementary school which was related to social class images. For female teachers in both infant and elementary schools, like their male colleagues, were invariably drawn from the working classes.⁷³ As Purvis remarks,⁷⁴ the paid female elementary and pupil teacher, recruited almost entirely amongst working class girls and teaching working class children, represents the typical female teacher of the nineteenth century. Despite the emergence of new female teacher training colleges, however, it was not until the last quarter of the nineteenth century that women eventually constituted the majority of elementary school teachers.⁷⁵

As a result of the incongruous social status of elementary school teaching and the working class backgrounds of those children attending elementary schools, few female middle class teachers entered or wished to become involved in elementary teaching. The progress seen in female secondary and higher education stemming from the developments at Queen's

71. Tegetmeier, W. B., A Manual of Domestic Economy, 1858, (fourth edition), title page.

72. Ibid., Notice to fourth edition.

73. Tropp, A., The School Teachers, 1957, pp.10-11.

74. Purvis, J., op.cit., p.365. For an account of the importance of pupil teachers see Illing, M. J., 'Pupil Teachers and the Emancipation of Women 1870-1905', M.Phil., University of London, 1978.

75. Widdowson, F., Going Up Into the Next Class: Women and Elementary Teacher Training, 1983, p.58.

College and the subsequently-formed girls' colleges and schools, had really only been directed towards girls from middle class backgrounds. Although Dorothea Beale, for example, was eager to extend female education, she too viewed these developments in girls' secondary education as only beneficial to middle class girls.⁷⁶

As elementary schools were seen as socially inappropriate for middle class young ladies, so more attention was focused on to their entry into paid employment as governesses.⁷⁷ The trend for the middle classes to increasingly employ governesses in the nineteenth century established the governess as an accepted part of Victorian life.⁷⁸ By 1851, it has been estimated, there were 25,000 governesses in England.⁷⁹ However, although developments as we have seen had been made at Queen's College from the 1850s, it was the Home and Colonial School Society which was at the forefront in the initial development of teacher training courses for private nursery governesses, which was later to become synonymous with the Froebelian movement towards kindergarten teaching.

The Society had been willing to accept nursery governesses since its formation in 1836,⁸⁰ but few showed any interest in such training. Nevertheless, it is apparent that by 1865 the Society was making a concerted attempt to establish a successful governess course. In the

76. Raikes, E., op.cit., p.327.

77. In mid-nineteenth century usage the term 'governess' is described by Peterson, M. J., op.cit., p.8 as referring either to women who taught in a school, such as a middle class nursery school, or in an employer's house, or women who lived in an employer's home and taught the children and served as companion to them. They are not to be confused with nursemaids who were of the servant class.

78. For contemporary journals on the Victorian governess see Neff, W. F., op.cit., pp.269-271.

79. Banks, J. A., and O., op.cit., p.31.

80. See Chapter IV, p.152 footnote 84. It is clear that a number had been in training at the Society by 1850. See The Times, 30th April 1850, p.6.

minutes of evidence given to the Schools Inquiry Commission in November 1865, Emily Davies describes the special training classes for governesses which had been 'recently' established by the Home and Colonial School Society.⁸¹

According to Miss Davies, the Society had made available accommodation for fourteen governesses. The course was designed mainly to instruct the students in the art of teaching. The subjects studied on the course were the three Rs, religious knowledge, spelling, grammar, history, geography, domestic economy, natural history, teaching and governing power. Additional subjects included French, German, music and drawing. The course was designed to last for six months or one year, depending on the educational standard of students on entry to the Society. A certificate was to be issued on completion of the training, based on continued observation of students' progress during the course.

It is evident in her report that Miss Davies praised the Society's initiative in responding to demands from school-mistresses for a higher class of governess.⁸² She had obviously studied in some depth the training system pursued at the Society. However, it is interesting to note here that she was relatively unfamiliar with other training establishments such as the courses for mistresses for the lower classes which existed at the Salisbury and Whitelands training schools.⁸³

The increased demand for trained governesses was also a reflection of the middle classes' realisation of the importance of educating their children, and their desire to establish their own form of early childhood education. The subsequent kindergarten movement, with its

81. Schools Inquiry Commission, Parliamentary Papers, Reports from Commissioners 1867-1868, Volume 13, Part 4, pp.238-239.

82. Ibid., p.238.

83. Ibid.

association with Froebelian methods, again demonstrates Pestalozzian influence and a link between the supporters of Froebel and Pestalozzi. The initial efforts of British Froebelian supporters culminated in the founding of the Manchester Froebel Society in 1873 and its London counterpart in 1874.⁸⁴ These Societies assisted in the promotion of the kindergarten system which obtained a uniformity of standards with the creation of the 'Froebel Society for the Promotion of the Kindergarten System' in 1875.⁸⁵

Froebel had, in fact, studied under Pestalozzi in Yverdon between 1808 and 1810,⁸⁶ and in later life expressed his indebtedness to Pestalozzi's teaching. Like Pestalozzi, Froebel realised that parents were often unable to give children at home the necessary stimulating educational experience that the period of infancy required.⁸⁷ While each wrote a book for mothers, it was Froebel who developed a specialized early childhood system of education to be based outside the family environment. His kindergarten was, in effect, the mother-school. Both were convinced that the basis of 'natural' education lay in the gradual and systematic development of the child from early infancy. In this respect, Froebel aimed to create the happiest educational means

84. Lawrence, E., (ed.), Friedrich Froebel and English Education, 1952, (second edition 1969), p.46.

85. Whitbread, N., The Evolution of the Nursery-Infant School, 1972, p.37. For an analysis of the Froebelian movement in England see Lilley, I., 'The Dissemination of Froebelian Doctrines and Methods in the English System of Elementary Education 1854-1914', M.A., University of London, 1963, pp.142-195.

86. Froebel, F., Autobiography of Friedrich Froebel, translated by Michaelis, E., and Moore, K., 1886, (twelfth edition 1915), pp.77-81.

87. For a comparison of the views of Pestalozzi and Froebel see Hayward, F. H., The Educational Ideas of Pestalozzi and Froebel, 1904; Chalke, R. D., A Synthesis of Froebel and Herbart, 1912.

of providing such an education.⁸⁸ Froebel's system,⁸⁹ in stressing the significance of sensory impressions through hand-and eye-training, helped to revive interest in Pestalozzi's emphasis on sensory training which had received renewed publicity through the writings of Herbert Spencer.

During the 1850s several followers of Froebel's system arrived in England. Apart from those concentrating on developing their own kindergartens,⁹⁰ a Pestalozzian influence is apparent. In particular, in 1857 Heinrich Hoffman was invited by the Home and Colonial School Society to take control of the Society's training section for nursery governesses and teachers destined for higher grade schools.⁹¹ Hoffman had previously been the head of the Kindergarten Training Institute in Hamburg and was, in fact, a former pupil of Froebel.⁹² Nevertheless, he was considered by the Society to be a suitable master for the Pestalozzian training establishment.

Hoffman's Froebelian contribution to the work of the Society seems to be of considerable importance. Indeed, many of his students established their own kindergarten schools on completion of their training, while others, such as Miss Sim, became prominent British Froebelians.⁹³

88. See Harris, W. T., preface to Froebel, F., The Education of Man, translated by Hailmann, W. N., 1887, p.viii. A more recent edition of Froebel's writings is available in Lilley, I. M., Friedrich Froebel: A Selection from His Writings, 1967.

89. The system concentrated on actual graduated exercises such as Froebel's unique 'gifts' which attempted to assist the child in perception and sensory training. For details of the kindergarten system see Goldammer, H., The Kindergarten: A Guide to Froebel's Methods of Education, Gifts and Occupations, 1895.

90. Lawrence, E., op.cit., pp.36-37.

91. Ibid., p.40. For further details on Hoffman see Lilley, I., op.cit., pp.14-15.

92. Lawrence, E., op.cit., p.38.

93. Miss Sim was the first principal of the Bedford Froebel College. See ibid., p.49.

Despite this, the Pestalozzian influence remained strong, both at the Home and Colonial and at the Froebel Society.

In the Froebel Society, there is a clear indication that Pestalozzi's ideas were considered of major importance. The Froebelian Child Life magazine⁹⁴ details the extent of the study of Pestalozzi in the syllabus and lectures of the Society.⁹⁵ Classes for kindergarten teachers and students were given on 'child nature illustrated by the principles and methods of Froebel and Pestalozzi', 'Pestalozzi's endeavour to psychologize education', 'Pestalozzi's view of sense-impression as the absolute foundation of all knowledge', and the 'teaching of Pestalozzi and Froebel with regard to the need, course and means of leading children from particular to general knowledge'.⁹⁶ Similarly, contributors to the magazine continued to advance the Pestalozzian cause.⁹⁷ Indeed, such was the interest in Pestalozzi's views that proposed readings on him were suggested,⁹⁸ and three guineas was allocated to cover the expenses for such lectures.⁹⁹

The significance of Pestalozzi to the training given at the Froebel Society is, however, most clearly illustrated in the examination

94. The 1899 editions of Child Life were a new series following on from those published in 1891-1892. Editions had, however, been produced by the Michaelis Guild in 1897, namely No. 1 - January, No. 2 - May, No. 3 - November. Located at the early childhood archives of the Froebel Institute College, London.

95. See Child Life, Volume I, 1899, p.236.

96. Ibid.

97. For example, Cooke, E., 'Lessons from the Drawing Examinations', in Child Life, Volume I, 1891, pp.41-42.

98. National Froebel Union Joint Board Minute Book, Volume IV, p.123, council meeting of 15th July 1895, located at Incorporated Froebel Educational Institute, London.

99. Ibid.

papers of the Society. The examination papers of 1894,¹⁰⁰ for example, indicate that two certificates were available to the Froebel students. The elementary certificate was designed for assistant mistresses in kindergartens, teachers in elementary schools and private governesses, while the higher certificate was intended for teachers who were going to manage their own kindergartens.

The elementary certificate included separate examinations on both Pestalozzi and Froebel's lives, principles and methods.¹⁰¹ These two-hour examinations, each consisting of nine questions, concentrated on testing the student's knowledge of the experiences and theories of the two reformers. Although in 1891 one question actually asked students to 'compare and contrast the teaching of Pestalozzi and Froebel',¹⁰² such comparisons of their work were only rarely asked for in the examinations.

The higher certificate involved three-hour examinations on both the History and Theory of Education.¹⁰³ The former consisted of two parts, the first of which dealt with questions on the individual contributions of Pestalozzi and Froebel, again with relatively little

100. The National Froebel Union Examinations for Certificates. Reports of Examiners, Examination Papers and Examination Results, July, 1894. Located at the Incorporated Froebel Educational Institute, London.

101. The reference books used by the Society for the study of Pestalozzi were de Guimps' Pestalozzi, His Life and Work, and Eva Channings' translation of Leonard and Gertrude, (Boston), 1885. See Syllabus of the Examination of the Joint Examination Board of the National Froebel Union, 1890, p.18. Located at the Incorporated Froebel Educational Institute, London.

102. The National Froebel Union Examinations for Certificates, op.cit., 1901, p.38.

103. For details of the other subjects examined see ibid., 1894, p.1-2.

attempt to compare their work.¹⁰⁴ The examination on the Theory of Education tended to emphasize the Froebelian kindergarten system and to probe the students' knowledge of psychology, including questions on mental development, sensory training, apperception and the role of memory in the learning process.¹⁰⁵

The certificate examinations therefore clearly demonstrate the importance attributed to the work of Pestalozzi by the Froebel Society. Despite an emphasis in the examinations on practical Froebelian methods,¹⁰⁶ the Home and Colonial School Society saw much in the examinations that was consistent with their own training. As both Societies were issuing their own kindergarten certificates, they tended to follow similar courses. The association between the staff eventually persuaded the Home and Colonial School Society to join with the National Froebel Union in 1894 and become part of the Joint Examination Board.¹⁰⁷ In many ways, the merger was an expression of the already-close bond between the fundamental views of both Societies towards the education of the younger child and the training of female teachers, but equally, as the minutes of the National Froebel Union point out,¹⁰⁸ the merger for examination and certificate purposes was in part the result of the Froebelians' own anxiety over the competition from the Home and Colonial

104. For example, *ibid.*, 1891, p.54; 1892, p.50. The second part was of a more general nature, including questions on Locke, Rousseau, Comenius and Herbart.

105. See, for example, *ibid.*, 1891, p.55; 1892, p.51.

106. Such methods included 'gifts' and 'occupations' referring to Froebel's system of using materials such as cubes, wooden balls and paper to facilitate mental development.

107. National Froebel Union Joint Board Minute Book, Volume II, 3rd March 1894, pp.72-74.

108. *Ibid.*, pp.72-73.

School Society's Kindergarten certificate.

The last decade of the nineteenth century was characterized by a renewed interest in Pestalozzi's and Froebel's emphasis on the mother-child relationship and the ideal of home education. In 1895, for example, the Education League and Sesame Club was established in London to interest parents in the methods of home education and to enable them to instigate reforms in early childhood education.¹⁰⁹ Its concern centred on encouraging an awareness of the more scientific ideas on the upbringing and education of children at home.¹¹⁰ As the Club became increasingly identified with educational reform, it subsequently renamed itself The Sesame League and Club.¹¹¹ Although members were charged an annual subscription of half a guinea, the Sesame's activities flourished. It was a meeting-place for parents, teachers and others interested in education. Support for Pestalozzian values clearly influenced educational thinking at the Club. In this respect, its committee arranged for weekly readings on Pestalozzi, which included discussions on his How Gertrude Teaches Her Children, in order to assist parents and teachers in the education of their children.¹¹² Activists such as Ebenezer Cooke were also influential in promoting a Pestalozzian spirit in the Club's own natural science lectures.¹¹³

109. Child Life, Volume I, 1899, pp.54-55.

110. See Child Life, Volume III, No. 10, 15th April 1901, p.117. It is evident in Child Life, Volume I, 1899, p.54 that the Club's interest in a science of education stemmed from Herbert Spencer's writings and the ideas of Pestalozzi and Froebel.

111. Child Life, Volume I, 1899, p.55.

112. For advertisements of 'Pestalozzi Readings' see Hand and Eye, Volume IV, No. 38, 15th November 1895, p.77.

113. Child Life, Volume I, 1899, p.54.

The Sesame Club, like the Home and Colonial School Society was towards the close of the nineteenth century closely involved with the efforts of the Froebel Society. Indeed, the Froebelians had reason to welcome the emergence of the Sesame Club, for it financially contributed towards the reintroduction of the Froebelian's Child Life quarterly magazine.¹¹⁴

The continued success of the Sesame League and Club, which by 1901 was fully subscribed and had a waiting list of seventy-five people,¹¹⁵ encouraged the Club to consider a further expansion so as to develop the practical ideas expressed by its members. The result of this was the opening on 6th July 1899 of the Sesame House in St. John's Wood, London.¹¹⁶ The establishing of this House was an experiment aimed to train students for the care and education of children, and included instruction in the theory and practice of education, child development, natural science, hygiene and general household management.¹¹⁷ In this way they intended to provide a form of home-life training that would enable young ladies to become successful governesses or accomplished mothers.

