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VICTOR MERCANTE

(1870–1934)

*Inés Dussel*¹

Argentina, together with Uruguay and Chile, was one of the earliest Latin American countries to undergo modernization. A key factor in this process was the organization of a national education system designed to integrate the provincial population and (more importantly) the great mass of immigrants and bring them all up to the same standard. This was achieved by extending public primary education and introducing a standard system of teacher training.

The educational philosophy applied during this expansion was a system taught in teacher training establishments known as ‘normal schools’.² Advocates of the normal-school system combined positivist and Krausian philosophy with the principles of other contemporary movements in their teaching. They believed in education for all, science and progress. They also thought that teachers should play a fundamental role in showing children how to be future citizens. It was also believed that laws and effective methods could be deduced through the scientific study of education.³

Victor Mercante was one of the main proponents of these theories. A graduate of the Paraná Teaching-Training College, he became principal of two provincial teacher training colleges. Later, he became a researcher in educational psychology at the University of La Plata. He published numerous works on education, school textbooks and scientific papers on a new discipline referred to as *paedology*. He was an orthodox positivist who attempted to organize a scientific basis for education founded on psychological and biological principles and based on his observations of thousands of children and young people. He also made significant contributions to the curricular reform of syllabuses, programmes and texts. Towards the end of his life, his faith in positivist orthodoxy relegated him to a place on the sidelines of education: the last bastion of an outmoded movement.⁴

A fulfilled life⁵

Mercante’s life could well be seen as the fulfilment of the immigrant dream to ‘make it’ in America. Son of an Italian farmer who had fallen on hard times and a descendent of a aristocratic family from Liguria, his home life was always one of hardship. He was born in Merlo in the province of Buenos Aires, but returned to Italy with his family at the age of 7, only to return finally to his birthplace in 1880. Mercante treasured idealized memories of his life on the land: ‘I was taught in an atmosphere of life and purity, close to my parents, far from dangerous contact with the throng at school; my impressions of things and phenomena were always heightened and unforgettable.’⁶

While living in his home town, he attended a school run by Bernardo Moretti, who became his guide and mentor: he led by example and not by force, used the power of suggestion with children and maintained the kind of close relationship with the local authorities necessary to ensure the survival of a private school. Years later, when he became head of the mixed teacher-training college in Mercedes, Mercante was to remember this type of teaching.

Bernardo Moretti's influence was crucial when the time came for Mercante to decide what he would study. Moretti told him about the Paraná teacher-training college, where he would be able to improve his skill and obtain a qualification which would guarantee him work. The teacher convinced Mercante's father and prepared his pupil for the exam, with the result that Mercante won one of the scholarships awarded by the school.

Set up in 1870, the Paraná college was the first training college in the country and became a focus for teacher training for many years. It produced generations of teachers who taught according to the 'normal school' system: they went on to work in various regions of the country, bringing with them their obsession for the method. This was one of the most important centres responsible for the spread of positivism in Argentina.⁷

The contrast between the intellectual climate in Paraná and Mercante's previous experience must have been great. He recounts in his memoirs that he felt lonely when he arrived in Paraná. He had no friends, did not understand his lessons, was taught by a succession of strict and distant teachers. Despite all this, he adapted and was able to find friends and like-minded colleagues.

In 1890, after obtaining his teaching qualification, Mercante moved to the province of San Juan, on the border with Chile, where he became head of a teacher-training college. There, during four years of hard work, he played an active role within the provincial education authority and became a deputy in the provincial legislature. He also took part in public debates in the press and married a young pianist.

In 1894, the National Education Council made him head of the mixed teacher-training college in Mercedes, founded by Carlos Vergara, another important Argentinean educationalist, whom he succeeded. During his twelve years at the school, he began psychological research into childhood intelligence and more specifically the mathematical aptitude of children.

