# Towards a History of Classroom Operations\*

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### I. Introduction

In 1992 Harold Silver made the remark, 'So far as mass schooling is concerned, there is no social history of the classroom'. In response to this an ambitious book subtitled *The Social History of the Classroom* was published in 1999. Silver suggested that the history of the classroom might reveal the experiences of children in classrooms. But the latter book makes the point that it is difficult for us to reconstruct and relive the classrooms of the past. It is through giving careful attention to methodological problems (what kind of sources can be used to construct the substantive study of the classroom) and to theoretical problems (deconstructing the terms taken for granted and re-examining the conceptualization of the classroom) that the history of classroom can itself offer a new perspective to historical research of education. Insofar as the classroom is an indispensable element of modern schooling, it can clarify the characteristics of that schooling. But as we will see in the following, it is not even settled when and how the classroom in the modern sense originated. This article attempts to clarify the starting point and the meaning of the modern classroom as a means to a better understanding of the characteristics of modern schooling.

What is the criterion of the emergence of the classroom? There have been a number of suggestions in relation to this question. Philippe Ariès has seen the correspondence between age and school class as a critical factor, resulting from the following three aspects of school class history, viz: (1) the regulation of the annual cycle of promotion from one class to the next, (2) the habit of making all the pupils go through the complete series of classes, and (3) the requirements of a new system of teaching adapted to

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<sup>1</sup> Silver, H., 'Knowing and not knowing in the history of education', History of Education, 21-1 (1992), 104.

<sup>2</sup> Grosvenor, I., Lawn, M., & Rousmaniere, K., eds., Silences & Images: The Social History of the Classroom, (New York: Peter Lang Publishing, 1999).

<sup>3</sup> *The School I'd like* recently edited by Burke, C. and Grosvenor I. has presented such experiences vividly (London: Routledge Falmer, 2003).

<sup>4</sup> Silence & Images, Introduction, 8.

smaller, more homogeneous classes<sup>5</sup>. Here the term 'modern class' refers to a grade of the systematic curriculum that is segmented normally by age. Brian Simon has directed his attention to the practice of 'streaming', the origin of which, he claims, is to be found in the system of payment by results.<sup>6</sup>

David Hamilton has described the processes of the emergence and development of class teaching.<sup>7</sup> He has examined class teaching in relation to simultaneous instruction. According to Hamilton, the simultaneous interrogation and response that emerged in the 1830s was a crucial stage in the development of class teaching.

Following Hamilton, this paper also will examine the emergence and development of simultaneous instruction. Furthermore, it will attempt to investigate the meaning of simultaneous instruction and to clarify the characteristics of the modern classroom, focusing mainly on the theory and practice of popular schooling in nineteenth century Britain.

# II. The Emergence of Simultaneous Instruction

Hamilton points out that in the 1830s a new idea of 'simultaneous' teaching developed, which was understood as an improvement upon the individual and successive instruction of the monitorial system. It was promoted by the Committee of Council on Education.<sup>8</sup> Like Hamilton, earlier researchers have regarded the gallery lesson devised by David Stow in the 1830s as the starting point of systematic simultaneous instruction. For example, David Wardle observed that 'Only with the introduction of Robert [sic] Stow's 'simultaneous system' of teaching was a viable alternative to monitorial organization found'.<sup>9</sup>

The criteria of the emergence of simultaneous instruction in this sense were a personal relationship between children and a specially-trained teacher, and sympathetic inspection or moral observation by the teacher of the individual character of the pupils. The essential point of simultaneous instruction was that the teacher could morally influence the whole class of children in a direct manner. The simultaneous method is distinguished from the method of mutual instruction by arrangements which enable the children to receive instruction immediately from the master or one of his assistants, instead of from the most advanced of their fellow-pupils, from which practice the method of mutual instruction derives its name'. (original emphasis) So it was intimately connected with the problem of teacher

<sup>5</sup> Ariès, Ph., A Century of Childhood: A Social History of Family Life, translated by Baldick, R. (New York: Vintage Books, 1962), 239-240.