The Sesame House experiment, although new to England, was in fact modelled on the Pestalozzi-Froebel House in Berlin, which had been established in 1873.¹¹⁸ The Sesame House was fortunate to enlist the

114. See National Froebel Union Joint Board Minute Book, Volume VIII, pp.5-7, Council Meeting, 5th September 1898.

115. Child Life, Volume III, No. 10, 15th April 1901, p.116.

116. Its full title being the Sesame House for Home-Life Training.

117. Child Life, Volume I, 1899, p.55.

118. Frau Schrader's work in Berlin is described in an article by Schepel, A. H., in Hand and Eye, Volume VI, No. 71, 1898, pp.340-345.

support of Miss Schepel as its first Principal. For twenty-two years she had been head of the original Pestalozzi-Froebel House in Berlin. As a result, she quickly organized the work and objectives of the new House.¹¹⁹

There was no fixed age for admittance to Sesame House, and although several students came straight from school, the majority were aged between twenty and thirty years.¹²⁰ While some completed a one-year course and returned to their own homes, others, having been trained at the House, left to become lady nurses and kindergarten teachers.¹²¹

It is evident that both Pestalozzi's and Froebel's ideas formed the basis of the education and training given at Sesame House. This basis remained a central feature of its work. Moreover, the emphasis on the importance of Pestalozzi was still apparent in 1909. In a letter to former students of the House, one writer explains:

I am sending you two bits of translation from Pestalozzi. I read and gave these to some ladies, young mothers, who I meet every Saturday and to whom I introduce Pestalozzi and Froebel's educational thoughts.¹²²

Indeed, the extent of Pestalozzi's influence at the House is perhaps most clearly illustrated in an article by Miss Emily Last, the Principal of Sesame House in 1910, who asserted

it remains to us . . . to strive to make Pestalozzi's ideals real and living.¹²³

119. Lawrence, E., op.cit., p.79.

120. Child Life, Volume II, 1900, p.253.

121. Ibid.

122. Sesame House Association Leaflet, No. 4, July 1918, pp.17-18, located in the early childhood archives of the Froebel Institute College, London.

123. The Child - a monthly journal devoted to child welfare, December 1910, p.269, located in the early childhood archives of the Froebel Institute College, London.

At the close of the nineteenth century the Sesame Club, League and House provided an important impetus towards the continued promotion of Pestalozzian ideals linked to female education, the mother-child relationship and his system of instruction based on scientific principles.¹²⁴ Similarly, the close association of the Home and Colonial School Society with the Froebelians, and the Society's contribution to training infant school teachers and governesses for middle class schools, assisted in the emergence of the female infant teacher and led to significant improvements by 1900 in girls' education.

3. Controversy and Respectability

The educational efforts, spiritual views and conventional personal lifestyles of such British Pestalozzian pioneers as Synge,¹ Orpen,² Browne and the Mayos, were in contrast to the controversial activities of James Pierrepoint Greaves. It is evident from accounts of his four-year stay in Yverdon that Greaves was an enigmatic figure with eccentric tendencies.³ He was interested in controversial areas such as phrenology

124. The Sesame House closed in 1916 due to 'war conditions'. See 'An Informed Talk to the Students and Friends of Sesame House', 4th July 1938.

1. Details on Synge's life, including his involvement in educational publications while influenced by the Darbyite movement are discussed in Williams, P. C., 'Pestalozzi John, a study of the life and educational work of John Synge', Ph.D., University of Dublin, 1966.
2. Apart from Orpen's educational work including the founding of the National Institution for the education of the deaf and dumb at Claremont, near Dublin, Orpen also became active in church affairs, and in later life was chaplain to the First Church of the Established Religion of England and Ireland in Colesberg, South Africa. See Le Fanu, E. L., Life of Dr. Orpen, 1860.
3. Refer to Wurm, C. F., 'James Pierrepoint Greaves', 9th May 1852. Article deposited with Wurm Papers, Cod. hans. IV, 76, Hamburg State and University Library.

and mysticism and was an enthusiast for Physical Puritanism.⁴ His search for spiritual enlightenment, however, led to an interest in Swedenborgianism⁵ which gained both Greaves himself and his Pestalozzian ideals respectability in Swedenborgian circles, and allowed him to play an active role in the promotion of Pestalozzian methods to the Swedenborgians involved in the early infant school movement.⁶

During his secretaryship of the Infant School Society Greaves had published in 1827 Three Hundred Maxims for the Consideration of Parents and Physical and Metaphysical Hints for Everybody, and in the same year issued The Contrasting Magazine which also discussed the Pestalozzian system.⁷ His close association with Pestalozzianism was eventually considered undesirable by the committee members of the Society who wished to avoid controversy by being associated too closely with any particular teaching method. Consequently, Greaves was dismissed from the Society in 1827. Nevertheless, this did not deter him from continuing to advance Pestalozzianism.⁸

Despite Greaves' subsequent withdrawal from infant school developments, it is clear that he maintained a lively interest in educational and social reforms throughout the remainder of his life. In March 1832,

4. See Harrison, J. F. C., Robert Owen and the Owenites in Britain and America, 1969, p.127. The name applied to a range of activities including vegetarianism, temperance, homeopathy, hydropathy, mesmerism, animal-magnetism and hypnotism.
5. Confirmation of Greaves' Swedenborgian interest is given in Wurm, C. F., op.cit.
6. See pp.113-115.
7. The Contrasting Magazine of Errors and Truths, 11th August 1827, includes two such articles, namely; 'On the Discernment of Pestalozzi's Disciples', (pp.81-83) and 'The Secret of the Pestalozzian System', (pp.113-116).
8. See Co-operative Magazine, 1828, Volume III, pp.29-31.

for example, he attempted to alleviate social distress at Randwick in Gloucestershire by securing work for unemployed men who, in return, were supplied with tokens for food and other essential items.⁹ Harrison discusses¹⁰ Greaves' ideas on practical social reform as being those of enlightened middle-class philanthropy and in this respect they were not controversial.

Although a colleague¹¹ was later to write that Greaves 'was at home in no science, no art nor any skill not even to the slightest degree', and Thomas Carlyle commented on Greaves that 'few greater blockheads (if "blockhead" may mean "exasperated imbecile" and the ninth part of "a thinker") broke the world's bread in my day',¹² it is evident that in the 1830s Greaves was attracting considerable attention as a sage and mystic.¹³ During these years Greaves became deeply interested in transcendentalism¹⁴ and the work of the American Bronson Alcott. This association was to lead to a generally more controversial educational experiment which partly reflected Greaves' continued enthusiasm for Pestalozzi's ideas.

Greaves' Exposition of the Principles of Conducting Infant

9. Campbell, A., (ed.), Letters and Extracts From the Ms. Writings of James Pierrepont Greaves, 1843, pp.xv-xix.
10. Harrison, J. F. C., op.cit., p.127.
11. Wurm, C. F., op.cit.
12. Norton, E. E. (ed.), The Correspondence of Carlyle and Emerson, 1834-1872, 1883, cited in Armytage, W. H. G., Heavens Below; Utopian Experiments in England, 1560-1960, 1961, p.171.
13. For a more favourable account of Greaves see Barham, A. F., An Odd Medley of Literary Curiosities, Part II, 1845. This work contains a Memoir of Greaves with details of his views.
14. A school of thought which defended the idea of intuitive perception of divine truth in opposition to dogmatic rationalism.

Education had, in fact, led Alcott to compile his own account on 'Pestalozzi's Principles and Methods of Education'.¹⁵ The establishing of Alcott's Temple School in Boston in 1834 also inspired Elizabeth Peabody's Record of a School (1835), and Alcott's own Conversations with Children on the Gospels (1836).¹⁶

The book Record of a School, describing Alcott's methods, obviously impressed Greaves¹⁷ who now began to correspond regularly with Alcott. In a letter to Alcott, dated 16th September 1837, Greaves listed twenty-nine questions on educational matters in which he inquired of Alcott's system of religious education. The enthusiasm of Greaves to ascertain the 'inner essential character' of Alcott's school is clearly apparent. In 1838 Greaves saw the fulfilment of many of his ideas, including those stemming from Alcott, in the establishing of a community and boarding school at Ham Common, in Surrey. In recognition of Alcott's work, the school was named Alcott House.¹⁸

15. See Shepard, O., Pedlar's Progress, the Life of Bronson Alcott, 1938, p.86.
16. Cremin, L. A., American Education: The National Experience 1783-1876, 1980, p.88.
17. Letter from J. P. Greaves to A. B. Alcott, dated London, 16th September 1837. Ms. Alcott 59M-307(3), 169-170, Houghton, Cambridge, Massachusetts. Copy located in Silber Papers, Box 5, Central Library, Zürich.
18. For details on the school see Wright, H. G., and Wright, Miss, Retrospective Sketch of an Educative Attempt at Alcott House, Ham Common, near Richmond, Surrey, 1840; Lane, C., 'Social Experiments' in Star in the East, 22nd February 1840, 29th February 1840; The New Age, Concordium Gazette and Temperance Advocate, 1843-1844; A Brief Account of the First Concordium, 1844; Armytage, W. H. G., op.cit., pp.175-183. See also New Moral World, Volume III, No. 27, 1st January 1842 for information on the addition of an infants' school.

The school was established by Greaves' friend William Oldham and benefited from the teaching and leadership of Henry Gardiner Wright and the involvement of the reformist editor Charles Lane, who were both supporters of Greaves' views. They were to remain at the school until September 1842, when, as a result of a personal visit to the school by Alcott,¹⁹ they were persuaded to return with him to America to embark on a new educational venture.²⁰ The American experiment, however, proved short-lived and both Wright and Lane returned to Alcott House which had been renamed the First Concordium.²¹

The school's methods and ethics are described by Stewart and McCann²² as being directly influenced by Pestalozzi. This Pestalozzian influence can be attributed to the impact of Greaves' views on Oldham, Wright and Lane.²³ However, as Stewart and McCann point out,²⁴ Pestalozzi's ideas were more in evidence in the loving atmosphere in

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19. Alcott had arrived in England in May, two months after the death of Greaves on 11th March 1842. As Cremin, L. A., op.cit., p.88 points out, the publication of Alcott's Conversations had aroused considerable criticism in Boston and led to the eventual closure in 1838 of the Temple School. Therefore, Alcott's arrival in England coincided with his despondency over the demise of his educational experiments at home.
 20. Armytage, W. H. G., op.cit., p.178. Details on the Fruitlands social experiment are given in Sears, C. E., Bronson Allcott's Fruitlands, 1915; Sanborn, F. B., Bronson Alcott at Alcott House, England, and Fruitlands, New England, 1842-1844, 1908.
 21. The name Concordium was chosen to designate 'the dwelling for those who desired to be in concord with the triune universe Spirit and all its creations'. See A Brief Account, op.cit., p.1.
 22. Stewart, W. A. C., and McCann, W. P., The Educational Innovators, Volume I: 1750-1880, 1967, p.148.
 23. This is implied in Barham, A. F., op.cit., p.4. Also, Greaves' residence at the school helped to increase his influence on the principles pursued.
 24. Stewart, W. A. C., and McCann, W. P., op.cit., p.149.

the school and the harmony between physical, intellectual and moral education than in any particular adherence to Pestalozzian method.

From the outset the school applied the laws of nature to the simple habits of life. Implicit in its work was the physical well-being of the child. Although Lane indicates²⁵ that the institution was a school and not a social community, there was a great emphasis on encouraging a family atmosphere which was sufficient to lead to the 'selfish dissatisfaction of some parents'.²⁶ In particular, Wright, who was responsible for the mental and moral management of the school was noted for making the children feel as if the school was, in fact, their own home.²⁷ Indeed, the school advertized itself as 'A Home for the Affectionate, Skilful and Industrious, uncontaminated by false sympathy, avaricious cunning or excessive labour'.²⁸

The school catered both for boys and girls, and charged for each child a fee of £5 per quarterly term.²⁹ The daily emphasis at the school was on physical labour, which occupied no less than eight hours each day. As a result, the school pursued practical work in such specialisms as printing, tailoring, shoe-making, carpentry and gardening.³⁰ Considerable freedom was also allowed in the children's choice of which academic subjects to attend when not participating in practical activities.³¹

As Lane remarks, all the school's lessons, both academic and

25. Lane, C., 'Social Experiments', in Star in the East, 29th February 1840.

26. Ibid., 22nd February 1840.

27. Ibid.

28. A Brief Account, op.cit., p.1.

29. The New Age and Concordium Gazette, 13th May 1843, p.16. This weekly journal provided supporters of the school with detailed articles on its activities.

30. Ibid.

31. A Brief Account, op.cit., p.2.

practical, were given with the intention of conditioning the pupils for higher spiritual influences.³² Greaves' belief and emphasis in attempting a fundamental re-modelling of society was clearly a significant inspiration to the school.³³ To achieve such lofty ideals the school adopted a particularly spartan régime. Pupils were expected to be very simply dressed, boys wearing a 'brown holland or cotton blouse with white trousers and a neat check shirt, without neck-cloth or any other clumsy wrapper round the neck'.³⁴ The diet at the school also provoked controversy,³⁵ as it supported strict vegetarianism in the belief that the killing of animals was against a Love-Law implicit in God's teaching.³⁶

The Love-Law, as the Concordium's publications point out, was at the very heart of the school's philosophy. The love concept developed by Pestalozzi as an expression of the relationship between mother, child and God, was extended by Greaves to include 'Love' in a universal setting. Greaves' philosophy as practised in the school was a 'Love of Love', to form the 'true developing and cultivating of humanity'.³⁷ Greaves believed in pure Transcendental Divinity - a God Life in man's soul.³⁸ Consequently, he felt that man must become love-natured to be harmonised with the Deity so as to be happy in themselves. The implications for schooling was that the spirit in the child was to be wholly

32. Lane, C., op.cit., 7th March 1840.

33. It is interesting to note that the school's journal advertizes Greaves' works including Letters and Extracts, Three Hundred Maxims and Memoir of the late J. P. Greaves. Alcott's Conversations and Peabody's Record of a School are also mentioned. See A Brief Account, op.cit., p.8.

34. The New Age, op.cit., 13th May 1843, p.16.

35. See Holyoake, G. J., A History of Co-operation, 1906, p.265.

36. A Brief Account, op.cit., p.5.

37. Ibid., p.4.

38. Barham, A. F., op.cit., p.20.

submitted to love mainly through the methods of Pestalozzi.³⁹

It is apparent, even in Greaves' early letter to Alcott in 1837, that he had formulated an intense enthusiasm for the Love-Law. As he writes,

there appears a greater degree of awakening to the central love-sensibility, than before. I see many more symptoms of the harvest time approaching in this country. There is, at present, an obvious appearance of the Love-seed beginning to germinate.⁴⁰

The extent to which the Love-Law dominated the school at Ham Common is partly shown in the staff's attitude towards punishment. Lane declares:

from the first it was decreed that no punishment whatever, mental or corporeal, should be perpetrated on the children.⁴¹

It was strongly felt that any such punishments were totally inconsistent with the love-principle inherent in the school.

The numbers attending the school were, however, relatively small. From 1838 to 1840 the average attendance was thirty-two pupils, but this was reduced to just twenty pupils by 1843.⁴² Nevertheless, the school attracted considerable interest. The New Age on 1st October 1843 commented on the 'great number of visitors'.⁴³ The journal indicates that friendly visitors were received on Sundays and Mondays

39. Ibid., p.21.

40. Letter, Greaves to Alcott, 16th September 1837, op.cit.

41. Lane, C., op.cit., 22nd February 1840.

42. See ibid., and The New Age, op.cit., 6th May 1843, p.7.

43. The New Age, op.cit., 1st October 1843, p.106. Indeed, Robert Owen himself visited the school on 28th April 1843. It is also interesting to note that in 1843 Samuel Wilderspin's daughter Emma became a teacher at the school. See McCann, P., and Young, F. A., Samuel Wilderspin and the Infant School Movement, 1982, p.272.

and accommodated at sixpence a meal and sixpence a bed.⁴⁴ Further publicity for the school was generated by the teachers' giving lectures throughout the south of England, including visits to Romsey, Southampton, Portsmouth, Chichester, Brighton and the Isle of Wight.⁴⁵

The school and the ideas propounded by Greaves attracted a number of former Owenites. As Armytage indicates,⁴⁶ J. Minter Morgan,⁴⁷ Alexander Campbell⁴⁸ and Samuel Bower⁴⁹ were all influenced by Greaves; William Galpin⁵⁰ gave a lecture at the school and Frederick Bate became the school's treasurer. Indeed, Campbell was involved in extensive tours on behalf of the school, including numerous lectures in Scotland.⁵¹ His enthusiasm for the school's ideals is evident in his support for the

44. The New Age, ibid., 13th May 1843, p.16.

45. Ibid., 20th May 1843, p.47.

46. Armytage, W. H. G., op.cit., pp.174-175, 180.

47. For details of Morgan's later schemes see ibid., pp.209-223. Morgan had, in fact, published Pestalozzi's letters to Greaves; see Harrison, J. F. C., op.cit., p.128.