In 1906, he was given the task of organizing the education section of the Faculty of Law and Social Sciences of the University of La Plata, which was to be modelled on similar centres in Brussels and Geneva. This section eventually became the Faculty of Educational Science in 1915. He became its first Dean and also lectured in educational psychology and special methodology and practice until his retirement in 1920. During this period, he edited an educational journal published by the University: *Archivos de pedagogía y ciencias afines* [Archives of educational and related sciences] (1906–14). Later, the title was changed to *Archivos de ciencias de la educación* [Archives of educational science] (1915–20).

In addition to his university activities, he was an inspector of secondary and special education between 1915 and 1916. In this capacity, he advised the Ministry of Justice and Public Education on the reform of syllabuses. He played an active role in producing a proposal for overall reform in the education system: his idea was to create an intermediate teaching cycle lasting three years between primary and secondary school. The reform only lasted a few months because the first democratically elected government headed by Hipólito Yrigoyen decided to overturn the changes.

From 1920, Mercante busied himself with his activities as honorary professor at the National University of La Plata, lecturer and writer. He died in 1934 while crossing the Andes in Chile on his way back from the Second Panamerican Teachers' Congress.

Concern for the method

As already indicated, Mercante was an eminent proponent of the normal school teacher-training movement, which was responsible for re-organizing the national education system.⁸ He shared with his colleagues a concern for developing an effective teaching method which could

be used to educate the entire population. This was probably the reason which prompted him to take an interest in psychology as a scientific support for education.

Mercante saw method as a means of achieving his purpose: learning. He was the driving force behind a new form of education which he saw as ‘the art of making pupils understand, of securing and holding their attention spontaneously’.⁹ Methodology formed a significant part of his system of education and embraced common, psychologically-determined principles relating to the building, classroom, teacher, pupil, material and teaching organization, in addition to the special principles of each subject determined by educational psychology: teaching system, syllabus, lessons, timetables and strategies.

Although he based his method on scientific principles, Mercante believed that decisions should always be reviewed in the light of actual teaching requirements. In this and other ways, his method of education marked a departure from reductionism. He introduced a set of teaching laws, which formed his main teaching guidelines. In political and educational terms, the most important were as follows:

- *The law of universality*: Mercante stated that ‘everyone has the need and right to learn and the skill to learn, contrary to commonly held, outdated prejudices which claim that certain [social] classes should not be taught or educated’.¹⁰
- *The law of integrity*: education must be based on the psychological integrity of the pupil and the integrity of his or her knowledge.
- *The law of proportionality*: teaching must be organized on the basis of age, sex, requirements and the time available.
- *The law of the unity of knowledge*: different branches of teaching should complement one another and phenomena of different kinds may be analytically reduced to a single, general physical cause.
- *The law of methodical education*: research should be carried out to find out how the faculties become aware of various subjects, in order to adapt methods to individual types of faculty.
- *The law of independence*: the teacher must be aware of the permanent interests, passing inclinations, methods and opinions of his pupils and try to ensure that the pupils think and act in an independent manner.¹¹

These laws reflect some of the distinctive features of the teaching carried out in schools where the normal system was applied. Firstly, it was believed that education should be extended to a broad range of the population. Pupils who did not meet development parameters considered ‘normal’ would be educated in special schools. No pupils were excluded for reasons of sex or social origin. Distinctions were drawn at a later stage on the basis of intelligence tests.

Secondly, in order to ensure the principles were effective, general laws had to be laid down to ensure the efficacy of the method. These laws also involved local and specific adaptations to individual situations. Mercante believed that his science was universal in terms of method but national or regional in terms of content. He believed that each country or region would produce its own specific responses to the challenges of the age.

The third strand of Mercante’s thought was responsible for making his approach the core of a new education movement. Mercante argued that teaching methods should be adapted to the ages and characteristics of his pupils and to specific areas of knowledge. Incidentally, considerations of the emotional and intellectual life of pupils and a will to increase their independence were also guiding principles behind educational reform movements of the 1920s and 1930s—in which Mercante did not play a part. As we shall see, however, he had already laid the foundations for what came later.