<sup>6</sup> Simon, B., 'Classification and streaming: A study of growing in English schools, 1860-1960', in; *Intelligence Psychology and Education: A Marxist Critique* (London: Lawrence and Wishart, 1971), 201-203.

<sup>7</sup> Hamilton, D., Towards a Theory of Schooling (London: The Falmer Press, 1989), Chap. 5.

<sup>8</sup> ibid., 103.

<sup>9</sup> Wardle, D., English Popular Education, 1780-1850 (London: Cambridge University Press, 1976), 88.

<sup>10</sup> Hunter, I., Culture and Government: The Emergence of Literary Education (London: Macmillan, 1988), 37-42. The following papers pointed out the same schemes. Jones, K. & Williamson, K., 'The birth of the schoolroom: A study of the transformation in the discursive condition of English popular education in the first-half of the nineteenth century' I & C. 6 (1979). Jones, D. 'The genealogy of the urban schoolteacher', in; Ball, S.J., ed., Foucault and Education, (London: Routledge, 1990). They are all influenced by Michel Foucault in the method of analysis.

<sup>11</sup> Minutes of the Committee of Council on Education Feb. 20th, 1840, House of Commons. Parliamentary Papers, vol.XL, 412.

training.

In this way simultaneous instruction was regarded as different from that of the monitorial system, which was the mechanical teaching method carried out by older pupils themselves. To be sure, commentators of the time, as is illustrated in the Minutes of the Committee of the Council on Education, endorsed the simultaneous method as a means of exposing the weaknesses of the individualised methods of the monitorial system. But we should not confuse a term embedded in a historical text with present-day uses of that term. If we analyse the characteristics of the modern classroom operation in terms of simultaneous instruction, we must go beyond the immediate connotations of the term 'simultaneous instruction' to grasp the inner meaning of the practice.

There is another point to which we must pay attention. This has to do with changes in the evaluation of simultaneous instruction.

Hamilton states that in the 1880s 'Simultaneous instruction lost the last remaining traces of its Enlightenment rationale and, in exchange, became increasingly tainted with the negative connotations that already clung to 'unison' instruction'. In other words, simultaneous instruction began to be criticized for its features of dealing with all the pupils in the same way. This is curious because the very method that had been recommended to promote personal relationship between teacher and pupils in place of the mechanical monitorial system was now being criticized for failing to deal with pupils individually. How are we to understand such fluctuations in the evaluation of simultaneous instruction?

A research paper written by William R. Johnson, which describes the process of the abandonment of the monitorial system in Baltimore classrooms, gives a good suggestion for this purpose. He writes, 'An analysis of why teachers favored simultaneous over monitorial recitation, then, illuminates classroom conditions in antebellum Baltimore'. In this way, he inquires into the range of the term 'simultaneous instruction'. Johnson points out that the reasons for the failure of the monitorial system were not only parent and teacher's dissatisfaction with the method but also fluctuations in the student body. In nineteenth-century Baltimore students were admitted to the schools on a weekly basis. This practice made successful implementation of the monitorial method impossible, because the monitorial system was based on the 'placement of students in groups of roughly equal ability'.

Johnson's study suggests that simultaneous instruction was a method that was not affected by differences in the students. He says, 'it (simultaneous recitation) need not take into account what the students knew nor even who might be present in the classroom that day'. According to Johnson, simultaneous instruction made each student anonymous and made it difficult for teachers to assess individual students. In a word, simultaneous instruction is in principle the opposite of personal care and moral influence by teacher.

We need to re-examine the periodization of pedagogic change and the real meaning related to simultaneous instruction. Apart from Hamilton, most of the studies that have regarded simultaneous

<sup>12</sup> Hamilton, op.cit., 111

<sup>13</sup> Johnson, W.R., "Chanting Choristers": simultaneous recitation in Baltimore's nineteenth-century primary schools', *History of Education Quarterly*, 34-1(1994).

<sup>14</sup> ibid., 3.