48. Campbell's involvement in educational and social experiments is highlighted in Marwick, W. H., Life of Alexander Campbell, 1964. Campbell was particularly active in the Society of Rational Religionists which, as was noted earlier, promoted Pestalozzian methods. Greaves' influence on Campbell can be traced back to the autumn of 1840 when Greaves spent six weeks in Campbell's Stockport residence. See Campbell, A. (ed.), op.cit., p.v.

49. Bower had joined Wright and Lane at Fruitlands and had published a number of Owenite tracts. See Armytage, W. H. G., op.cit., p.175.

50. Galpin, a Salisbury banker, was a founder member of 'The Home Colonization Society', formed to provide funds for the Owenite Tytherly community (later to be known as the Queenwood Community). Like Campbell, Galpin was also closely involved with the Rational Society. For details on Queenwood and the Rational Religionists see Holyoake, G. J., op.cit., pp.126-129.

51. The New Age, op.cit., 1st October 1843, p.108.

establishment of a second Concordium school.⁵²

It is clear, therefore, that while the school was generally controversial, especially in terms of its organization, it did attract a small circle of enthusiasts who respected the higher ideals of the school. Although the school only survived until 1848, its importance in British Pestalozzianism rests mainly on the fact that it represents a progression of Pestalozzi's ideas on moral education to a form of educational institute designed to elevate man as a universal being. Its development outside the contribution of British Pestalozzianism towards general progress in child-centred education and infant teacher training is further evidence that such Pestalozzianism did not conform to an organized movement for change and progress in education. Its influence on educational developments tended to remain diffuse and uneven throughout the nineteenth century.

The religious ideals which formed the foundation for the Concordium School also demonstrate the central role that religion invariably played in the development of nineteenth century British Pestalozzianism. In its early years, particularly in the period 1815 to 1830, British Pestalozzianism was greeted with considerable suspicion and distrust. As previously indicated,⁵³ controversy initially surrounded the religious basis of Pestalozzi's work. Criticism was focused on whether Pestalozzi and his educational ideas were based on Christian principles.⁵⁴ Orpen, for example, pleaded with Pestalozzi to publish a letter or an address on the religious basis of his system, which Orpen, was convinced, would

52. Ibid., 1st July 1844, p.255.

53. See p.14.

54. The Contrasting Magazine of Errors and Truths, 11th August 1827, pp.81-83, provides an interesting account of the suspicion surrounding the religious basis of Pestalozzi's education.

assist in the promotion of Pestalozzianism in Ireland.⁵⁵ The hostility surrounding Pestalozzi's religious beliefs seriously weakened his initial impact on British education in the early nineteenth century. Although his writings express a Christian view of society and an acceptance of the divine authority of the Scriptures, Pestalozzi was not prepared to commit himself to the doctrines of any one particular religion. While it is not the concern of this thesis whether Pestalozzi was, in fact, a Christian, there is clear evidence that a religious emphasis dominates his attitudes to education.⁵⁶ Moreover, as Walch points out,⁵⁷ Christianity for Pestalozzi was education for morality. Through education Pestalozzi sought to introduce religious values which could assist him in obtaining his ideals relating to the overall improvement of mankind. In Pestalozzi's teachings, moral and religious education, therefore, became almost synonymous. Consequently, many of the developments in British Pestalozzianism are characterized by a stricter adherence to Christian principles as applied to everyday life.

Cheam School provides a good example of this emphasis on moral and religious principles. Its evangelical tone and adherence to the Scriptures,⁵⁸ together with Mayo's conventional background and beliefs did much to allay anxieties as to the religious basis of Pestalozzianism. Cheam School assisted in gaining respectability for Pestalozzi's work both in terms of its religious nature and the practicability of

55. Letter from Orpen to Pestalozzi, November 1820, Ms. Pest., 54a/272/4, Central Library, Zürich.

56. For a discussion on whether Pestalozzi was a Christian and the importance of his religious views see Walch, Sister, M. R., Pestalozzi and the Pestalozzian Theory of Education, 1952, pp.25-34.

57. Ibid., p.31.

58. See Waldegrave Letters, op.cit., Samuel to his Father, Cheam, 12th April 1831.

Pestalozzian teaching methods.⁵⁹

Similarly, the Home and Colonial School Society played a significant role in perpetuating the religious emphasis in British Pestalozzianism. As previously discussed,⁶⁰ the Society's meetings showed a reverence for religion and the trainee teachers themselves had to satisfy the Society's regulations that they believed in the fundamental truths of Christianity.⁶¹ Such an emphasis on religion in the Society, however, was not specifically linked to any real concern about the religious nature of Pestalozzianism, but was more a reflection of the national religious controversy surrounding British educational developments seen in the confrontation between Church and Dissenters, which, at the beginning of the nineteenth century, had led to the establishing of the separate National Society and British and Foreign School Society.⁶²

The dominance of these contemporary religious attitudes was such that, in order to avoid controversy, the Home and Colonial School Society felt the need in 1841 to actually change one of its original foundation clauses to confirm that its religious basis was in accordance with the Doctrinal Articles of the Church of England.⁶³ However, as we have already seen, this had little effect on the numbers or type of

59. As was noted earlier (p.59), Mayo's teaching of the classics, however, was controversial and in 1829 attracted hostile criticism from Mr. Cunningham of Harrow School. Such controversy was only short-lived.

60. See p.128.

61. Abstract of Trust, op.cit., p.9.

62. Details on the establishing of the two Societies are to be found in Barnard, H. C., A History of English Education From 1760, 1971, pp.55-57.

63. Abstract of Trust, op.cit., p.8. See also Bartley, G. C. T., The Schools for the People, 1871, p.484.

candidates entering the Society. Indeed, by 1843, one third of those having received training had belonged to the Dissenting denominations.⁶⁴

The training course pursued by the Society also demonstrates a concern that the teacher training and the education of young children should emphasize moral education based on religious assumptions.⁶⁵

The emphasis in the Society's Model Schools on religious instruction highlights the Society's support for the central role of religious and moral education in the training of the young.⁶⁶ Such an emphasis was not controversial, but was accepted as part of the teacher's responsibility to awaken children to higher influences.

Apart from the stress placed by the Society on the study of Pestalozzi and his principles,⁶⁷ the Society played a significant role in highlighting Pestalozzian methods through its quarterly journal and providing infant manuals that promoted Pestalozzian ideals.⁶⁸ These manuals were favourably received, being, as Bartley points out,⁶⁹ important works with extensive circulation. The Society's contribution to developing an infant teaching system and to progress in infant teacher training and education attracted praise from government

64. Tremenheere, S., 'Report on the Model Schools of the Home and Colonial Infant School Society', in Minutes of Committee of Council on Education, 1842-1843, p.590.

65. See Tufnell, E. C. 'Report on the Schools of the Home and Colonial Infant and Juvenile School Society', in Minutes, ibid., 1846, Volume II, p.546.

66. The absence of the Catechism in infant education meant that religious teaching in such schools was not an issue of controversy.

67. See 'Lessons on Education' in Barnard, H., Pestalozzi and Pestalozzianism, 1859, pp.32-36.

68. Such manuals included Mayo, E., Model Lessons for Infant School Teachers and Nursery Governesses, 1838; Sunter, R., Manual for infant schools and nurseries, 1856.

69. Bartley, G. C. T., op.cit., p.483.

inspectors,⁷⁰ and provoked little controversy.⁷¹

In later years the developments associated with the Society's involvement in the training of governesses and school-mistresses for higher grade schools also allowed the Society to pursue Pestalozzian ideals linked to female education. The subsequent emergence from the 1850s of the popular kindergarten school and its connection with Froebelian methods gained further respectability for the Society in terms of its ability to respond to new demands in middle class education and the recognition of the similarity between the principles of Pestalozzi and Froebel.

The Society, therefore, played an influential role in gaining respectability for Pestalozzian methods and ideals. For the greater part of the nineteenth century it provided a focal point for those active in promoting Pestalozzianism. Throughout these years it attracted little controversy, yet it remains central to most British Pestalozzian developments in the nineteenth century.

The emergence of Pestalozzian object lessons also served to impart moral and religious education. In particular, the actual object lessons devised by Miss Mayo and supported by the Home and Colonial School Society clearly emphasized moral values linked to religious teaching.⁷²

70. See Tufnell, E. C., op.cit., 1846, Volume II, p.546; Cook, F. C., ibid., 1851, Volume I, p.327.

71. The Times, 13th September 1847, p.4, however, indicates that the Society's Pestalozzian methods were still viewed with some suspicion. For further discussion on the entry of women into infant teaching and training see Roberts, A. F. B., 'The Development of Professionalism in the Early Stages of Education', British Journal of Educational Studies, Volume XXIV, No. 3, October 1976, pp.254-264.

72. See Mayo, E., Lessons on Objects, 1831; Model Lessons for Infant School Teachers and Nursery Governesses, Part II, 1849.

While such lessons were not controversial on religious grounds, the weaknesses in the object lesson approach did stimulate criticism. As already mentioned, Herbert Spencer condemned the classroom methods employed to teach object lessons.⁷³ Criticism centred on the emphasis on verbalism and teacher direction. Although in this respect from the 1850s object lessons became somewhat controversial in terms of contemporary classroom practice, they were accepted as an important and useful means of instruction with implications in particular for the extension of science teaching.⁷⁴

The object lesson approach pursued Pestalozzian ideals centred on Anschauung and sense training. In emphasizing the importance of a sequential order of development through a series of small but clearly defined steps, such lessons anticipated the contemporary quest for an 'ideal order' in subject presentation, while highlighting sensory experience as a prerequisite to effective teaching. In so doing, the method forms an example of the Pestalozzian attempt to psychologize education which was to receive further recognition through the influential writings of Spencer.⁷⁵

The psychological theories that formed the basis of Pestalozzi's teaching encouraged teachers, especially those involved in early childhood education, to consider improvements in their own teaching method. Although, as we have seen, object lessons degenerated into verbal instruction with little attempt to encourage discovery learning, British

73. Spencer, H., Education: Intellectual, Moral and Physical, 1861, (1878 edition), p.83.

74. For details on the enthusiasm of Spencer to use object lessons to advance science teaching see ibid., p.86. As previously discussed, object lessons also made a contribution to the teaching of science earlier in the nineteenth century. See pp.93-97.

75. Spencer, H., op.cit., pp.80-81.

Pestalozzians, in their pursuit of Pestalozzian ideals, assisted in awakening thoughts of a less harsh,⁷⁶ more experimental and child-centred classroom environment.

76. These enlightened attitudes were clearly a feature of the Home and Colonial School Society's Model Schools and would appear to have also surfaced in other schools benefiting from the services of teachers trained at the Society. See Minutes of Committee of Council on Education, 1842-1843, p.585; 1853-1854, Volume II, p.768.

CONCLUSION

It was the purpose of this study to determine the extent of the contribution made by Pestalozzi and his supporters to British education during the nineteenth century. The diverse nature of the educational developments initiated or assisted by the efforts of the British Pestalozzians is now more clearly evident.

The study clarifies the significance to individual British Pestalozzians of their first-hand experience of Pestalozzi and his methods in Yverdon. It is apparent that these Yverdon-trained British Pestalozzians made an important contribution to the emerging infant school movement, becoming involved in the promotion of infant schools while encouraging individuals to adopt Pestalozzian methods in their own schools.

The crisis in the infant school movement apparent from the late 1820s, seen in the demise of the Infant School Society in 1828 and the emergence of the Evangelicals at the forefront of infant school developments, was to a certain extent overcome by attention being directed towards infant teacher training. In this respect, the publication of Charles Mayo's lecture in 1827 and Miss Mayo's books on object lessons in the early 1830s assisted in emphasizing the importance of the teacher and his or her methods of instruction.

The establishing of the Pestalozzian-influenced Home and Colonial School Society in 1836 was a significant event in reasserting the advantages of infant schools and early childhood education. The study has highlighted Pestalozzian involvement in the Society, especially the noteworthy work and publications of Miss Mayo, and the contribution

of the Society to providing trained infant school teachers and initiating improvements in teacher training.

The extent of the Society's significance to advances in infant teaching is also evident, especially prior to 1850, amongst the small number of the Society's teachers who settled in Wales. Indeed, the study has thrown light onto the initial impact of these teachers in creating new standards in Welsh infant education.

Although the Society was primarily involved in infant teacher training, the study has shown the extent to which the Society later became involved with the Froebelians and subsequent developments in the education of governesses and teachers destined for higher grade schools. Through this, the Society made a contribution to female education, assisting, albeit on a small scale, improvements in the secondary education of girls.

Whilst the influence of the Pestalozzian-based Home and Colonial School Society on developments in education and teacher training is apparent throughout the greater part of the nineteenth century, the contribution of Cheam School to British Pestalozzianism is limited to a twenty-year period ending with Charles Mayo's death in 1846. Nevertheless, the study has indicated the varied nature of this contribution. In particular, the school demonstrated the practicability of the Pestalozzian method linked to object lessons and, in contrast to contemporary practice, gave recognition to the importance of science-based subjects. Above all, it promoted a diluted Pestalozzian system that emphasized the over-riding importance of moral and religious education. In so doing, Cheam School helped to dispel concern as to the religious nature of Pestalozzian methods and greatly assisted their continued development.

The study has revealed the contribution of Pestalozzi in Britain

to specific subject areas. It is clear that in arithmetic, art and music, Pestalozzi's ideas were absorbed into successful teaching methods. Similarly, the Pestalozzian emphasis on object lessons assisted in the emergence of elementary science teaching, and was recognized by later supporters of science, such as Spencer, as potentially a useful method on which science teaching could be further developed.

Although improvements in infant education resulted from the emergence of infant teacher training, the study has shown the overall impact of the British Pestalozzians and Pestalozzi's ideas on developments in child-centred education. Moreover, it has demonstrated the extent to which an appreciation of Pestalozzi's views on child development, inherent in his concept of Anschauung and Language, Number and Form, stimulated an interest in the science of education and child psychology.

Due to the diverse nature of the Pestalozzian contribution to British nineteenth century education, it is not surprising that it was on occasions the subject of controversy. The study has detailed the nature of this controversy and the degree to which such criticism centred on Greaves, the religious beliefs of Pestalozzi and on the verbalism associated with object lessons. On the whole, however, Pestalozzian developments were well-received, and in this respect credit should be given to the early British Pestalozzians' initial choice of emphasis and direction.

Towards the close of the nineteenth century Pestalozzi's ideas had attained general acceptance, yet the extent of his contribution was still underestimated. In 1899 Sir Joshua Fitch commented that

we do not realise the real debt we owe to
Pestalozzi or how many movements of the past

and of our time were really owing to
his initiative and his personal interest.¹

It is to be hoped that the study goes some way towards explaining the degree of this 'real debt' and assists in highlighting the significance of British Pestalozzianism in shaping our educational heritage.

1. The Times, 5th January 1899, p.8.

A P P E N D I C E S

APPENDIX A

Letters and extracts from Dr. C. Mayo
in Yverdon, 1819-1822.