Teaching reform: a psychological basis for education

Mercante believed that ‘we must know how one learns in order to know how to teach’.¹² This was the reason why he often repeated the importance of using research into psychology and educational psychology as a basis for educational methods.

Mercante’s interest in psychology dates back to his time at San Juan. As he examined problems of discipline and of children’s and adolescent’s behaviour, he decided to study ‘the phenomena of the mass or group of children and combine the influences of each factor to form a teaching method’. At that time, he was also reading the works of criminal anthropologists such as Cesare Lombroso and Sergi, and scientists such as Darwin, Haeckel and Morselli. From his readings and observations, he reached the conclusion that sense could be made of the apparent chaos of behaviour by considering the effect of inherited traits in conjunction with the influence of physical factors, home, society and school.

When teaching in Mercedes, he probed more deeply into these matters to find psychological foundations for his educational method.¹³ He even defined education as the ‘science of observing children and groups within environments suitable for the systematic analysis of actions’.¹⁴ His method of education was based to some extent on Herbart’s philosophy, because it was teacher-centred and prescriptive, but it was more clearly associated with psychological (not educational) movements of the time: the experimental psychology of Wundt and Münsterberg, Binet and Terman’s studies into intelligence and studies on children carried out by the North American Stanley Hall.¹⁵ Although his main concern was to measure intelligence, Mercante made great efforts to elucidate the many specific operations carried out by a subject during play and learning. His examination of mental states, affective and emotional life, dreams, psycho-analysis and sensation were at least as detailed as his analysis of supposedly intellectual operations, such as memory and image formation, or the parallels he drew with animal psychology.

Mercante believed that teachers had a sacred duty to study the spirit of their pupils, just as doctors study the body as part of their attempt to heal. They had to be ‘cultivators’ of childhood, able to understand and respect its idiosyncracies. Like any good positivist, he believed in nature and not nurture. He believed that a person’s fundamental mental structure was inherited: the success or failure of education depended on the trail blazed by fathers and grandfathers.¹⁶ ‘Interests are not created, they are developed and cultivated.’ The task of education was to develop one’s predetermined potential to the full. He also believed, like Terman, that IQ could be used to predict a pupil’s educational and even social future.¹⁷ For this reason, he introduced a strict system of grading his subjects according to learning ability.¹⁸

In spite of his comprehensive social leanings and the universality of his method, his belief in inherited psychological ability led him toward an authoritarian form of teaching. His psychological fatalism, together with his adherence to the jaundiced viewpoint of Sarmiento and Alberdi, who believed that the scum of mankind had washed up in Argentina instead of in a civilizing wave of immigration,¹⁹ led him to mistrust any natural tendency arising in pupils or teachers. He also mistrusted towns and crowds.

He gradually began to define education as a disciplinary action: ‘The task of the teacher is to recapitulate the past in order to prepare pupils for the present under favourable conditions while overcoming any deviation which may manifest itself.’²⁰ This tension between respecting and developing what one is given, but also channelling and correcting, is typical of positivist thinking, which tended to look on education as a form of social reform and control. The principle of inherited fitness was called on to justify the differences: ‘egalitarian desires give rise only to short-lived happiness’, which soon gives way to natural differences. A single, levelling form of education was unnatural and could only call a temporary halt to the

pluralistic, heterogeneous tendencies of individuals.²¹ As we shall see, however, his proposal for curricular reform not only maintained a common primary school but even extended this universal form of education to the middle school.

Paedology

Years later, Mercante took his research further and tried to create a new discipline which would embrace educational psychology. The field of paedology encompassed the study of the pupil: in other words the child in a learning situation. The Paedology Laboratory, opened in 1915 together with the National University of La Plata's Faculty of Educational Sciences, marked a partial break with Wundt in its quest for patterns rather than individuals and in its emphasis on education.²² It was able to call on the National University of La Plata's teaching college and its attached school. Mercante thought of these as 'experimental annexes' able to provide more than 3,000 subjects for study and research—the highest such figure in the world according to the author.