<sup>15</sup> ibid., 16.

instruction as an sympathetic and moral method are influenced by Michel Foucault. They have identified the personal care to individual students by a specially-trained teacher with the conception of pastoral care that Foucault has formulated.<sup>16</sup> The fact that this Foucauldian framework has been so taken for granted has made invisible what was practised in simultaneous instruction in the classroom. As Kevin J. Brehoney has indicated, it is necessary to consider closely 'what was happening in classrooms'.<sup>17</sup>

# III. Classroom Apparatus: An Index of the Operation of the Classroom

But it is difficult for historians of education to clarify educational practice in the classroom because of the lack of documents. It is obvious that we cannot grasp the past educational practices directly, but we can investigate it through some indices that represent the practices. One of these indices is the design of the classroom. Martin Lawn, referring to the work of Thomas A. Markus and Hamilton, has stated: 'The way a school is designed to work reflects social ideas about institutions and the education these institutions are created to further'.<sup>18</sup> It is important, Lawn points out, that 'Markus and Hamilton raise questions about the operation of the classroom that focus less on the teacher controlling the space and form, and more on being controlled by it'.<sup>19</sup> (emphasis added) Thus, while the educational practices of the past cannot be known directly, it is possible to consider the operation of the classroom through classroom design.

On February 20, 1840, the Committee of the Council on Education issued plans for the arrangement of classrooms. While it recommended some specific plans relating to the scale of schools, the Committee made general recommendations to apply across the range of schooling provision to the effect that desks and chairs should be placed opposite the master's desk and be arranged in parallel (See plate1). On August 7, 1844, the Letter respecting Grants for School Apparatus was issued by the Committee stating that the Committee would pay a part of the expense of providing parallel desks<sup>20</sup>:

For the present his Lordship will be disposed to recommend the Committee of Council to grant two-thirds of the expense of providing a school-room, with a group of three or four parallel desks, to contain from 20 to 40 children for simultaneous instruction.<sup>21</sup>

In any case in which the writing-desks are still affixed to the wall of the school, his Lordship will be glad to promote their removal by contribution two thirds of the cost of converting those desks and

<sup>16</sup> Peim, N., 'The history of the present: Towards a contemporary phenomenology of the school', *History of Education*, 30-2 (2001), 182. Hunter, I., *Rethinking the School: Subjectivity, Bureaucracy, Criticism*, (New York: St. Martin's Press, 1994), xiii.

<sup>17</sup> Brehony, K. J., 'Montessori, individual work and individuality in the elementary school classroom', *History of Education*, 29-2 (2000), 125.

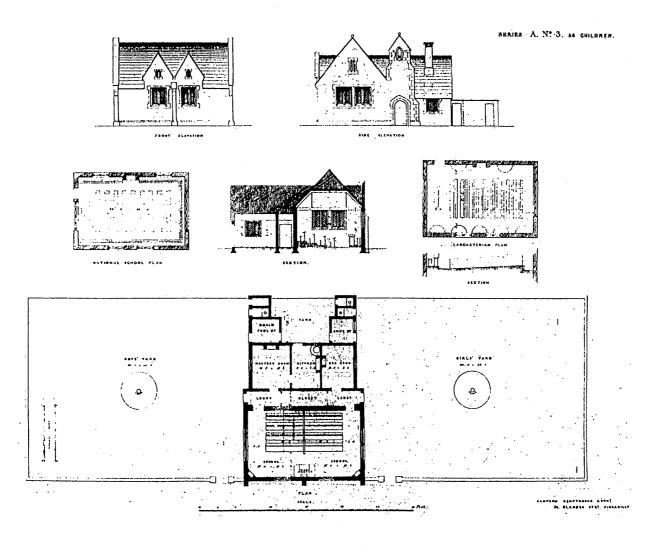
<sup>18</sup> Lawn, M., 'Designing teaching: the classroom as a technology', in; Grosvenor, I., Lawn, M., & Rousmaniere, K., eds., op.cit., 75. The referred Markus's work is 'Early nineteenth century school space and ideology', *Pedagogica Historica*, 30-11 (1996).

<sup>19</sup> ibid., 75-76.