Letter No.1

July 22nd. 1819

My dear Betsy,

You must imagine that you have passed through the whole of France and a small part of Switzerland asleep, that suddenly you wake and ask the voiturier in the best French you can command what is the little town you see about a mile from you. He answers, Yverdon. You then rouse yourself and resolve to look about you - on the margin of the lake, the length of which the eye is not certain that it defines, a collection of houses presents itself - a church steeple rises above the roofs, and near it four towers of no great elevation at the four angles of a large building attract your attention.

This building you guess to be Pestalozzi's chateau - your conjecture is right - observe it then a little more attentively.

One tower you perceive is higher than the other three, all circular and covered with something like an inverted pottle of tiling.

They are connected by a plain frontage with a heavy sloping roof, pierced with irregular windows and deformed with various appendages.

Where you ask is that picturesque beauty which the description of friends has led you to expect and the very name of chateau seemed to promise? Anywhere but in the reality - without grandeur, picturesque beauty, elegance or neatness, without excellence in form or colour, it presents the most uninteresting melange of incongruous parts I ever beheld. This delectable morceau of Swiss Architecture you approach through a miserable avenue of starveling poplars, which you behold with more than

ordinary disgust from the disappointed hope which you had formed that when you quitted France you had seen the last of them.

Well, the carriage rolls on - you enter the town through a paltry gate of modern erection, pass the front of the castle and having admitted the neatness of the place, find yourself housed in a respectable*. You know Mr. Greaves - I need not introduce him to you - I am not, however, quite certain that you would know him in this Yverdun dress. Fancy then his good-humoured face, the ample range of well drilled teeth guarding the freely opening mouth, the little hazel eyes which seem ever laughing at their good luck in having just escaped being completely buried in head, the lank grizzled hair, the tout ensemble of frank good-humour, eccentric benevolence, self-pleased contentedness with a dash of sanctification or perhaps I should say religious mysticism - fancy, I say, this head, invaluable to a Stevens or a Spurzheim, surmounted by a blue cap in the same form that workmen sometimes make them of paper, add to this an immense blue gown of the same stuff, enveloping his portly figure (almost too fat for a philosopher's) and complete the picture by casing his legs in trowsers of the same, and voila Mr. Greaves.

By him I was conducted to the Chateau and introduced to the principal members of the establishment. Several of them had assembled in the best room of the building and among them Pestalozzi who, to do honour to the English Minister, the Institution had had washed, shaved and drest. This circumstance made the double salute with which he honored me less overpowering than some I have since received. But you wish me to describe him? He is, then, to use a phrase more expressive than elegant, a little weazen old man, upwards of seventy, stooping a good deal in the shoulders, but apparently from a habit of looking on the ground and not from age or

* Letter torn here.

decady. There is nothing very remarkable in his countenance, no very peculiar expression of benevolence, no strong indication of a powerful mind which I could discern, there is an air of abstraction but that I think a very ambiguous sign - it shows that the mind is prone to wander from the sphere in which the body actually moves, but it does not indicate whither it has wandered or whether it is vigorously and efficiently occupied. His walk when he is by himself is a shuffle, effected by a ambilinear movement of his legs, which without lifting his feet from the ground makes them form a kind of oval completed by his bringing his toes into contact. When he is receiving guests or leaving a room with strangers in it, he adds to the shuffle a kind of jerk which, however, does not reach lower than his ancles.

Schmidt, the active manager of the Institution has much more of the air of a man of the world than either of the other two; true he is not polished, but he is extremely attentive and obliging - his deep thought not quite a l'Anglais is not yet outre, the general cast of his face and figure indicates strength - he strikes you as a man of powerful mind devoting its energies to practical purposes. With the other gentleman in the Institution I shall not make you at all acquainted at present ; if anything occurs or manifests itself worth noticing, they shall be brought on the canvas. I have at present confined myself to the delineation of first impressions. I shall have to make you better acquainted with the interior of Pestalozzi, and the more you know of his heart, the more you will be compelled to love him.

I shall end my letter with a few remarks on the interior of the Chateau. It is, as you may have guessed, of quadrangular form, with a kind of cloister running round three sides of the building, sufficiently spacious and much more decent than I expected to have found it. It seems to have been lately repaired and beautified.

My own room is comfortable enough and I am very well satisfied with the arrangements of the Chateau for my personal convenience.

In two or three days a private table will be established for myself and my pupils whereon Mr. Beaumont and Mr. Dixon, my brother, Mr. Trotter and another gentleman will join the party. Richard prefers sleeping in the town, both as being cheaper and quieter, but he will pass most of his time probably in the castle. I have been very well since I have been here, the very simple fare, the early hours, and drinking no wine except the meagre wine of the country, not so strong as small beer, agree very well with me. We have had some hot weather, some cold, but I felt no inconvenience from either. The early mornings in fine weather are most delicious here.

I have sent the book to Mr. Rooke and we have already had an interchange of letters. He has had a surplice made for me, and I am to do duty for him at Geneva on the 5th of September next. I have written to Newman but he will not have the letter for some days after this reaches you. Tell Mr. Nourse that French is well taught in the Chateau - that German is also I believe, but am no judge - that everyone who understands the subject speaks highly of the Mathematical department, that I much admire the drawing. Should he think these branches with the addition of the Classics sufficient, I should think that 40 guineas per annum would more than cover the expenses of the Institution, exclusive of clothes - should he wish to add Italian or Instrumental music etc. these would be an additional expense, but I would with pleasure arrange it in the most economical manner for his son. If he sends him, he should write to Mr. P saying that he puts him under my direction and wishes that no expense should be incurred which I do not sanction - I think I could save him some Pounds annually - I do not mean to be lavish of this offer because I hate accounts and responsibility. Comyn and Cooke are quite well - you had better let their friends know.

Kind remembrances to all friends, particularly my uncle John and the Marryats. I must not proceed to enumerate or I should write nothing but a list of names. Love to the old Lady and give her a kiss from me, also love to the young Merchants.

There is an Institution for young ladies here - something about it in my next. I had your letter and thank you for it. I am working hard on German and French - Mr. Dixon not yet arrived.

Adieu - God bless you all,

C.M.

Extract from Letter No.3

"It is delightful to live under the same roof with Pestalozzi: every action of his life is characterized by the most exuberant philanthropy. Had it been checked by a little more prudence, it would perhaps have produced more benefit to mankind."

Extract from Letter No. 5 August, 1819

"My dear Mother,"

"As I know you have said a hundred times at least since my departure that you should like to take a peep at me, I must endeavour to supply by description what I think you are not likely to have in reality. Suppose me then in my chamber at the Castle. 20 feet by 16 or rather larger, hung with pink and white paper, with a very broad stone-coloured border instead of wainscoating; two windows opening in the French manner, but not reaching to the ground, and of very clumsy make, two doors, one painted and the other not, a large stove covered all over with plates of pottery like the back of my grand-father's parlour fire-place at Edmonton, a little Swiss bed without curtains in one corner of the room and the washing apparatus by its side, in another corner stands a sort of beautifit

but not fastened to the wall. I am writing between the two windows at a rude, old-fashioned Escritoire, two small tables united occupy the centre of the room and some chairs of different shapes line the sides. Add to this description two white curtains, a few engravings suspended from the walls, and the litter which you know any room of mine would be in, and you may form some ideas of the pomp and circumstance that attaches to me at Yverduin. The next room to mine is Mr. Dixon's, under me lodges Mr. Beaumont, next to him a Mr. Esdaile, in another part of the Chateau Mr. Trotter, and Richard lodges in the town.

We rise between 6 and 7, prayers at 7, soon after breakfast in a large room just when we please to go there, some of the masters drop in the same way, and English, French, German and Latin are perhaps all talked in succession. At 8 I have a French lesson, then an hour of intermission. At 10 another French lesson, at 11 a German lesson, then an hour of intermission.

From a little after 1 till 3 I teach Latin, at 3 we dine in the same room where we breakfasted but not with the other masters, at half-past 4 another German lesson; we drink tea in the same manner as we breakfasted, and I find my way to bed between 10 & 11.

When you add to these occupations the reading about 2 hours a day with Mr. Dixon, the writing letters of which I have a great many to get through, private reading and a little drawing, you may suppose I have not much time that hangs heavy on my hands."

Extract from Letter No. 8

"M. Pestalozzi considers that education is begun too high up, that the first steps should be made more interesting, more simple, more easy to the opening mind; he rejects the principle of loading the memory without exercising the understanding, he leads every child as much as possible to

discover the truth he is desirous to impress, and to make use of the knowledge he has acquired. Thus in language he does not begin with the definitions because a child never comprehends them -but first calling up the idea in the child's mind by conversing with him, he gives him the simple sentence, *Leo est animal* - here the words *Leo* and *animal* - being, one almost the same, the other quite the same as those which express the same idea in English, they readily enter the child's mind - from this he proceeds to "An ape is what?"

An animal - *Simian est what? animal*, the child using the word he had learnt just before; proceeding in this manner he stocks the child with words before he enters on the inflexions of those words, always endeavouring to link what the child has to learn with what he has acquired. In the declensions he does not propose to the child *Musa a Muse, Musae of a Muse*, words which cannot interest the child because they represent only parts of ideas, he involves the important word in sentences thus - *Rose est flos-ammo missimus horti. Rosae odor est sa wis &c.* through all the cases. The child having learnt the inflexion of *Rosa*, has a similar word proposed to him also enveloped in little sentences but he is now required to find the termination. In teaching Syntax they give the examples lead the child to find the rule and then make it apply the rule in the same way as in the declensions. The advantages of this method are briefly these:-

You do not disgust the child in his first intellectual exertion, you must exercise other faculties besides memory, you enrich his mind with a greater number of ideas and you furnish him with a *copia verborum* before you set him down to translate a classical author or to express his own ideas in a connected chain in the language.

I know very imperfectly as yet this system, yet I could talk to you for hours on the topic - judge then how impossible it is to comply with your request. Remember that though the general principles of the

Pestalozzian system are the same, they will vary in their application first according to the frame of mind of the instructor, secondly according to the branch of learning taught, thirdly according to the age and development of the pupil,"

Yverdun,

Sept. 25th, 1819.

Extract from Letter No. 14

Dr. Mayo to his Sister

"I hope next spring to pay a visit to Fellenbergs, I have an invitation from him; he does not admit occasional visitors to see his principal school on account of the interruption they occasion, and the dislike which people of rank have to their children being exhibited to every idle traveller. He has more pupils than he wants and he has no need to attract attention by making a show-room of his establishment. His I consider a private Institution - Pestalozzi's a public one. The one effects its purpose with the pupils it has, the great advantage of the other is that it fosters a proper spirit - it serves, however imperfect, as a model and may prove the source from which purer streams may eventually flow."

Extract from Letter No. 15

"To-morrow Pestalozzi completes his 75th year; his mind has all the ardour and vivacity of youth, he writes a great deal and his ideas have that uncontrollable influence over him that he feels himself sometimes necessitated to rise in the middle of the night to seek an amanuensis who shall commit them to paper. He stoops a great deal and shuffles in his walk, which gives him the appearance of debility though he is really strong. A girl belonging to his poor-school having died a few days ago, he attended her funeral, leading the procession bare-headed though the snow

was on the ground."

Yverdon,

11th. Jan. 1820.

Extract from Letter No. 17

"You remember Sabina, one of the eldest of the Clindy girls, with eyebrows pointing downwards as they approached each other, comme ca \ / - she took care of the boys' clothes. Well, she was seized with a violent fever, and Miss Shepherd, thinking the room she slept in too cold, had her moved up into her tower; then she gradually got better, but being rather inactive, I believe the Dr. (Orlez) recommended that she should take a little exercise and breathe the fresh air. Miss Schmid in her violent manner rushed up into the room and finding the poor girl disinclined to move, dragged her by force to the open window, and then scolding her all the while, forced her to parade up and down the room for a considerable time; she then obliged her to get up, telling the little girl who acted as her nurse that if she suffered her to lie down her brother would come and beat her. Poor Sabina, agitated beyond expression, shook convulsively, her faculties torpid, uttering at intervals incoherent expressions of terror. It was ten hours before a shower of tears came to her relief. The consequence was a relapse, the symptoms grew more malignant, she lingered a few days and expired. This is a melancholy story which must not be known out of Millman Street, conclusions would naturally be drawn from it, much against the Institution generally.

Though I know Miss Schmid had no bad intentions, yet her conduct indicates so unfeeling a heart that I never can look on her again without a feeling approaching to aversion."

YVERDON

31st. Jan. 1820.

Extract from Letter No. 18Dr. Mayo to his Sister, dated YVERDUN, 25th. February 1820

"The King of Prussia has just sent a gentleman here to study the system; he has been for some time at Fellenberg's.

His opinion of that establishment does not seem to be very high. It excels most on that point where we fail the most - domestic management. That and Agriculture are the points on which Fellenberg prides himself. He says the different masters pursue their own plans, and you cannot trace very well any system that prevails through the whole.

I hope to have an opportunity of judging for myself before I leave Switzerland. As German is the language of the School, I could not at present make any satisfactory investigation. I shall, however, go over for a few days probably in the course of the Spring."

Extract from Letter No. 22Dr. Mayo to his Brother - letter undated

(References are made to Greaves, Mrs. Hillyar,
Niederer and Pestalozzi)

"M. G. is with her (Mrs. H. an English resident at Yverdun) also the prince of philosophical divines. She is continually boring Pestalozzi with his praises. P is entirely estranged from him as a philosopher, and he answered not a word; it is amusing to see them together. The other day she told P that G had picked up the most beautiful ideas. He said not a word. Mrs. H. then observed that Mr. G had seized the spirit of the system better than any other Englishman. P was silent. She then turned round to me and made the same remark to me in French. I parried the question in a manner that made P laugh heartily. He soon after took his leave. Schmid told me afterwards that he was hugely tickled with what I said; he recounted the whole circumstance laughing most immoderately. The

next time P saw me, he placed both his hands on my shoulders and fell a-laughing and kissing, kissing and laughing so that a bystander must have taken him for a fool."

Extract from Letter No. 23

Dr. Mayo to his Brother, dated YVERDON, 17th August, 1820

"Miss Edgeworth has been here this morning. She made a very rapid review of the Institution. She expressed herself highly delighted with the Mathematical Department. I went with her also to the Institution for the Deaf and Dumb which she approved of very much. She is ... active, energetic, inquiring, penetrating, positive and dictatorial. The little boys had done one sum and were commencing another - I began to explain the principle on which the succession of questions proposed was built; she cut me short saying she had not the faculty of attending to two things at once."

Extract from Letter No. 30

Dr. Mayo to his Sister - Post-mark 21st February 1821

"Send me Pullen's "Pestalozzi's Mothers' Book" by the first opportunity."

"Try and get for me all Mr. Synge's Pestalozzian tracts - they were published by Keene and Bowes, Dublin. Send them express if you get any other besides the Sketch of the Struggles of P. What a fudge Pullen's book is. Greaves is gone to Bale to teach the Missionaries English."

Extract from Letter No. 32

Dr. Mayo to his Brother - dated 15th. March, 1821

Dear Herbert,

"No. 2, which should have been No. 3, arrived yesterday. I have begun my second letter, but of course my illness has thrown me back terribly. I hope now the insertion may be a little delayed."

I should think I should form the first series of letters in about 6 Nos. This will include the Biographical notices of Pestalozzi and the extracts from his most popular works. It would form a whole. It would then become a subject of consideration with me whether I should continue to write directly on the Method; and it would also become a subject of consideration with the Editors whether they would enter into an engagement for the second series. Remember that the right of republication must be reserved for me. I have reflected on Elliss's suggestion - I think the letter should stand as it does - but if Woolphus thinks it advisable, he would, I dare say, have the kindness to address a few lines to the Editor on the subject by way of introducing the letters - I remember that that is a frequent practice in the magazines. The subsequent letters will be longer and every one will embrace some distinct period or branch of the subject."