The laboratory contained a board for measuring arm span; anthropometric devices for measuring height; craniographs; dynamometers and respiration gauges for measuring lung capacity; instruments (mainly German) for measuring sensory spectra; as well as boards and tests for measuring memory, judgement and reasoning, vigilance and emotion. The laboratory made use of a form of psychology based on anatomy and physiology, in the shape of nineteenth-century craniology and phrenology, together with other more idiosyncratic and ambiguous studies centring around the individual's dynamic balance in his or her intellectual, volitive and emotional environment.²³ This combination paved the way for a new form of psychology:

An adolescent does not see or perceive things in the same way as a child [...] because his changed ego is given new dynamism by the avalanche of feelings and emotions which accompany the awakening of sexuality. He interprets things, the essence of infinite values, in terms of usefulness and not experience.²⁴

The laboratory was a very important educational centre during the early decades of the century. Here the works of Binet, Hall, Freud, Claparède and Piaget were read and introduced to Argentina. Mercante travelled to Rome and Geneva to meet colleagues. In fact, he kept up to date with the work of other centres and stayed in touch with the outside world to a surprising extent, even by today's standards. The laboratory went into a severe decline after Mercante's death, however, and never regained the vitality of its early days.²⁵

Contributions and limitations of educational psychology

Mercante's educational psychology brought changes. In the first place, the science of education was treated as a field in its own right, distinct from philosophy or sociology. Mercante was the driving force behind the creation of the country's first Faculty of Educational Science in 1915. He also organized the journals and libraries responsible for giving academic authority to the field of educational science.

Secondly, he provided a new source of curricular choice. Adolescent psychology became the fly in the ointment of the prevailing humanities-based curriculum. As we will see later on, many of Mercante's criticisms of secondary education were based on the psychology and health of pupils. He also introduced an anti-democratic note by legitimizing social differences as 'natural laws of heredity' on which educational streaming could be based.

In the third place, he also widened his range despite the psychological reductionism of his educational methods. Despite its innate qualities, paedology took the place of what Mercante referred to as ‘mindless psychology’. Traditional psychology was extremely limited in comparison with the wealth of mental activities Mercante began to reveal. When spring arrived in a traditional school and ‘life erupted into song, colours, scents, action and finery, the syllabus, timetable and teachers always conspired to ensure that the children were not aware of these facts and did not fall victim to such dangerous sensuality.’²⁶ But Mercante said:

Why should the classroom not be in the middle of a park, a meadow, a wood or a museum: any setting less dry and sombre than a classroom? Memory would be prompted by other stimuli.²⁷

A school by a river, in a wood, in a museum or in a laboratory, as had been set up by his teachers Pedro Scalabrini and Juan Gez in Paraná, would increase the pupils’ capacity for discrimination and sharpen their tactile and auditory memories: the important thing was to stimulate all the senses, and not overlook emotional factors.

This feeling of enrichment was restricted, however, by a deep-seated mistrust of contemporary culture. Mercante felt that this offered a ‘discouraging picture’: ‘with its cinemas, shop windows, electric trams and facile talk [...]. The phenomenon is aggravated by intoxication caused by nicotine.’²⁸

Mercante drew a clear line between cultural modernization and modernization in school. Schools could only adopt changes judged to be moral by the family, the school and the State. The cinema could be educational only if it supported the teaching of subjects or provided moral examples. His reform centred around a condemnation of contemporary culture and a consequent idealization of a pastoral lifestyle, as already mentioned.

Curricular reform in Argentina

We have already seen that Mercante played a role in various aspects of the education system throughout his life: schools, university, inspection, textbooks and books on educational theory. In all cases, his main thrust was to reform the classic, literary form of education which dominated the education system in Argentina and has continued to prevail throughout this century.²⁹

He took his first steps along this road while working in San Juan. Mercante proposed to build a modern school with an attached educational museum. An educational museum was an ever-growing collection of fossils, pictures and various classified objects able to provide a medium for ‘pursuing the aims of education spontaneously and pleasurably’.³⁰ As well as classifying the objects, the pupils also had to prepare descriptions, examine the items in context and find out about their history. They therefore learned about several subjects at the same time: botany, zoology, natural history, geography, literature, history and mathematics.