<sup>20</sup> Pallister, R., 'Educational capital in the elementary school of the mid-nineteenth century', *History of Education*, 2-2 (1973), 154

<sup>21</sup> Minutes of the Committee of Council on Education 1841-1842, (London, 1842), 113.

PLATE 1. Minutes of the Committee of the Council of Education



their benches into a group of parallel desks and benches.<sup>22</sup>

Furthermore, in 1851 the Committee published the Memorandum Respecting the Organization of Schools in Parallel Groups of Benches and Desk.<sup>23</sup> It appears that the Committee stuck to parallel desks in order to enable simultaneous instruction to be easily implemented. But as Malcolm Seaborne has pointed out, this Memorandum was closely connected with the pupil-teacher system that was introduced at that time.<sup>24</sup> The Memorandum stated: 'where such assistants are maintained at the public expense, it becomes of increased importance to furnish them with all the mechanical appliances that have been

<sup>22</sup> ibid, 114.

<sup>23</sup> It is included in Minutes of the Committee of Council on Education, 1851-1852

<sup>24</sup> Seaborne, M., *The English School: Its Architecture and Organization 1370-1870*, (London: Routledge & Kegan Paul, 1971), 209.

found by experience to be the best calculated to give effect to their services'.<sup>25</sup> Pupil-teachers were not able to teach well without 'mechanical appliances' such as parallel desks.<sup>26</sup>

Though the Committee of the Council on Education recommended simultaneous instruction, they did not want completely to abandon the monitorial system. The Minutes of the Committee stated,

When the number of children increases beyond that which the master can conveniently instruct in successive classes, he requires assistance; and at this stage the mixed method of school management is adopted, in order to avoid the expense of providing teachers, whose training is completed, to take the charge of those classes which the master cannot always superintend.<sup>27</sup>

They intended to adopt the mixed system in which simultaneous instruction and the monitorial system coexisted. Furthermore, in Stow's school monitor lessons for some groups were practised in addition to the gallery lesson by the master. Seaborne describes Stow's school room as follows, 'In the main body of the room stand lesson-posts with pictures of objects attached to them. When not in the gallery, the children stood in circles around these posts, at each of which a monitor was stationed'. Actually the interior plate of Stow's Juvenile school shows the class circle instructed by monitors (See plate2). <sup>29</sup>

In the 1830s the institutionalization of the school system was accelerated. Because of conflict between different churches concerning popular education, the government was able to intervene in education only through the school apparatus and teacher training. The criticism of the monitorial system and the recommendation for simultaneous instruction enabling teachers to care for the individual child morally were in fact a campaign to establish institutional authority of teachers for the effective systematization of education<sup>30</sup>.

Considering the above factors, the difference between the monitorial system and Stow's simultaneous instruction was not so clear-cut as has sometimes been supposed<sup>31</sup>. In the light of this we need to

<sup>25</sup> Minutes 1851-1852, 78.

<sup>26</sup> Also in 1847, the Committee complied 'a list of books, maps, and diagrams specially adapted for the use of Elementary Schools', and 'grants were offered towards the purchase of articles selected from this list' (Bartley, G.C.T., The Schools for the People Containing the History, Development, and Present Working of Each Description of English Schools for the Industrial Poorer Classes, (London: Bell & Daldy, 1871), 38. The Committee of Council on Education stated such grants for the purchase of books and maps was 'consequent on the operation of the Minutes of August and December 1846' (emphasis added), 'Grants of Schools Books and Maps', Minutes of the Committee of Council on Education 1847-1848, vol.1, (London, 1848), xviii. 'The Minutes of August and December 1846' operated the introduction of pupil-teacher system.

<sup>27</sup> Minutes of the Committee of Council on Education, Feb. 20th, 1840, House of Commons Parliamentary Papers, vol.XL, 413.

<sup>28</sup> Seaborne, M., op.cit., 144.