Extract from Letter No. 33

Dr. Mayo to his Mother, dated YVERDUN, April 12th, 1821

"Dr. Badham advises me not to publish anything. I shall continue to write and then when the moment seems favourable for the explosion, the crackers will be ready."

Extract from Letter No. 38

Dr. Mayo to his Brother, dated YVERDUN, Sept. 16th, 1821

"While we were sitting at dinner on Saturday, the Crown Prince of Denmark was abruptly ushered into the room; we all jumped up from our chairs - old P was as brisk as a Bee, did the honours with his usual grace while the rest of the party one by one made their escape. I had the honour of being introduced; he is a fine looking man, affable and easy in his manners. The Princess was affected even to tears at the exn. of the little children and both declared that had they been educated in the same manner,

their knowledge would have been more extensive and more clear.

These are our gleams of sunshine - Pestalozzi is mad about the application of his system to the Classics. I do not think the path he has struck out is a good one, but as he has a clever little German to aid him, he may throw some light on this most difficult branch."

Extract from Letter No. 45

Dr. Mayo to his Mother, dated YVERDUN, 5th February 1822

"Pestalozzi has just been spending an hour with me ... He has a very high opinion of my prudence and management in delicate situations and I rather think intends before I go to make me instrumental in bringing about a reconciliation between Schmid, Niederer, Krüsi and himself."

APPENDIX BAn Account of Cheam School in the
Rev. Dr. Mayo's Time, Undated

There was a large School Room with two or three smaller or Class rooms and the Dining Room in which Mr. Reiner gave his lessons.

There were no blackboards but a large piece of slate was fitted into the wall of each room, and there was a moveable one in a frame as well. Two tables ran the whole length of the Dining Room with a small one in the middle for serving.

At dinner Dr. Mayo sat at one end of a long table with any gentlemen visitors and the elder boys near him; Mrs. Mayo with her children and lady visitors at the other end. Masters had charge of the other long table. At breakfast Dr. and Mrs. Mayo, their visitors' children and elder pupils, that is, those who were preparing for the University, sat at the end of the other long table. This party did not have tea in the School Room but in an old-fashioned sitting room called the parlour. The elder pupils would speak afterwards of the charm of Dr. Mayo's conversation during this meal. Politics were discussed, they were encouraged to express their opinions, the talk was made quite general, and he used to tell the most amusing stories.

The course of the day ran thus - The big bell was rung at 6.

The time before breakfast at 8 was spent in Scripture and other lessons. Till his very last illness Dr. Mayo was always in School at this time and said Prayers. Classes began at 9. There was an interval of 10 minutes for play taken off the end of each hour. At 11 great pieces of bread were brought in. At 12.45 play began and lasted till 1.45. Then hands were washed in preparation for dinner at 2. Play till 4. Classes again till 6 - then tea, and after that preparation for the next day's

lessons. Prayers at 7.45 were conducted by Dr. Mayo in the large School Room. When the boys were assembled in double rows, Dr. and Mrs. Mayo, visitors and children, passed between them.

There was a queer little gallery in one corner of the room where stood a Seraphine on which Mrs. Mayo accompanied the hymn. Then Dr. Mayo gave a short address and said an extempore prayer. After this the younger boys went to bed.

The bed-rooms were of a good size. Each had a small piece partitioned off where a Master or Matron would sleep. This no doubt was done in the time of the first Mr. Gilpin, as in the Prospectus of his school it is stated that "in apartments within hearing, the Assistant Masters or other careful persons are lodged, that help may be at hand if anything should happen in the night".

It can still be seen that when the partitions were made, for the sake of space half the window was bricked up.

The house had, and still has, a large Entrance Hall and fine oak staircase, and the windows looked out on the playground. Beyond the playground was the cricket field. Part of the playground was enclosed for the use of the small boys only. All along one side were small gardens with arbours. These no doubt dated from Mr. Gilpin's time as they are mentioned in his life.

A large proportion of the boys passed on to Public Schools, but some remained till they went to the University, where many distinguished themselves highly. Dr. Mayo took the entire charge of their studies with the exception of Modern Languages and Mr. Reiner's subjects. They had certain privileges such as being allowed to take walks and so on. Masters came from London once a week on different days to teach Singing on the Hullah System, Drawing and Drilling. There was always a resident French Master.

Dr. Mayo was in personal touch with each of his pupils. He was

constantly to be seen walking in the garden with his arm round a boy's neck. Not long ago, one who has since passed away, said with tears in his eyes, "We all loved him" and this feeling of personal attachment was certainly very general. In teaching, he always followed Pestalozzi's system, that the pupil was to make use of what he had already learned.

Thus, in preparing a lesson for construing, he was made to pick out the nominative, the verb, and then the other words connected with these. The rule laid down for questioning a pupil was that the question should never suggest the answer. He was always cultivating the power of observation, bringing in where he could, what is now called Nature Study. He was very fond of giving impromptu lessons. Thus a child who was with him in the holidays remembers his opening the first page of *Rasselas* and copying two or three sentences with wide spaces between the lines. The child was to write noun and case-verb or adjective below each word, and then was taught how to describe the rest. It was a lesson in parsing never forgotten and of course built on in the future. The parts of a plant would be taught in the same way and these formed amusements rather than lessons.

For the last few years he worked on in very failing health till the end came. Generally speaking, he seems to have been a very attractive man. He was full of wit and power of conversation and had the gift of winning the affection of many devoted friends. His judgment was considered excellent, and people would consult him on the most delicate subjects, knowing that the confidence reposed in him would never be betrayed.

During part of Dr. Mayo's stay at Yverdun, there was a young German who came from Frankfort, named C.F. Reiner. He followed Dr. Mayo to England, intending in a short time to go to America, but gave up the idea to the unspeakable advantage of the School which by that time was started. It is impossible to say what Mr. Reiner was to Dr. Mayo, his children and pupils. Personally, he was simple, true-hearted, loyal and

eminently conscientious. His power of teaching was superb.

His subjects were Mathematics, embracing Arithmetic, Geometry on Form, Algebra, Trigonometry etc, Physical Geography, Chemistry, Mechanics etc. Some of the boys who were passed on to Public Schools looked back with delight to the lessons on the latter subjects, especially Chemistry, and lamented having to drop them.

Mr. Reiner wrote two books - Lessons on Numbers and Lessons on Form, which explain his system of teaching. The great object seems to have been, to quote Dr. Mayo in his preface to Lessons on Number, "not to explain processes, but to unfold principles. The pupil is not taught to comprehend a rule, but to dispense with it or form it for himself." One who began to learn from Mr. Reiner at the age of 8, and had been taught the ordinary rules of Addition, Subtraction, Multiplication and Division, can remember the sort of personal acquaintance with numbers, that this system of Multiples, Divisors and Factors gave.

Thus 12 was an individual, who was made up of two 6's or three 4's or four 3's. It was as if the number was seen dissected. This made fractions so easy to understand, that the same child remembers telling a little friend that there was a whole world below 1, which they had thought was the beginning of everything - Algebra, quadratic equations and Logarithms, had been reached before the age of $12\frac{1}{2}$, when the lessons ceased.

The recollections of the lessons in Geometry are very exciting but they begin and end with this. A problem from Euclid was written and drawn on the large slate. The class was expected to solve it by discovering the necessary auxiliary lines, making use of the results of former problems and so on. If a boy accomplished this, he would hold up his hand - Mr. Reiner would come, listen to the solution given in a whisper, and if it was the right one, put the boy on a stool in front of the large slate

with a pointer in his hand. He would draw the auxiliary lines (e.g. produce B.C. - D) and make him give the demonstration to the class. After this Mr. Reiner would read it in Euclid's words and the class would write it out on their slates.

Classes of Arithmetic, Algebra etc. must have been given in alternate weeks with Geometry during the mornings, that is from 9-12.45 and the other subjects in the afternoons from 4-6. Saturday afternoon was a half holiday. In the morning the Mathematical classes were examined in writing on the work of the week. Marks were given and a record kept. At the end of the term was an examination on the whole of its work. Thus there was a recapitulation of the week's work on Saturday, of the term's work before the holidays and of Arithmetic of each lesson at the beginning of each succeeding one.

Dr. Mayo's mother and sister left Cheam in 1834. Till then Miss Mayo took classes and gave lessons on Objects and Lessons on Shells which were afterwards published, and she probably also taught Religious Instruction also published, and other subjects. The secular subjects must afterwards have been entirely assigned to Mr. Reiner. This same pupil can remember the way in which he would give an Object Lesson.

Suppose Glass was the object. He would ask the class what he held in his hand and then write their answer - "Glass" - on the slate.

Then he would pass the piece round and ask who could tell him anything about it. A hand would be held up. "Well, what do you say?"

"You could break it". Appeal to the class generally - "Is that right?" "Yes". "When you can break something, what do you say it is? Probably no child could answer this question. He would then point out certain substances which can not be broken and some that can, the class being encouraged to mention as many of each as they could, and then the word "Brittle" would be given. "Objects that are easily broken are called Brittle" would be repeated several times by the class and then the

word would be written on the large slate under Glass. Other qualities would be drawn out in the same way and the class appealed to for assent or dissent. This pupil remembers the quality Transparent was drawn out in the same way, as "you can see through it" and the knowledge of the difference between "Transparent" and "Translucent" dates from that lesson. When all the qualities had been chalked up, they were read over by the class, the slate was cleaned and each child wrote out as much of the lesson as he could.

Naturally some of these qualities belonged to other objects as well and a sharp boy would recall and quote them.

This same pupil remembers a course of the lessons on Shells which was given on exactly the same lines.

Punishment was almost unknown in his classes. A troublesome boy might be made to sit at a table by himself, and this was considered a disgrace, or if really necessary, and that was very seldom, he might be reported to Dr. Mayo. At the same time Mr. Reiner had amusing little ways of bringing faults home. Thus, in the case of a very discontented boy, his name was chalked up on the slate :-

A. Smith Esq.,
Grumbleton Hall,
Grumbletonshire.

and other little weaknesses, such as pride of rank, were treated in the same sort of way. He had a most devoted affection for Dr. Mayo, which was most thoroughly and warmly returned. Very sadly did he say to a young Master who came to Cheam only six months before the end - "You will never know what Dr. Mayo has been - you only see a dying man".

About three years after this, he left Cheam to live in London where he soon formed a large connection of private pupils, as well as having classes at the Home & Colonial Training College, and in Upper Class Schools. He was brought to the notice of Queen Victoria and H.R.H. Prince Consort,

and had the honour of giving lessons to their four elder children.

After several years he gave up work and spent his last days at Reigate.

He was a man most truly whom to know was to love and his memory can never be forgotten by any who had the privilege of being taught by him.

S O U R C E S

A N D

B I B L I O G R A P H Y

SOURCES AND BIBLIOGRAPHY1. MANUSCRIPTSBritish and Foreign School Society Archives Centre, Isleworth

Letters from J. J. Evans, Chaplain of the Home and Colonial School Society to A. Bourne, Secretary of the British and Foreign School Society, 31st October 1871 - 5th September 1881.

Schoolmistresses' Certificate of the Committee of the Privy Council on Education to Annie Maria Windsor of the Home and Colonial School Society, 17th April 1868.

British Museum Library - Department of Manuscripts

Letter from J. P. Greaves to Lord Liverpool, 18th August 1818.
Additional Ms. 38273.

Buckinghamshire County Record Office, Aylesbury

T. F. Fremantle - 2nd Baron Cottesloe, Box 233, Letters to his parents and family, mostly written from Cheam and Eton, 1837-1847.

Glamorgan County Record Office, Cardiff

Minute Books of the School Board, Swansea, No. 1140, School Board Ledger 1871-1881, Part 1, p.21.

National Schools, Swansea, St. Mary, P/123.

Hamburg State and University Library

Collection of letters and papers of C. F. Wurm, Cod. hans. IV, 76.

Hampshire County Record Office, Winchester

Calthorpe Papers: 26M62 F/C852 - Infant School Society leaflet dated 16th July 1824.

School Log Book 1864 - St. Thomas's Boys' National School.

School Log Books, 1866 to 1870 - Winchester Central National Girls' and Infants' School.

Incorporated Froebel Educational Institute, London

Minute Books of National Froebel Union, 1890-1903.

Lambeth Palace Library, London

Letterbook of Reverend F. Temple, Principal of Kneller Hall, 1850-51.
Ms. 1798.

National Library of Wales, Aberystwyth

Nefydd (William Roberts), Mss. 7106.

Public Record Office, Kew

Education Files: 9/12. Letter from R. R. W. Lingen to J. S. Reynolds of the Home and Colonial School Society dated 23rd June 1849.

Education Files: 9/12, 9/15, articles on Industrial schools.
 " " 14/1. Wilkin Street School.
 " " 17/39, Committee minutes.
 " " 21/9858, St. Wilfrid's School, Preston.
 " " 21/22718, Hafod Copper Works School, Swansea.
 " " 40/20, Abstract of Trust.

Surrey County Record Office, Kingston

Epsom land tax returns, 1822-1831.

Sutton Public Library, Surrey

Letter from Mary Mayo to Mr. Marshall. Dated 9th June 1925.

Trinity College, Cambridge

The Wren Library - Sidgwick Papers File 101/172 - Letter - Mrs. Sidgwick to her son William dated 5th November 1866.

File 99/150 - Letter Henry Sidgwick to Mrs. Sidgwick dated 15th January 1871.

File 99/157 - Letter Henry Sidgwick to Mrs. Sidgwick dated June 1871.

Trinity College Library, Dublin

Synge, John of Glanmore, Miscellaneous papers, 22 items, 1809-1852.

University of London Library

Brougham Mss. 44415 Letter Burgoyne to Brougham, dated 3rd January 1833.

The Herbert Spencer Papers, Ms. 791, deposited by the Athenaeum.

P.N.E.U. Papers, Ms. 808 - Letters of Charlotte Mason:
 Box I, 9th March 1900.
 Box II, 22nd October 1861.
 Box III, 16th May 1894.

Lord and Lady Waldegrave, Chewton Mendip, Bath

Private Letters of the Waldegrave Family, 1825-1870.

West Sussex Record Office, Chichester

Letters from Charles Mayo to John Hawkins in Hawkins' Papers:

Vol. 2, Part 8, f. 990, 27th May 1833.
 " " f. 1007, 17th September 1833.
 " " f. 1020, 13th December 1833.
 " " f. 1027, 13th January 1834.
 " " f. 1053, 21st December 1834.
 " " f. 1059, 4th June 1835.
 " " f. 1066, 30th September 1835.
 " " f. 1067, 8th October 1835.
 " " f. 1072, 7th December 1835.
 " " 11, f. 1362, 15th June 1841.
 " " f. 1363, 29th November 1841.

Letter, Dorothy Brown to Mayo:
 Vol. 2, Part 5, f. 674, 26th July 1823.

Whitehall, Cheam, Surrey

Student's Magazine, or, Cheam School Journal, Nos. 1, 2, 3, 1830s,
 found in basement of Whitehall with manuscript notes attached.

Zürich Central Library, Switzerland

An Account of Cheam School in the Rev. Dr. Mayo's Time. Anonymous.
 Silber Papers, Box 2.

Letter from Allen to Pestalozzi, 17th April 1818; Ms. Pest. 50/5/1.

Letter from Browne to Pestalozzi, 1823; Ms. Pest. 50/40/1.

Letter from Devey to Dr. Mayo, November 1829; Silber Papers, Box 5.

Letter from Greaves to Alcott, 16th September 1837; Silber Papers, Box 5.

Extracts from eighteen letters written by Mrs. Hillyar to Wurm, 1823-
 1827; Silber Papers, Box 4.