His second campaign was to reform the syllabus in the Mercedes Training College. He called on the results of his psychological research to propose a joint education system designed to embrace the overall psychological life of students and not merely their intellectual activity. The aims of the school were to be:

- general education of bodily organs through diet, clothing and grooming, physical exercise, hygiene, body posture and leisure activities;
- education of feelings by teaching discipline and moral education, but not religion;³¹
- education of the senses and of observation;
- education of reflective faculties;
- education of expressive faculties;

— education of practical faculties, through educational crafts.³²

The last point reflects one of the most significant new features of the primary curriculum and normal schooling, which had been traditionally opposed to the introduction of work. Mercante took inspiration from the educational *slöjd* or craft system, where pupils are taught a manual skill, because he believed that excessive emphasis on method mistakenly stifled his pupils' spontaneity.³³

He imagined that crafts would be taught in a workshop where children and young people could learn and invent new technological processes. These activities were to take up half a day and not be limited to two hours a week, as in Scandinavian schools. Educational craft would be a good antidote to the tendency of Argentinean schools to favour foreign ways: the crafts would be bound to have a strongly specialized flavour due to local needs for training farmers, blacksmiths, carpenters, shoemakers—and also the physicists, chemists and technicians the country needed. Mercante's option apparently spearheaded plans for change in Argentina's prevailing land-owning oligarchy which attached little importance to industry.

He produced his first textbooks for primary education at this early stage. Mercante based his ideas for textbooks on a new concept: he aimed to use 'a book of exercises, a book of problems, a book of tests designed to link the subjects and make one seamless, organic whole, for cultivating, developing and nurturing the intelligence'. He was against 'compendia which [concealed] what they set out to teach in the name of brevity',³⁴ and saw the reader as a brainless individual only capable of taking in the information provided by the book. He therefore wrote various books of his own to teach reading and writing, and others to teach arithmetic and geometry. These were full of pictures and written in language a child could understand. Despite his overall modernizing drive, Mercante remained a supporter of the phonetic method for learning how to read and write, even though this was already being questioned due to its over-generality and over-emphasis on comprehension.³⁵

Intermediate school

Mercante introduced his most significant reform for the Argentinean curriculum years later when, in 1915 and 1916, he was commissioned by the Ministry of Education to contribute to an ambitious project for educational reform. The aim was to reorganize the education system in order to create an 'intermediate school' between primary and secondary levels. This intermediate school was to last three years and included two subject cores: general literary and scientific subjects on the one hand, and vocational and technical teaching on the other (focused on technical drawing, with other options according to the pupils' sex). Students automatically went on to the next year after completing the course, provided that they achieved the required average mark in their exams. These reforms came into force for one year—1916—only to be overturned by the radical government in the following year.

Intermediate schools were to have been run in national schools, normal schools, industrial schools or trade schools under the control of the deputy head of the establishment. The teachers in charge would have been ordinary teachers, in other words teachers with the same qualifications as required for national schools.³⁶ Teachers in charge of courses and workshops would have to spend the entire school day within the establishment.

Mercante was one of the proponents of this reform and saw the intermediate school as a formative stage offering equal opportunities for all; not a crude form of utilitarianism as his detractors claimed. Two years after the reform had been overturned, Mercante noted that 'the aim of the intermediate school was not to produce workers but vocational skills for the multitude of services which require a manual discipline, thus implanting a love of manual craft in the soul.'³⁷

He answered his critics by claiming that his idea extended general education because children usually left school at the end of the fourth year, i.e. after primary education. At the same time, this new system offered families from 'modest households' the chance to receive a short education.