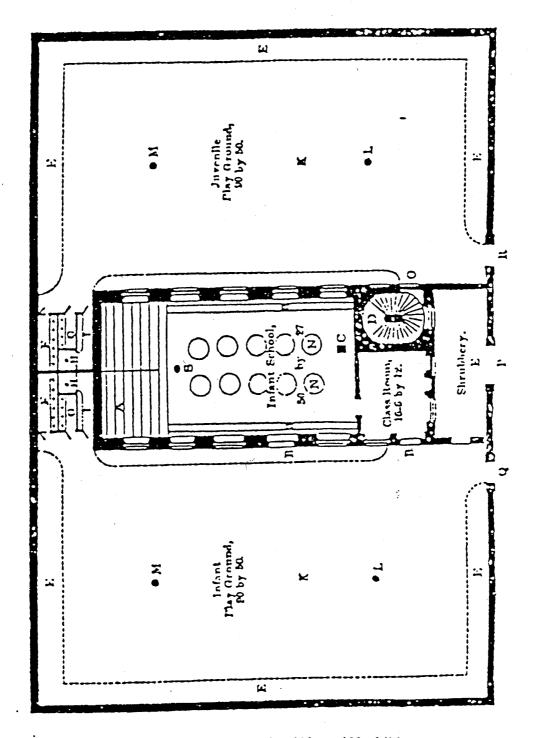
<sup>29</sup> Stow, D., The Training System Adopted in the Model Schools of the Glasgow Educational Society, 1st ed., 1835, Appendix.

<sup>30</sup> But as Dave Jones has pointed out, the authority that was needed in the discourse of educational policy and planning was not easily established in reality. Ironically, it was achieved by corporal punishment. Jones states, 'Teacher training and the architecture of the classroom required the teacher to be the focus of both authority and instruction, yet in order to sustain the silent attention of a class of 60 verminous, diseased, and half-starved scholars, the teachers could envisage no alternative to the application of a chilling discipline.' (Jones, D., op.cit., 70).

<sup>31</sup> Hunter has also pointed out that, 'The tactics of supervised freedom and the 'personal' relation between teacher and student do not represent a fundamental critique of monitorialism arising from its 'failure', but an alternative implementation of the pedagogical disciplines' (*Culture and Government*, 292).

PLATE 2. Stow, National Education, 1839

[Ground Plan of Plate No. 1.]



The above is the smallest suitable size for 120 or 150 children; but the following would be preferable, viz., School-room 56 to 60 feet, by 28 or 30 feet; Play-ground 120 to 130 feet, by 60 feet. Instead of placing the brass nails as marked N, see Page. 41.

scrutinize the characteristics of both systems.

# IV. The monitorial system and Stow's system

What is the difference between the monitorial system and Stow's system? In addition to the qualification of teachers, many previous researches have distinguished the monitorial system from Stow's system because of its individual and successive instruction. From the viewpoint of teaching method this seems to be justified. But the monitorial system was not just a teaching method. In contrast with the former school it required a totally new arrangement of pupils and school apparatus, and introduced technologies that the organizational structure made possible. In a phrase, it represented a new classroom operation.

It is clear that in the monitorial system pupils were interrogated by monitors and responded individually. But it was the pupils' simultaneous behaviour that made such interrogation and response possible. For example, between the writing lesson and reading lesson pupils had to move from their seat to the reading drafts following the monitor's command. Also during the lessons pupils had to act according to the monitor's short instructions.<sup>32</sup> Joseph Lancaster declared proudly that 'When a new scholar is first admitted, he is pleased with the uniformity, novelty, and simplicity of the motions made by the class he is in'.<sup>33</sup> Though the monitorial system was not simultaneous instruction, it depended on simultaneous behaviour facilitating individual teaching. It can be said to be the simultaneous method in the point of learning *pratique*.<sup>34</sup>

It seems that such simultaneous behaviour ordered by monitors mechanically should be differentiated from Stow's simultaneous interrogation and response. But Stow included, for example, the way of 'simultaneous rising up and sitting down in gallery' in the section 'Norma, or rule for conducting the training system'. Stow commented as follows.

To attain this object, the trainer commences the physical movements as follows – expressing the orders very distinctly, gently, and yet firmly:

No.1. Shoulders back – heads up – chins in, which orders must be immediately obeyed successively.