Extracts from seventeen letters written by Dr. Mayo in Yverdon, 1819-
 1822; Silber Papers, Box 5.

Twelve letters, Dr. Mayo to Pestalozzi, 1822-1824; Ms. Pest. 53/211/1-12.

Three letters Dr. Mayo to Wurm, 1825; Silber Papers, Box 4.

Letter from Mary Mayo to Dr. Rusk, 16th April 1830; Silber Papers, Box 4.

Five letters, Orpen to Pestalozzi, 1818-1823; Ms. Pest. 54a/272/1-5.

Letter from Pestalozzi to Wilberforce, 17th April 1823; Ms. Pest.
 3d/158/e.

Letter from Reiner to an old pupil. Undated; Silber Papers, Box 5.

Three letters, Synge to Pestalozzi, 1816-1818; Ms. Pest. 55a/365/1-3.

Letter from Lord de Vesci to Schmid, 19th February 1818; Ms. Pest. 912/87.

Letter from Wurm to Dr. Mayo, 25th May 1827; Silber Papers, Box 4.

C. F. Wurm's article on 'James Pierrepont Greaves', 9th May 1852; Silber Papers, Box 4.

2. NEWSPAPERS, PERIODICALS AND MAGAZINES

A. General Files

The Cambrian, 1831-1858.

The Carlisle Patriot, 1869.

Cheam School Journal, 1913-1969.

The Child, 1910.

Child Life: a kindergarten journal, 1891-1892, 1897, 1899-1901.

The Christian Monitor, 1827-1828.

The Christian Observer, 1819.

The Contrasting Magazine of Errors and Truths, 1827.

The Co-operative Magazine, 1828.

The Edinburgh Review, 1810-1840.

The Educational Magazine, 1835-1841.

The Educational Paper of the Home and Colonial School Society, Volumes 1 - 5, 1859-1863.

The Educational Record with the Proceedings of the British and Foreign School Society, 1854.

The Educational Times and Journal of the College of Preceptors, 1896.

The Friendly Visitor, 1833.

Hand and Eye, 1892-1902.

Home and Colonial School Society Occasional Paper, 1866.

The Intellectual Repository, 1819-1821.

The Morning Chronicle, 1824.

The New Age, Concordium Gazette and Temperance Advocate, 1843-1844.

The New Moral World, 1835-1842.

The Parents' Review, 1891.

The Quarterly Educational Magazine and Record of the Home and Colonial School Society, Volume 1—2, 1848-1849.

The Quarterly Review, 1850.

The Record, 1836-1906.

The Schoolmaster, 1881 and 1884.

Star in the East (Wisbeck), 1840.

The Student's Magazine; or, Cheam School Journal, Nos. 1 - 7, 1832-1842.

The Swansea District Directory, 1873-1882.

The Swansea and Glamorgan Herald, 1851-1853.

The Swansea Journal, 1843-1844.

The Times, 1810-1905.

Westminster Review, 1842 and 1846.

B. Articles - A Selected List

Ashwin, C.F., 'Pestalozzi and the Origins of Pedagogical Drawing', British Journal of Educational Studies, Volume XXIX, No. 2, June 1981.

Badham, C. D., 'Pestalozziana', Blackwood's Magazine, Volume LXVI, 1849.

Ball, N., 'Richard Dawes and the Teaching of Common Things', Educational Review, 17, 1964.

Ball, N., 'Practical Subjects in mid-Victorian Elementary Schools', History of Education, Volume 8, No. 2, June 1979.

Bartle, G. F., 'Early Applications By Women Candidates to the Borough Road Normal College', History of Education Society Bulletin, No. 18, Autumn 1976.

Bartley, G. C. T., 'The Training and Education of Pauper Children', Journal of the Society of Arts, Volume XVII, 1869.

Burstyn, J. N., 'Women's Education in England during the Nineteenth Century: A Review of the Literature', History of Education, Volume 6, No. 1, February 1977.

Butterworth, H., 'The Department of Science and Art (1853-1900) and the Development of Secondary Education', History of Education Society Bulletin, No. 6, Autumn 1970.

Carr-Gomm, F., 'A Very Old Cheam Boy', Cheam School Journal, 1952-1953.

Cohn, N., 'The Saint-Simonian Portent', Twentieth Century, Volume CLII, 1952.

Davies, B. L., 'Sir Hugh Owen and Education in Wales', The Transactions of the Honourable Society of Cymmrodorion, 1971.

Davies, B. L., 'British Schools in South Wales', National Library of Wales Journal, Volume XVIII, 1974.

Gordon, S. C., 'Studies at Queen's College, Harley Street, 1848-1868', British Journal of Educational Studies, Volume III, No. 2, May 1955.

Grabar, T.H., '"Scientific" Education and Richard Feverel', Victorian Studies, Volume XIV, No. 2, 1970.

Hargest, L., 'The Welsh Educational Alliance and the 1870 Elementary Education Act', Welsh History Review, Volume X, No. 2, 1980.

Heward, C. M., 'Industry, cleanliness and godliness', Studies in Science Education, 7, 1980.

Hickson, W. E., 'Music and the Committee of Council for Education', Westminster Review, Volume XXXVIII, January 1842.

Higham, C., 'The Rev. David Goyder's Work for Infant Education', New Church Magazine, Volume XXIV, No. 406, October 1915.

Hollingworth, B. C., 'Developments in English Teaching in Elementary Schools under the Revised Code, 1862-1888', Journal of Educational Administration and History, June 1972.

Jones, E. D., 'Journal of William Roberts (Nefydd) 1853-1862', National Library of Wales Journal, Volume X, 1958.

Jones, I., 'The Voluntary System at Work', The Transactions of the Honourable Society of Cymmrodorion, 1931-1932.

Layton, D., 'Science in the Schools: the first wave - a study of the influence of Richard Dawes 1793-1867', British Journal of Educational Studies, Volume XX, February 1972.

Leinster-Mackay, D., 'John Hullah, John Curwen and Sarah Glover: A Classic Case of "Whiggery" in the History of Musical Education', British Journal of Educational Studies, Volume XXIX, No. 2, June 1981.

McCann, P., 'Samuel Wilderspin and the Early Infant Schools', British Journal of Educational Studies, Volume XIV, No. 2, May 1966.

Manning, J., 'Charles Dickens and the Oswego System', Journal of the History of Ideas, Volume XVIII, 1957.

Marcham, A. J., 'Recent Interpretations of the Revised Code of Education, 1862', History of Education, Volume 8, No. 2, June 1979.

Marshall, J. J., 'David Manson, Schoolmaster in Belfast', Ulster Journal of Archaeology, Volume XIV, 1908.

Pankhurst, R. K. P., 'Saint-Simonism in England', Twentieth Century Volume CLII, 1952.

Pedersen, J. S., 'Some Victorian Headmistresses: A Conservative Tradition of Social Reform', Victorian Studies, Volume XXIV, No. 4, 1981.

Peterson, M. J., 'The Victorian Governess: Status Incongruence in Family and Society', Victorian Studies, Volume XIV, No. 1, 1970.

Roberts, A. F. B., 'A New View of the Infant School Movement', British Journal of Educational Studies, Volume XX, No. 2, 1972.

Roberts, A. F. B., 'The Development of Professionalism in the Early Stages of Education', British Journal of Educational Studies, Volume XXIV, No. 3, October 1976.

Roderick, G. W., and Stephens, M. D., 'Observations on the work of the Department of Science and Art', History of Education Society Bulletin, No. 10, Autumn 1972.

Romanes, G. J., 'Mental Differences between Men and Women', Nineteenth Century, Volume XXI, 1887.

Ross, A. M., 'Kay-Shuttleworth and the Training of Teachers For Pauper Schools', British Journal of Educational Studies, Volume XV, No. 3, 1967.

Sargant, W. L., 'On the Progress of Elementary Education', Journal of the Royal Statistical Society, 1867.

Seaborne, M., 'Early Theories of Teacher Education', British Journal of Educational Studies, Volume XXII, October 1974.

Silver, H., 'Aspects of Neglect: The Strange Case of Victorian Popular Education', Oxford Review of Education, Volume 3, No. 1, 1977.

Steedman, C., '"The Mother Made Conscious": The Historical Development of a Primary School Pedagogy', History Workshop Journal, 20, 1985.

Stephens, M. D., and Roderick, G. W., 'National Attitudes towards Scientific Education in Early Nineteenth-Century England', The Vocational Aspect of Education, Volume XXVI, No. 65, Autumn 1974.

Stephens, W. B., 'The Victorian Art Schools and Technical Education: A Case Study 1850-1889', Journal of Educational Administration and History, December 1969.

Taylor, I., 'Music and the Victorian Elementary School', History of Education Society Bulletin, No. 18, Autumn 1976.

Thomas, J. P., 'A Consideration of Technical Education in the Swansea District, 1850-1900', The Vocational Aspect of Education, Volume XXII, No. 83, December 1980.

Thompson, D., 'Science Teaching in Schools during the Second Half of the Nineteenth Century', School Science Review, 133, June 1956.

Tomaselli, S., 'The Enlightenment Debate on Women', History Workshop Journal, 20, 1985.

Tracey, G. W., 'The Origin and Growth of Scientific Instruction in Science Classes under the Science and Art Department', Durham Research Review, 21, 1968.

Turner, D. A., '1870: The State and the Infant School System', British Journal of Educational Studies, Volume XVIII, No. 2, June 1970.

Williams, P. C., 'Pestalozzi and John Syngé', Hermathena, 106, 1968.

3. PARLIAMENTARY AND OFFICIAL PUBLICATIONS

Third Report from the Select Committee appointed to inquire into the Education of the Lower Orders, 1818.

Report from the Select Committee on the State of Education with Minutes of Evidence, 1834.

Report from the Select Committee on Arts and Manufacturers, 1835.

Report from the Select Committee on Arts and Principles of Design, 1836.

Report from the Select Committee on the Education of the Poorer Classes in England and Wales, 1838.

Minutes and Reports of the Committee of Council on Education, 1840-1872.

Report of the Commissioners of Inquiry into the State of Education in Wales, 1847.

Report from the Select Committee on the School of Design, 1849.

First Report of the Department of Practical Art, 1852-1853.

First Report of the Department of Science and Art, 1854.

Fifth Report of the Department of Science and Art, 1857.

Report of the Commissioners appointed to inquire into the State of Popular Education, 1861.

Minute of the Committee of the Privy Council on Education establishing A Revised Code of Regulations, 1861.

Minute of the Committee of the Privy Council on Education establishing A Revised Code of Regulations, 1862.

Changes proposed to be Introduced into the Revised Code of the Committee of Council on Education as last printed, 1862.

Report from the Select Committee on Schools of Art, 1864.

Report of the Commissioners into the Revenues and Management of certain Colleges and Schools, 1864.

Fifteenth Report of the Department of Science and Art, 1867-1868.

Report of the Select Committee appointed to enquire into the provisions for giving Instructions in Theoretical and Applied Science to the Industrial classes, 1868.

Report of the Schools Inquiry Commission, 1868.

Minute of the Committee of the Privy Council establishing a New Code of Regulations, 1871.

New Code of Regulations, with an Appendix of New Articles, and of all Articles modified by the Committee of the Privy Council, 1872.

Minute of the Committee of Council on Education modifying certain provisions of the New Code, 1872.

Report of the Royal Commission on Scientific Instruction and the Advancement of Science, 1872-1875.

Report of the Royal Commissioners on Technical Instruction, 1882-1884.

Thirtieth Report of the Department of Science and Art, 1883.

Thirty-Fifth Report of the Department of Science and Art, 1888.

Reports from Commissioners, Inspectors and Others, Education Department, 1897.

4. THESES

Ashwin, C. F., 'The teaching of drawing in general education in German-speaking Europe 1800-1900', Ph.D., University of London, 1980.

Baldwin, W. T., 'The Development of Elementary Education in Preston from 1815 to 1902', M.Ed., University of Liverpool, 1970.

Butterworth, H., 'The development and influence of the Department of Science and Art 1853-1899', Ph.D., University of Sheffield, 1968.

Collins, G. P., 'The contribution of the British and Foreign School Society to the Kindergarten Movement From 1868 to 1907 with particular reference to Stockwell and Saffron Walden Training Colleges', Ph.D., C.N.A.A., 1984.

Cunningham, P. J., 'The Formation of the Schools of Design 1830-1850, with special reference to Manchester, Birmingham and Leeds', Ph.D., University of Leeds, 1979.

Duffy, W., 'The Early Years of the Liverpool Industrial School, Kirkdale', M.Ed., University of Liverpool, 1976.

Evans, W. G., 'The Voluntaryist Movement in South Wales 1843-1867', M.Ed., University of Cardiff, 1978.

Gray, E. M., 'The Educational Work of Emanuel von Fellenberg (1771-1844)', M.A., University of Belfast, 1952.

- Hipwell, M. E., 'A Survey of the Work of the Science Division of the Department of Science and Art 1853-1899', M.Ed., University of Nottingham, 1964.
- Humphreys, N., 'A Nation Divided: an analysis of attitudes and policies in Welsh elementary education, with special reference to Nonconformity in South Wales, 1870-1906', M.A., University of Keele, 1978.
- Illing, M. J., 'Pupil Teachers and the Emancipation of Women 1870-1905', M.Phil., University of London, 1978.
- Johnson, B. J., 'The development of English education 1856-1882, with special reference to the work of Robert Lowe', M.Ed., University of Durham, 1956.
- Kitteringham, G., 'Studies in the Popularisation of Science in England 1800-1830', Ph.D., University of Kent, 1981.
- Lilley, I., 'The Dissemination of Froebelian Doctrines and Methods in the English System of Elementary Education 1854-1914', M.A., University of London, 1963.
- Luckhurst, K. W., 'Some aspects of the history of the Society of Arts, London, 1754-1952', Ph.D., University of London, 1956.
- Marcham, A. J., 'The Revised Code of Education 1862', Ph.D., University of London, 1976.
- Parkinson, E., 'The Origins and Development of the Reformatory and Industrial Schools Movement to 1874', M.A., University of Leicester, 1976.
- Parsons, A. V., 'Education in the Salford District 1780-1870', M.Ed., University of Manchester, 1963.
- Phillips, C. J., 'The Life and Work of David Williams', Ph.D., University of London, 1951.
- Rees, L. M., 'The history of Bangor Normal College from its inception to 1908', M.A., University College of North Wales, Bangor, 1955.
- Ross, A. M., 'The Care and Education of Pauper Children in England and Wales 1834 to 1896', Ph.D., University of London, 1955.
- Trott, A. L., 'Church Schools in Swansea, 1800-1879', M.A., University of Swansea, 1941.
- Trott, A. L., 'A History of Elementary Education in Wales, 1847-1870', Ph.D., University of Aberystwyth, 1966.
- Warwick, D. W., 'Sir James Kay-Shuttleworth (1804-1877): the genesis, development and influence of his ideas on education and teaching', Ph.D., University of Lancaster, 1978.
- Weaver, J. A., 'The Development of Education in Swansea 1846-1902', M.A., University of Swansea, 1957.

Williams, P. C., 'Pestalozzi John, a study of the Life and Educational Work of John Synge', Ph.D., University of Dublin, 1966.

Wolfe, A. J., '"Domestic Union"; The Migrant Family in Early Nineteenth-Century England in the Light of J. H. Pestalozzi's Concept of Family Community', Ph.D., University of Dundee, 1982.

5. BOOKS AND PAMPHLETS

Primary Reference Works:

Abbott, J., The Teacher, revised by C. Mayo, London, 1834.

Anderson, K., 'Frances Mary Buss, the Founder as Headmistress 1850-1894' in The North London Collegiate School 1850-1950; Essays in Honour of the Centenary of the Frances Mary Buss Foundation, London, 1950.

Anderson, L. F., Pestalozzi, London, 1931.