In an attempt to imagine a new way of organizing the system, Mercante abandoned his rigid psychological classifications in favour of common schooling. As a good normal school product, he embraced the idea that the school should act as the cement bonding all social sectors to produce a more egalitarian society: 'A worker would no longer be a dangerous semi-illiterate who knows how to read; young people embarking on higher education should no longer turn up their noses at the prospect of getting their hands dirty.'³⁸

Another interesting element of the proposed intermediate school was its implicit criticism of traditional education. In *La crisis de la pubertad* [The crisis of puberty], where he defended the 1916 reform, he said that 'one learns by doing; by combining thoughts with deeds, ideas with facts [...]. Inside every man there must be a worker, because a man can only be worth what he is able to produce and achieve.'³⁹ Skills must be cultivated in the exercise of active methods, 'guided by a work ethic, in workshops, places for experiment and observation'.⁴⁰ He also thought spontaneity to be important: 'the plan [...] forces nobody to go against their desires and inclinations'. He noted the importance of providing a series of practical apprenticeships which would prepare the pupil for useful, necessary activities, in view of 'the social environment in which we live'.⁴¹

This school would also be the most suitable establishment for adolescents, who were plunged into a huge developmental crisis. During this stage:

the body undergoes a crisis something like a metamorphosis as the adult is defined. The brain becomes less agile; the restraining action of the inhibitory centres is weakened and the person is driven by an uncontrollable need. This is not the ideal state for intense mental activity, but would be suited to a manual discipline.⁴¹

This interest in the problems of adolescence was something new for the time. As Puiggrós noted,⁴² Mercante sought to promote the corrective 'normalizing' sublimation of sexual instincts, in his own idiosyncratic interpretation of Freudian psychology. *La crisis de la pubertad* expounded his ideas of basing the curriculum on experimentally-obtained psychological statistics: his aim was to analyse the various aspects of adolescent life in order to propose the most effective educational measures for providing guidance.

Work and the modernization of the middle-school curriculum

As we have already indicated, the introduction of the most innovative feature of the intermediate school curriculum—manual work—could be justified by a need to make allowances for the natural urges of adolescence: its aim was to sublimate and discipline those urges. Mercante now had to decide which manual skills should be introduced. Vocational teaching accounted for nine out of the thirty hours of teaching per week. School-leavers were required to have mastered at least one manual skill. Some of these were very new, such as telecommunications, electricity, film-camera operation and industrial chemistry. The up-to-date nature of some of these skills is surprising, particularly when we recall that Mercante had previously written to condemn cinemas and electric trams.

Diversification of secondary studies

Vocations were finally decided at the age of 15 or 16. Mercante believed that this stage reflected innate tendencies which become apparent at a later stage, probably influenced by interaction with the environment. Some pupils would display manual tendencies; others would be more intellectual. The former could go on to industrial schools or, more specifically, the world of work, while the latter would go on to higher education. At this point, Mercante reverted to his original argument for streaming: it would be wasteful to promote an all-round education for everyone because ability is unevenly distributed.⁴⁴

He justified diversification by claiming that encyclopaedic knowledge was anachronistic in the face of scientific and technical advances. Limits needed to be set to prevent dispersion of knowledge by emphasizing specialization over and above a general basic training. Mercante also put forward another two criticisms of the current encyclopaedic manner of teaching: no subject was given precedence over another and it was detrimental to the health of the pupil to be bombarded with different subjects and teachers. In this sense, the creation of a core of compulsory subjects with other optional subjects was a considerable innovation for secondary schools. Mercante believed that this division would make it possible to organize content more effectively. It would be possible to establish clearly which subject pupils were best at, and help restrict the number of subjects the pupil could take each year, 'without impairing his health or the efficiency of his studies'.

This syllabus not only established a central core and optional subjects, but also offered flexibility because the subjects did not need to be taught in any particular order. Each pupil could take the courses when he or she wanted, 'provided one particular subject was not necessary to the understanding of another'.⁴⁵

This change did not imply a significant reorganization of subjects in the curriculum; new areas of knowledge were not introduced or grouped together in a different way.⁴⁶ The difference lay, as already stated, in the introduction of different branches, a system already introduced in France and the United Kingdom with baccalaureates in science or literature. As Mercante pointed out in other writings, the result was not a reduction but a redistribution of knowledge.