No.2. Feet in.

No.3. Heels close.

No.4. Toes out.

<sup>32</sup> The plate indicating the way in which pupils' behaviour followed the monitor's command is to be founed in Lawson, J., & Silver, H., *History of Education in England* (London: Methuen, 1973), 244-245.

<sup>33</sup> Lancaster, J., The British System of Education, 1810, reprinted in Seven Pamphlets (Bristol: Thoemmes Press, 1995), 40.

<sup>34</sup> This concept of *pratique* is influenced by Pierre Bourdieu. Bourdieu connects it closely with his concept of *habitus* in the following way: 'The habitus, the durably installed generative principle of regulated improvisations, produces practices which tend to reproduce the regularities immanent in the objective conditions of the production of their generative principles, while adjusting to the demands inscribed as objective potentialities in the situation, as defined by the cognitive and motivating structures making up the habitus.' (Bourdieu P., Translated by Nice, R., *Outline of the Theory of Practice* (London: Cambridge University Press, 1977), 78.

No.5. Hands on knees, not on the lap, but grasping the knees gently.<sup>35</sup>

Is there any difference between this series of brief instructions by the trainer and the mechanical instruction of the monitorial system? This mechanical command seems to be almost the same as the monitor's one. Also Stow said, 'The trainer should see that each of the motions be attended to by every child, also frequently repeating them day after day, until the habit of rising up and sitting down simultaneously, without confusion, or the slightest noise, be formed into a habit'. These physical activities were needed for pupils' concentration during lessons. This was also the 'learning *pratique*' that enabled lessons to be easily regulated.

In the light of the above it seems that there was little difference between the monitorial system and Stow's system. The differentiation of the two had significance in the contemporary context – that is, as many professional teachers as possible were needed. But from the viewpoint of classroom operation, the difference was less than it has sometimes been thought to be.

### V. Conclusion

Ian Hunter has said,

The emergence of a school system dedicated to the formation of self-reflective and self-regulating citizens may thus be approached as an outcome of the historical overlapping of two autonomous technologies of human existence: the pastoral guidance of Christian souls and the governmental training of national citizens.<sup>36</sup>

From this viewpoint Hunter has identified the starting point of modern schooling in the simultaneous instruction devised by Stow.

Like that of Hunter, many previous studies have taken the 1830s to be the turning point in the history of the modern elementary school.<sup>37</sup> Simultaneous instruction has been thought to be the most important factor in the transformation that came about in the 1830s because of the following three points:

- (1) It depended on the teacher's moral attention to individual pupils.
- (2) It needed specially-trained teachers.
- (3) It was differentiated from the individual and successive interrogation and response of the monitorial system.

This paper has attempted to disprove each point. Simultaneous instruction failed to take into account each pupil's individuality. The various aspects of classroom apparatus that seemed to facilitate simultaneous instruction were actually devised in order to dispense with specially-trained teachers. Also the mechanical monitorial system had the aspect of simultaneity in the same way as Stow's system.

<sup>35</sup> Stow, D., The Training System, Moral Training School and Normal Seminary for Preparing School-Trainers and Governesses, 10th ed., (London, 1854), 224-225.

<sup>36</sup> Hunter, Rethinking the School, 30-31.

<sup>37</sup> See note 10. Also in Japan some studies influenced by the articles referred to in note 10 have come to similar conclusions.

In the light of this, it now becomes clear that it was not the simultaneous instruction of the 1830s but the monitorial system that represented what was really the new classroom operation. In appearance it was just a mechanical teaching method, but it did not operate without segmentation by ability and each pupil's assent or acquiescence to the order.

The classification into small groups by ability was the first step towards the investigation of the individuality of each pupil. The monitorial system also involved various devices that enabled order to be maintained in the school – the arrangement of classroom apparatus, the minutely ruled timetable, the frequent rewarding and punishment, and so on. These were all devised in order to compensate for the low teaching ability of monitors. But such arrangements and organization continued to influence educational practice even when the monitorial system declined and plenty of professional teachers came to be trained. As Lawn has pointed out, the space and form of the classroom influence teachers. The arrangement and organization that the monitorial system devised has remained the basic framework of educational practice. The monitorial system established the model of modern classroom operation.