Armytage, W. H. G., Heavens Below: Utopian Experiments in England 1560-1960, London, 1961.

Ashwin, C., Drawing and Education in German-Speaking Europe 1800-1900, Michigan, 1981.

Bamford, T. W., The Rise of the Public Schools, London, 1967.

Banks, O., Faces of Feminism, Oxford, 1981.

Barham, A.F., An Odd Medley of Literary Curiosities, Part II, London, 1845.

Barnard, H., Pestalozzi and Pestalozzianism, New York, 1859.

————— The Life, Educational Principles and Methods of J. H. Pestalozzi, New York, 1859.

Bartley, G. C. T., The Schools for the People, London, 1871.

Beer, M., (ed.), The Life of Robert Owen By Himself, London, 1920.

Bell, Q., The Schools of Design, London, 1963.

Biber, E., Three Hundred Maxims for the consideration of parents, London, 1827.

————— Henry Pestalozzi and His Plan of Education, London, 1831.

Boardman, J. H., The Educational Ideas of Froebel and Pestalozzi, London, 1905.

A Brief Account of the First Concordium, or Harmonious Industrial College, Ham, 1843.

Brown, S., A Comparative View of the Systems of Pestalozzi and Lancaster, New York, 1825.

- Buckholse, F., A Letter on the Method of Elementary Instruction Invented and Practised by Pestalozzi at his Institution at Yverdon, Yverdon, 1818.
- Campbell, A., (ed.), Letters and Extracts from the Ms. Writings of J. P. Greaves, London, 2 Volumes, 1843 and 1845.
- Carline, R., Draw They Must, London, 1968.
- Cavenagh, F. A., (ed.), Herbert Spencer on Education, Cambridge, 1932.
- Central Society of Education publications, London, 1837-1839.
- Clough, B. A., Memoir of Anne J. Clough, London, 1897.
- Cole, G. D. H., The Life of Robert Owen, London, 1925.
- Cole, M., Robert Owen of New Lanark, London, 1953.
- Compayré, G., Pestalozzi and Elementary Education, translated by Jago, R. P., London, 1907.
- Cooke, E., Our Art Teaching and Child Nature, London, 1895.
- Cremin, L. A., American Education: The National Experience 1783-1876, New York, 1980.
- Curwen, J. S., Memorials of John Curwen, London, 1882.
- Curwen, J. S., and Graham, J., The Tonic Sol-fa Jubilee, London, 1891.
- Digby, A., and Searby, P., Children, School and Society in Nineteenth-Century England, London, 1981.
- Downs, R. B., Heinrich Pestalozzi: Father of Modern Pedagogy, Boston, 1975.
- Evans, D., The Sunday Schools of Wales, London, 1883.
- Evans, L. W., Education in Industrial Wales 1700-1900, Cardiff, 1971.
- Fitch, J. G., Educational Aims and Methods, Cambridge, 1900.
- Fremantle, D., Recollections of Dean Fremantle, chiefly by himself, London, 1921.
- Froebel, F., Autobiography of Friedrich Froebel, translated by Michaelis, E. and Moore, H. K., London, 1886.
- National Froebel Union Examinations For Certificates. Reports of Examiners, Examination Papers, and Examination Results, London, 1888-1910.
- Syllabus of the Examination of the Joint Examination Board of the National Froebel Union, London, 1890.
- Goyder, D. G., A Manual of the System of Instruction Pursued at the Infant School, Meadow Street, Bristol, London, (fourth edition), 1826.
- A Treatise on the Management of Infant Schools, London, 1826.

- Swedenborg and his Mission, London, 1853.
- The Autobiography of a Phrenologist, London, 1857.
- Green, J. A., The Educational Ideas of Pestalozzi, London, 1905.
- with Collie, F. A., Pestalozzi's Educational Writings, London, 1912.
- Life and Work of Pestalozzi, London, 1913.
- Grylls, R. G., Queen's College, 1848-1948, London, 1948.
- Guimps, R. de, Pestalozzi, His Life and Work, London, 1890.
- Gutek, G. L., Pestalozzi and Education, New York, 1968.
- Harrison, J. F. C., Robert Owen and the Owenites in Britain and America, London, 1969.
- Hayward, F. H., The Educational Ideas of Pestalozzi and Froebel, London, 1904.
- Heafford, M., Pestalozzi, His Thought and its Relevance Today, London, 1967.
- Hints to Mothers on the Cultivation of the Minds of Children in the Spirit of Pestalozzi's Method - by a foreigner, three years resident at Yverdon, London, 1823.
- Holman, H., Pestalozzi: An Account of His Life and Work, London, 1908.
- Holyoake, G. J., A History of Co-operation, London, 1906.
- Home and Colonial Infant School Society -
- The First Annual Report of the Home and Colonial Infant School Society for the improvement and extension of the infant school system at Home and Abroad, and for the education of teachers, London, 1837.
- Admission Papers for Non-Government Branch, n.d.
- Brief Hints on the Formation and Management of Infant Schools, n.d.
- Useful Hints to Teachers, London, 1843.
- Information on Common Objects, London, 1845.
- Proceedings at the Half-Yearly Meeting of the Teachers Instructed at the Institution, July 1841, July 1846, January 1847, July 1847, January 1848, August 1861.
- Graduated Course of Instruction for Infant Schools and Nurseries. 2nd edition, London, 1847.

- Hints on the Establishment of Schools for Early Education, 5th edition, London, 1851.
- A Wednesday afternoon at the Home and Colonial Schools, 2nd edition, London, 1853.
- Annual Examination of the children May 2nd 1853, London, 1853.
- Annual Reports, London, 1837, 1853, 1854, 1870, 1876-1886, 1903, 1910.
- A Manual of Domestic Economy by W. B. Tegetmeier, London, 1853.
- A Short Account of the Institution for Training Teachers, and of the Schools connected with it, London, 1854.
- Annual Examination of the Model Schools, Monday May 1st, 1854, London, 1854.
- Manual for infant schools and nurseries. Prepared by Rebecca Sunter . . . under the direction of Miss Mayo . . . of the Society, London, 1856.
- Pestalozzi and his Principles, by E. Mayo, London, 1864.
- Admission Papers for Pupil Teachers, January 1871 and January 1873.
- Home and Colonial School Society Pamphlet, London, 1885.
- Hunziker, O., Pestalozzi und Fellenberg, Langensalza, 1897.
- Jedan, D., Johann Heinrich Pestalozzi and the Pestalozzian Method of Language Teaching, Stanford German Studies, Volume 16, Bern, 1981.
- Jones, M. E. M., A Brief Account of the Home and Colonial Training Institution, and of the Pestalozzian System, as taught and practised in its Schools, London, n.d.
- Kamm, J., How Different From Us: A Biography of Miss Buss and Miss Beale, London, 1958.
- Hope Deferred: Girls' Education in English History, London, 1965.
- Kaye, E., A History of Queen's College, London, 1848-1972, London, 1972.
- Klafki, W., Pestalozzi über seine Anstalt in Stans, Weinheim, 1971.
- Krüsi, H., Pestalozzi: His Life, Work and Influence, Cincinnati, 1875.
- Kühlemann, G., Pestalozzis Erziehungsinstitut in Burgdorf und Yverdon, Bern, 1972.
- Laqueur, T. W., Religion and Respectability: Sunday Schools and Working-Class Culture 1780-1850, New Haven, 1976.

Laspee, H. de, Calisthenics, or the elements of bodily culture on Pestalozzian principles, London, 1856.

Lawrence, E., (ed.), Friedrich Froebel and English Education, London, 1952.

Lawson, J., and Silver, H., A Social History of Education in England, London, 1973.

Layton, D., Science for the People: the origins of the school science curriculum in England, London, 1973.

Le Fanu, E. L., Life of Dr. Orpen, London, 1860.

McCann, P., and Young, F. A., Samuel Wilderspin and the Infant School Movement, Beckenham, 1982.

Macdonald, S., The History and Philosophy of Art Education, London, 1970.

McWilliams-Tullberg, R., Women at Cambridge, London, 1975.

Mack, E. C., Public Schools and British Opinion 1780-1860, London, 1938.

Mayo, C., Observations on the Establishment and Direction of Infant Schools, (being the substance of a lecture delivered at the Royal Institution, May 1826) London, 1827.

————— Memior of Pestalozzi, (ibid.), London, 1828.

————— A Lecture on the Life of Pestalozzi: with other papers, (ibid.), London, 1856.

————— and Mayo, E., Practical Remarks on Infant Education, for the use of schools and private families, London, 1837.

Mayo, C. H., Genealogical Account of the Mayo and Elton Families, Long Burton, Dorset, 1882.

Mayo, E., Lessons on Objects as given in a Pestalozzian School, London, 1831.

————— Lessons on Shells as given in a Pestalozzian School, London, 1832.

————— A selection of Hymns and Poetry for the use of infant schools and nurseries, London, 1838.

————— Model Lessons for Infant School Teachers and Nursery Governesses, London, 1838 (third edition 1849).

————— Religious Instruction in a graduated series of lessons for young children, London, 1845.

————— Pestalozzi and his Principles, London, 1864.

Newsome, D., Godliness and Good Learning, London, 1961.

- Orpen, C. E. H., The Pestalozzian Primer, Dublin, 1829.
- Payne, J., Pestalozzi. The Influence of His Principles and Practice on Elementary Education, London, 1875.
- Peel, E., Cheam School From 1645, Gloucester, 1974.
- Pestalozzi, J. H., The Address of Pestalozzi to the British Public, Yverdon, 1818.
- Leonard and Gertrude, translated by Channing, E., London, 1895.
- Letters on Early Education Addressed to J. P. Greaves, London, 1827.
- How Gertrude Teaches Her Children, translated by Holland, L. E., and Turner, F. C., London, 1894.
- Pestalozzi. Sämtliche Werke, (ed.), Seyffarth, L. W., Liegnitz, 1899-1902.
- Pestalozzi. Sämtliche Werke, (ed.), Buchenau, A., Spranger, E., Stettbacher, H., Berlin, Leipzig and Zürich, 1927——. (referred to as Werke throughout the thesis).
- Johann Heinrich Pestalozzi. Sämtliche Briefe, (ed.), Pestalozzianum and Zentralbibliothek, Zürich, 1946——.
- Pestalozzian Academy - A Short Account of the system pursued in the Pestalozzian Academy, South Lambeth, London, 1826.
- Pinloche, A., Pestalozzi and the Foundation of the Modern Elementary School, London, 1901.
- Podmore, F., Robert Owen, A Biography, London, 1906.
- Pollard, H. M., Pioneers of Popular Education 1760-1850, London, 1956.
- Pollard, S., and Salt, J., (eds.), Robert Owen: Prophet of the Poor, London, 1971.
- Pressland, A. J., Education and Social Welfare in Switzerland, London, 1927.
- Pullen, P. H., The Mother's Book, London, 1820.
- Pestalozzi's Intellectual or Intuitive Arithmetic, London, 1821.
- Quick, R. H., Essays on Educational Reformers, London, 1890.
- Raumer, K., The Life and System of Pestalozzi, translated by Tilleard, J., London, 1855.
- Reiner, C., Lessons on Number as given in a Pestalozzian School, Cheam, Surrey, London, 1831.

————— Lessons on Form; an introduction to geometry, as given in a Pestalozzian School, Cheam, Surrey, London, 1837.

Rich, R. W., The Training of Teachers in England and Wales during the Nineteenth Century, Cambridge, 1933.

Roberts, R. D., (ed.), Education in the Nineteenth Century, Cambridge, 1901.

Roderick, G. W., and Stephens, M. D., Scientific and Technical Education in Nineteenth Century England, Newton Abbot, 1972.

Rusk, R. R., A History of Infant Education, London, 1933.

Russell, J., The Students' Pestalozzi, (based on de Guimps' "L'Histoire De Pestalozzi"), London, 1888.

Sanborn, F. B., Bronson Alcott at Alcott House, England and Fruitlands, New England, 1842-1844, Cedar Rapids, Iowa, 1908.

Sanderson, M., Education, Economic Change and Society in England, 1780-1870, London, 1983.

Sesame House Association Leaflet, No. 4, London, July 1918.

Silber, K., Pestalozzi, The Man and his Work, London, 1960.

————— Pestalozzis Beziehungen zu England und Amerika, Zürich, 1963.

Silver, H., The Concept of Popular Education, London, 1965.

————— Robert Owen on Education, Cambridge, 1969.

Spencer, H., Education: Intellectual, Moral and Physical, London, 1861, (1878 edition).

Stewart, W. A. C., and McCann, W. P., The Educational Innovators, 1750-1880, London, 1967.

Synge, J. H., A Sketch of Pestalozzi's Intuitive System of Calculation, compiled and translated by an Irish Traveller, Dublin, 1815.

————— A Biographical Sketch of the Struggles of Pestalozzi to establish his system, compiled and translated chiefly from his own works, by an Irish Traveller, Dublin, 1815.

————— The Relations and Descriptions of Forms according to the principles of Pestalozzi, Dublin, 1817.

Tate, T., Treatise on the first principles of arithmetic after the method of Pestalozzi, London, 1845.

————— A System of Mental Arithmetic after the method of Pestalozzi for the use of teachers, London, 1857.

Walch, Sister M. R., Pestalozzi and the Pestalozzian Theory of Education, Washington, 1952.

Williams, W. G., A Brief History of the Hafod Copperworks' School. From its Foundation, (supplement to St. John's Parish Tidings), Swansea, 1905.

Wright, H. G., and Miss Wright, Retrospective Sketch of an Educative Attempt at Alcott House, Ham Common, Near Richmond, Surrey, London, 1840.

Secondary Reference Works:

Adamson, J. W., English Education 1760-1902, Cambridge, 1930.

Adkins, T., History of St. John's College, Battersea, London, 1906.

Alcott, B. A., Conversations with Children on the Gospels, Boston, 1836.

Allen, D. E., The Naturalist in Britain: A Social History, Harmondsworth, 1976.

Allen, W., The Life of William Allen, with selections from his correspondence, London, 1846.

Archer, F. R., Secondary Education in the Nineteenth Century, London, 1921.

Argles, M., From South Kensington to Robbins: An Account of English Technical and Scientific Education since 1851, London, 1964.

Ariès, P., Centuries of Childhood, London, 1962.

Armytage, W. H. G., Four Hundred Years of English Education, Cambridge, 1964.

————— The French Influence on English Education, London, 1968.

Babbage, C., Reflections on the Decline of Science in England, London, 1830.

Banks, J. and Banks, O., Feminism and Family Planning in Victorian England, Liverpool, 1964.

Barnard, H. C., Education and the French Revolution, Cambridge, 1969.

————— A History of English Education from 1760, London, 1971.

Battersea - Testimonials of Masters trained at the National Society's Institution, at Battersea, London, 1848.

Beale, D., Addresses to Teachers, London, 1909.

Beard, R. M., An Outline of Piaget's Developmental Psychology, London, 1969.