Reasons for failure

While the national school curriculum apparently acted to reinforce dependency on the university system, at least in terms of disciplinary structure, the intermediate school had the opposite effect. The fact that secondary education was cut into two parts, while maintaining institutional unity, certainly made headteachers more amenable to the reform.⁴⁷ The profile of such institutions had been completely altered: three general basic years, with workshops and a wide range of pupils; three further years at pre-university level for elite pupils. In his presentation, Mercante alluded to the similarity to high schools and colleges in the United States; but, in the latter case, both types of education did not co-exist within the same establishment.

It is interesting to contrast the failure of Mercante, and the group of headteachers who supported him, with the success achieved by similar movements in the United States. The main arguments against the former humanist curriculum, which ultimately contributed to its decline, were formulated by educational psychologists such as Stanley Hall and sociologists such as David Snedden, who was a supporter of efficient utilitarianism. This old curriculum was undermined by claims that it was unsuitable for developing individual student abilities and unable to meet the needs of contemporary society.

In Argentina, however, similar protests fell on deaf ears. Tedesco put the blame on the age-old struggle between the oligarchy and the middle class: the former attempted unsuccessfully to deviate from the traditional system of baccaureate and university, while the latter resisted institutional diversification. Puiggrós claimed that this occurred because the new political and social powers did not react with sufficient vigour to new, all-embracing ideas for political and educational reform—it was easier for them to maintain the educational status quo.

In my opinion, it is important to reconsider the social alliances established around Mercante's proposal in the light of the North American experience. In Argentina, the adoption of a new curricular code of the type proposed by Mercante formed part of a general utilitarian drive promoted only by certain economic and governmental factions. A triumphant unity between science and utilitarianism was achieved in the United States because the North-American system was organized around democratic principles of social unity in the name of progressivity and later the 'New Deal'. In Argentina, reform of the type proposed by Mercante involved an authoritarian education system. Science, as a symbol of progress, was associated with social discrimination and the exclusion of mass culture: the cinema, football and the tango. The modernization proposed by Mercante was flavoured with conservatism, which did not sit easily with the current wave of cultural and political reform.

The legacy of reform

The legacy of the intermediate school proposal has been contradictory. In the first place, although seen as an attempt to curtail primary education, the overall proposal actually involved extending common general education for all from four to seven years, and adding manual options.⁴⁸ This required general reorganization of the education system.

The inclusion of work experience and new technologies was, however, apparently a democratic extension of the curriculum. Due to the prevailing philosophy of mind/body dualism, however, manual activity tended to be viewed simply as a motor skill rather than as a new way of looking at the overall idea of separation between intellectual work and manual work. This came about because Mercante proposed few changes to the humanist division of the curriculum into subjects: the same subjects were simply redistributed and reorganized. Ultimately, dualism was upheld because of the way the institutes were organized. The intermediate school had its own institutional profile, quite distinct from that of the universities, yet secondary schools were completely dependent on the universities. These differences were countered by the fact that both institutions were governed by the same regulations and shared the same teaching personnel within a single establishment.

It is difficult to imagine what the consequences of this educational structure would have been if its proponents had been given their way. Perhaps the introduction of technical subjects would have paved the way for further changes and other areas would have been questioned; perhaps new pupils entering a middle school for the first time would have stayed in the same establishment for the three remaining years. All we can be certain of is that neither psychological science nor socio-economic requirements were ultimately used as criteria for curricular determination in the middle school. I feel that only the more reductionist features of Mercante's psychology have survived: his classification of subjects, and his normal school system methodology, which soon became dated. The rich scientific and technological vein underlying his proposals and his idea of voicing (albeit in psychological, subordinate terms) the problem of adolescents are principles which have undeservedly been neglected.