#### **Bibliography**

Minutes of the Committee of Council on Education Feb. 20th, 1840, *House of Commons. Parliamentary Papers*, vol.XL,

Minutes of the Committee of Council on Education 1841-1842, London, 1842, p.113

Minutes of the Committee of Council on Education 1847-1848, vol. I, London, 1848

Minutes of the Committee of Council on Education, 1851-1852

- Ariès, Ph., A Century of Childhood: A Social History of Family Life, translated by Baldick, R., (New York: Vintage Books, 1962).
- Bartley, G.C.T., The Schools for the People Containing the History, Development, and Present Working of Each Description of English Schools for the Industrial Poorer Classes, (London: Bell & Daldy, 1871).
- Bourdieu P., Translated by Nice, R., Outline of the Theory of Practice, (London: Cambridge University Press, 1977).
- Brehony, K. J., 'Montessori, individual work and individuality in the elementary school classroom', *History of Education*, 29-2 (2000).
- Burke, C. and Grosvenor I. ed., The School I'd like, (London: Routledge Falmer, 2003).
- Grosvenor, I., Lawn, M., & Rousmaniere, K., eds., Silences & Images: the Social History of the Classroom, (New York: Peter Lang Publishing, 1999).
- Hamilton, D., Towards a Theory of Schooling, (London: The Falmer Press, 1989).
- Hunter, I., Culture and Government: The Emergence of Literary Education, (London: Macmillan, 1988).

  —Rethinking the School: Subjectivity, Bureaucracy, Criticism, (New York, St. Martin's Press, 1994).
- Jones, D., 'The Genealogy of the Urban Schoolteacher', in; Ball, S.J., ed., *Foucault and Education*, (London: Routledge, 1990).
- Jones, K. & Williamson, K., 'The birth of the schoolroom: A study of the transformation in the discursive condition of English popular education in the first-half of the nineteenth century', I & C, 6 (1979).
- Johnson, W. R., "Chanting choristers": Simultaneous recitation in Baltimore's nineteenth-century primary schools', *History of Education Quarterly*, 34-1 (1994).
- Lancaster, J., *The British System of Education*, 1810, reprinted in; *Seven Pamphlets*, (Bristol: Thoemmes Press, 1995).

- Lawn, M., 'Designing teaching: the classroom as a technology', in; Grosvenor, I., Lawn, M., & Rousmaniere, K., eds., *Silences & Images: The Social History of the Classroom*, (New York: Peter Lang, 1999).
- Lawson, J., & Silver, H., History of Education in England, (London: Methuen, 1973).
- Markus, T, A, 'Early nineteenth century school space and ideology', *Pedagogica Historica*, 30-11 (1996).
- Pallister, R., 'Educational capital in the elementary school of the mid-nineteenth century', *History of Education*, 2-2 (1973).
- Peim, N., 'The history of the present: Towards a contemporary phenomenology of the school', *History of Education*, 30-2 (2001).
- Seaborne, M., *The English School: Its Architecture and Organization 1370-1870*, (London: Routledge & Kegan Paul, 1971).
- Silver, H., 'Knowing and not knowing in the history of education', History of Education, 21-1 (1992).
- Simon, B., 'Classification and streaming: A study of growing in English schools, 1860-1960', in; *Intelligence Psychology and Education: A Marxist Critique*, (London: Lawrence and Wishart, 1971).
- Stow, D., The Training System Adopted in the Model Schools of the Glasgow Educational Society, 1st ed., 1835.

  —National Education: Supplement to Moral Training and Training System, with Plans for Erecting and Fitting up Training Schools, 1839, Rep. 1971.
  - —The Training System, Moral Training School and Normal Seminary for Preparing School-Trainers and Governesses, 10th ed., (London, 1854).
- Wardle, D., English Popular Education, 1780-1850, (London: Cambridge University Press, 1976).