- Bell, Rev. A., The Madras School, or Elements of Tuition, London, 1808.
- Binns, H. B., A Century of Education, Being a Centenary History of the British and Foreign School Society, London, 1908.
- Birchenough, C., History of Elementary Education in England and Wales from 1800 to the Present Day, London, 1938.
- Bishop, T. J. H., and Wilkinson, R., Winchester and the Public School Elite, London, 1967.
- Bucchi, B. M., 'The Industrial Revolution in Switzerland 1700-1914', in Volume IV, Cipolla, C., (ed.), The Fontana Economic History of Europe, London, 1969.
- British and Foreign School Society Annual Reports, 1814-1906.
- Manual of the System of Primary Instruction pursued in the model schools of the B.F.S.S., London, 1834. .
- Brougham, H., Practical Observations upon the Education of the People, addressed to the working classes and their employers, London, 1825.
- Buisson, F., Dictionnaire de Pédagogie et d'Instruction Primaire, Volumes I and II, Paris, 1887.
- Burgess, H. J., and Welby, P. A., A Short History of the National Society 1811-1961, London, 1961.
- Burnett, J., (ed.), Destiny Obscure: Autobiographies of Childhood, Education and Family from the 1820s to the 1920s, London, 1982.
- Burstyn, J. N., Victorian Education and the Ideal of Womanhood, London, 1980.
- Butler, J., (ed.), Women's Work and Women's Culture, London, 1869.
- Byron, Lady N., What de Fellenberg has done for Education, London, 1839.
- Cardwell, D. S. L., The Organisation of Science in England, London, 1972.
- Carpenter, L., Principles of Education, Intellectual, Moral and Physical, London, 1820.
- Chalke, R. D., A Synthesis of Froebel and Herbart, London, 1912.
- Chandos, J., Boys Together, English Public Schools 1800-1864, Oxford, 1985.
- Childers, H. C. E., The Life and Correspondence of the Right Hon. H. C. E. Childers 1827-1896, London, 1901.
- Clark, A. K., A History of the Cheltenham Ladies' College 1853-1953, London, 1953.

Clarke, K., 'Public and Private Children: infant education in the 1820s and 1830s' in Steedman, C., Urwin, C., and Walkerdine, V., (eds.), Language, Gender and Childhood, London, 1985.

Cole, Sir H., Fifty Years of Public Work accounted for in his Deeds, Speeches and Writings, London, 1884.

College of Preceptors Calendar, London, 1896.

Collins, W. L., The Public Schools, London, 1867.

Comenius, J. A., School of Infancy, edited with an introduction and notes by Monroe, W. S., Boston, 1901.

Cornelius, B., An account of M. Jacotot's Method of Universal Instruction in a letter to E. N., Esq., from B. Cornelius, principal of the Pestalozzian School at Epsom, London, 1830.

Cousin, M. V., Report on the State of Public Instruction in Prussia, London, 1834.

————— Report on the State of Education in Holland as regards Schools for the Working Classes and for the Poor, London, 1838.

Crossley, J. T., and Martin, W., The Intellectual Calculator, or Manual of Practical Arithmetic, London, 1833.

Cruickshank, M., Church and State in English Education 1870 to the Present Day, London, 1964.

————— History of the Training of Teachers in Scotland, Edinburgh, 1970.

Crowther, M. A., The Workhouse System, 1834-1929: The History of an English Social Institution, London, 1981.

Cumming, I., Helvétius: His Life and Place in the History of Educational Thought, London, 1955.

Curtis, S. J., and Boulwood, M. E. A., An Introductory History of English Education since 1800, London, 1960.

————— A Short History of Educational Ideas, London, 1963.

Curwen, J., Sunday School Papers, London, 1849.

————— Sketches in Nassau, Baden, and Switzerland. Letters written during the summer of 1856, London, 1857.

Cust, L., A History of Eton College, London, 1899.

Dale, R., Esland, G., Fergusson, R., and Macdonald, M., (eds.), Education and the State, Volume II, Lewes, 1981.

Davies, E., The Higher Education of Women, London, 1866.

————— Thoughts on Some Questions Relating to Women 1860-1908, Cambridge, 1910.

- Deans, J., 'Swedenborg on Education' in Watson, F., (ed.), Encyclopaedia and Dictionary of Education, Volume IV, London, 1922.
- Delamont, S., and Duffin, L., (eds.), The Nineteenth Century Woman, Her Cultural and Physical World, London, 1978.
- Dewey, J., The School and Society, Chicago, 1900.
- Dobbs, A. E., Education and Social Movements 1700-1850, London, 1919.
- Edgeworth, R. L., Memoirs, Volume I, London, 1820.
- and Edgeworth, M., Practical Education, London, 1798.
- and Edgeworth, M., Essays on Professional Education, London, 1809.
- Education: Swansea 1870-1970. A Short History of Local Education During the Past One Hundred Years, Swansea, 1970.
- Fayle, J., The Spitalfields Genius. The Story of William Allen, London, 1884.
- Fletcher, S., Feminists and Bureaucrats, Cambridge, 1980.
- Fraser, D., (ed.), The New Poor Law in the Nineteenth Century, London, 1976.
- Fraser, Rev. W., Memoir of the Life of David Stow, London, 1868.
- Froebel, F., The Education of Man, translated by Hailmann, W. N., London, 1887.
- Garforth, F. W., (ed.), John Dewey: Selected Educational Writings, London, 1966.
- Garlick, A. H., Object Lessons for Standards I, II and III, London, 1901.
- Godwin, W., Enquiry concerning Political Justice and its Influence on Morals and Happiness, London, 1793.
- Goldhammer, H., The Kindergarten: A Guide to Froebel's Methods of Education, Gifts and Occupations, London, 1895.
- Gregg, P., A Social and Economic History of Britain 1760-1970, London, 1971.
- Grylls, R. G., William Godwin and his World, London, 1953.
- Gutek, G. L., Joseph Neef: The Americanization of Pestalozzianism, Alabama, 1978.
- Haines, G., Essays on German Influence upon English Education and Science 1850-1919, Connecticut, 1969.

Hamilton, E., Letters on Education, Bath, 1801.

————— Hints addressed to patrons and directors of schools, etc., London, 1815.

Hassell, J., Common Things and Elementary Science, London, n.d.

————— Familiar Objects of Everyday Life, London, 1891.

Higgins, P. L. H., An Exposition of the Principles on which the Infant System of Education is Conducted, London, 1826.

Hill, F., National Education: Its Present State and Prospects, London, 1836.

Holt, R. V., The Unitarian Contribution to Social Progress in England, London, 1938.

Hopkins, M. F. S., Learning through the Environment, London, 1968.

How, F. D., Six Great Schoolmasters, London, 1904.

Hudson, D., and Luckhurst, K. W., The Royal Society of Arts 1754-1954, London, 1954.

Infant School Society - Annual Report, London, 1825.

Ingle, R., and Jennings, A., Science in Schools; Which Way Now? Studies in Education, 8, University of London Institute of Education, London, 1981.

Johnson, R., '"Really Useful Knowledge": Radical Education and Working-Class Culture 1790-1848', in Clarke, J., Critcher, C., and Johnson, R., (eds.), Working Class Culture, Studies in History and Theory, London, 1979.

Jones, L. G. E., The Training of Teachers in England and Wales, London, 1924.

Jones, M. G., The Charity School Movement: A Study of Puritanism in Action, Cambridge, 1938.

Jonsson, I., Emanuel Swedenborg, New York, 1971.

Kay-Shuttleworth, Sir J., Four Periods of Public Education, London, 1862.

Kelly, T., George Birkbeck, Pioneer of Adult Education, Liverpool, 1957.

Kildare Place Society - Report of the Proceedings at a Meeting of the Society on the 24th February 1820, Dublin, 1820.

————— Report of the Committee to the annual meeting on the 2nd February 1826, Dublin, 1826.

————— Female Model School, Dublin, 1833.

- Lancaster, J., and Gaunt, J., Developments in Early Childhood Education, London, 1976.
- Leach, A. F., A History of Winchester College, London, 1899.
- Leach, R. A., Pauper children their education and training, London, 1890.
- Lewis, S., Topographical Dictionary of Wales, Volume II, London, 1843.
- Lilley, I. M., Friedrich Froebel: A Selection From His Writings, Cambridge, 1967.
- Low-Beer, A., (ed.), Herbert Spencer, London, 1969.
- Lowndes, G. A. N., The Silent Social Revolution, Oxford, 1937.
- McCann, P., (ed.), Popular Education and Socialization in the Nineteenth Century, London, 1977.
- Mack, E. C., Public Schools and British Opinion Since 1860, New York, 1941.
- Manning, E. A., Froebel and Infant Training, London, 1884.
- Marwick, W. H., The Life of Alexander Campbell, Glasgow, 1964.
- Maurice, F. D., Introductory Lectures Delivered at Queen's College, London, London, 1849.
- Maurice, M., (ed.), The Life of Frederick Denison Maurice Chiefly Told in his Own Letters, London, 1884.
- Milward, A., and Saul, S. B., The Economic Development of Continental Europe 1780-1870, London, 1973.
- Monroe, P., A Textbook of the History of Education, London, 1911.
- More, H., Strictures on the Modern System of Female Education, London, 1799.
- Murphy, J., The Religious Problem in English Education, Liverpool, 1959.
- Church, State and Schools in Britain 1800-1970, London, 1971.
- National School Society - Annual Reports 1818-1850.
- Neff, W. F., Victorian Working Women: An Historical Account and Literary Study of Women in British Industries and Professions 1832-1850, London, (first edition 1929), 1966.
- Nettel, R., Sing a Song of England: A Social History of Traditional Song, London, 1954.
- Nixon, E., Mary Wollstonecraft, Her Life and Times, London, 1971.

Norwich Diocesan Calendar, 1858-1861.

Oakley, A., and Mitchell, J., (eds.), The Rights and Wrongs of Women, Harmondsworth, 1976.

Orpen, G. H., The Orpen Family, Frome and London, 1930.

Owen, R. D., An Outline of the System of Education at New Lanark, Glasgow, 1824.

————— Threading my Way, twenty-seven Years of Autobiography, London, 1874.

Oxford University - Alumni Oxonienses, 1715-1886.

————— Calendar, 1813-1854.

Paine, T., The Rights of Man, London, 1791.

Palmer, R., Memorials, Part I, Family and Personal, 1766-1865, London, 1896.

Pankhurst, R. K. P., The Saint Simonians: Mill and Carlyle, London, 1957.

Parker, W., The second part of microscopical science under six series of subjects, Bath, 1866.

Payne, J., Curriculum of Modern Education, London, 1866.

————— The Importance of the Training of the Teacher, London, 1872.

————— Essay on the Culture of the Observing Powers of Children, London, 1872, edited by J. Payne.

————— True Foundation of Science Teaching, London, 1873.

————— Froebel and the Kindergarten System of Education, London, 1874.

————— The Science and Art of Education, London, 1880.

Payne, J. F., The Works of Joseph Payne, Volume II, Lectures on the History of Education, London, 1892.

Peabody, E., Record of a School, Boston, 1835.

Pearsall, R., Victorian Popular Music, London, 1973.

Percival, A. C., The English Miss Today and Yesterday, London, 1939.

Pole, T., Observations Relative to Infant Schools, Bristol, 1823.

Pownall, H., History of Epsom, London, 1825.

Purvis, J., 'Women and Teaching in the Nineteenth Century' in Dale, R., Esland, G., Fergusson, R., and MacDonald, M., (eds.), Education and the State, Volume II, Lewes, 1981.

- Raikes, E., Dorothea Beale of Cheltenham, London, 1908.
- Ricks, G., Object Lessons and How to Give Them, London, 1887.
- Ridley, A. E., Frances Mary Buss and her work for Education, London, 1895.
- Robson, A. H., The Education of Children Engaged in Industry in England 1833-1876, London, 1931.
- Ross, M. A., How to Train Young Eyes and Ears, Being a Manual of Object Lessons for Parents and Teachers, Edinburgh, 1863.
- Rousseau, J. J., Émile, London, (Everyman edition), 1911.
- Rowbotham, S., Women, Resistance and Revolution, Harmondsworth, 1972.
- Rusk, R. R., The Doctrines of the Great Educators, London, 1918.
- Russell, C., Science and Social Change 1700-1900, London, 1983.
- Salmon, D., and Hindshaw, W., Infant Schools: their History and Theory, London, 1904.
- Sandford, F., (ed.), Reports on Elementary Schools 1852-1882 by Matthew Arnold, London, 1889.
- Schmid, J., Die Elemente de Zeichnens nach Pestalozzischen Grundsätzen, Bern, 1809.
- Sears, C. E., Bronson Alcott's Fruitlands, Boston, 1915.
- Seeger, L. G., The "Unwed Mother" as a Symbol of Social Consciousness in the Writings of J. G. Schlosser, J. Möser and J. H. Pestalozzi, Bern, 1970.
- Selleck, R. J. W., The New Education, 1870-1914, London, 1968.
- Shepard, O., Pedlar's Progress, the Life of Bronson Alcott, London, 1938.
- Silver, H., English Education and the Radicals 1780-1850, London, 1975.
- Education as history, London, 1983.
- Silver, P., and Silver, H., The Education of the Poor: The History of a National School 1824-1974, London, 1974.
- Simon, B., Studies in the History of Education 1780-1870, London, 1960.
- Education and the Labour Movement 1870-1920, London, 1965.
- and Bradley, I., (eds.), The Victorian Public School, London, 1975.
- Sinclair, J., (ed.), Correspondence of the National Society with the Lords of the Treasury and with the Committee of Council on Education, London, 1839.

Smith, F., A History of English Elementary Education 1760-1902, London, 1931.

————— The Life and Work of Sir James Kay-Shuttleworth, (first edition 1923), Bath, 1974.

Spalding, T. A., The Work of the London School Board, London, 1900.

Stephen, B., Emily Davies and Girton College, London, 1927.

Stewart, W. A. C., Progressives and Radicals in English Education 1750-1970, London and Basingstoke, 1972.

Straight, Sir D., Schooldays at Harrow, London, 1867.

Sturt, M., The Education of the People: A History of Primary Education in England and Wales in the Nineteenth Century, London, 1967.

Sylvester, D. W., Robert Lowe and Education, Cambridge, 1974.

Taylor, B., Eve and the New Jerusalem: Socialism and Feminism in the Nineteenth Century, London, 1983.

Tegetmeier, W. B., A Manual of Domestic Economy, London, 1858.

Thompson, E. P., The Making of the English Working Class, London, 1963.

Thompson, W., Appeal of one half of the Human Race, Women, against the pretensions of the other half, Men, to retain them in political and thence in Civil and Domestic Slavery, London, 1825.

Tropp, A., The School Teachers: The Growth of the Teaching Profession in England and Wales from 1800, London, 1957.

Tuke, M. J., A History of Bedford College for Women 1849-1937, London, 1939.

Turner, D. M., History of Science Teaching in England, London, 1927.

Twining, L., Workhouses and Pauperism, London, 1898.

Vicinus, M., (ed.), Suffer and Be Still: Women in the Victorian Age, Indiana, 1972.

————— Independent Women: Work and Community for Single Women, 1850-1920, London, 1985.

Watts, D. G., Environmental Studies, London, 1969.

Webb, S., and B., English Poor Law History, Part II, London, 1927.

Whitbread, N., The Evolution of the Nursery-Infant School, London, 1972.

Widdowson, F., Going Up Into the Next Class: Women and Elementary Teacher Training, London, 1983.

- Wilderspin, S., The Importance of Educating the Infant Poor, London, 1823.
- Infant Education, London, (fourth edition), 1829.
- Early Discipline Illustrated; or, the Infant System Progressing and Successful, London, 1832.
- A System for the Education of the Young Applied to all the Faculties, London, 1840.
- Wilkinson, J. J. G., Emanuel Swedenborg. A Biographical Sketch, London, 1886.
- Williams, D., History of Wales, 1485-1931, London, 1934.
- Williams, G. A., The Welsh in their History, London, 1982.
- Wollstonecraft, M., A Vindication of the Rights of Women, London, 1792. (Pelican edition 1975).
- Wood, H. T., The History of the Royal Society of Arts, London, 1913.
- Woodcock, G., William Godwin: a Biographical Study, London, 1946.
- Wright., E. H., The Meaning of Rousseau, London, 1929.
- Youmans, E. A., Essay on the Culture of the Observing Powers of Children, edited and extended by J. Payne, London, 1872.
- Zimmern, A., The Renaissance of Girls' Education in England: A Record of Fifty Years' Progress, London, 1898.