Notes

1. *Inés Dussel (Argentina)*
The author holds a degree in educational science from the University of Buenos Aires and an M.A. in education and society from the Facultad Latinoamericana de Ciencias Sociales (FLACSO). She is also holder of a research fellowship from the Deutscher Akademischer Austauschdienst, Georg-Eckert International Institute and University of Buenos Aires country exchange programme. She is a FLACSO researcher in the area of education and lectures in the Philosophy and Literature Department of Buenos Aires University.
2. J.C. Chavarría, *La escuela normal y la cultura argentina* [The normal school and Argentine culture], Buenos Aires, Publ. El Ateneo, 1945.
3. Adriana Puiggrós identifies two trends within the normal school system: those tending to maintain the norm, protect the status quo and the framework of society; and radical democratic trends, which advocated plurality plus educational and social democracy. A. Puiggrós, *Sujetos, disciplina y curriculum en los orígenes del sistema educativo argentino (1885-1916)* [Subjects, disciplines and curriculum in the origins of the Argentine education system], Buenos Aires, Galerna, 1990.
4. A. Korn, *Influencias filosóficas en la evolución nacional* [Philosophical influences in national evolution], 1949, in: *Obras completas*, Buenos Aires, Claridad; R. Soler, *El positivismo argentino* [Argentine positivism], Mexico, UNAM, 1979.
5. The title of Mercante's incomplete memoirs
6. V. Mercante, *Una vida realizada: mis memorias* [A fulfilled life: my memoirs], Buenos Aires, Ferrari Hnos., 1944, p. 32.
7. See L. Zea, *Dos etapas del pensamiento en Hispanoamérica: del Romanticismo al Positivism* [Two stages in Latin American thought: from romanticism to positivism], Mexico, El Colegio de México, 1949. J.C. Tedesco, *Educación y sociedad en Argentina (1880-1945)* [Education and society in Argentina (1880–1945)], Buenos Aires, Solar, 1986
8. This does not deny the contribution of the People's Education Societies or Educational Councils towards the growth of the system. The importance of the standardizing effect of the nationwide normal schools system on education should nevertheless be emphasized.
9. V. Mercante, *Metodología especial de la enseñanza primaria* [Primary school special method], Buenos Aires, Cabaut, 1916, first part, p. 3.
10. *Ibid.*, p. 12.
11. *Ibid.*, p. 12–21.
12. V. Mercante, *Maestros y educadores* [Teachers and educators], Buenos Aires, Gleizer, 1927, p. 9.
13. In 1900, Mercante noted, 'I felt the need for a more specific and convincing experimental form of education [...] I devoted myself to formal research, beginning with arithmetic', in: Prologue to *Una vida realizada*, op. cit., p. 10.
14. V. Mercante, *La paidología* [Paedology], Buenos Aires, Gleizer, 1927, p. 49.
15. On the latter, see S.J. Gould, *The mismeasure of man*, London, Penguin Books, 1981; H. Kliebard, *Forging the American curriculum*, New York, Routledge, 1992.
16. Mercante, *La paidología*. op. cit., p. 47.
17. *Ibid.*, p. 36.
18. See Puiggrós, *Los sujetos [...]*, op. cit.
19. See N. Botana, *La tradición republicana* [The republican tradition], Buenos Aires, Sudamericana, 1984.
20. V. Mercante, *Charlas pedagógicas* [Educational speeches], Buenos Aires, Gleizer, 1925, p. 100
21. Mercante, *La paidología*, op. cit., p. 129–34.
22. *Ibid.*, p. 213–15. The quest for series instead of coincidences had more in common with G. Stanley Hall's proposal for psychological research, based on the collection of information by lecturers than with that of Claparède, who was acknowledged as a source. Kliebard notes the criticisms that this form of data collection aroused in Wundt's supporters and in James and Dewey. The latter were concerned to overcome the confusion between psychology and education, and advocated a need to place psychological research on a professional footing, *ibid.*, chapter 3.
23. For the time being, craniology and phrenology had been ousted from the leading edge of scientific knowledge in the area by the 'psychology of intelligence' and psychoanalysis. Cf. S.J. Gould, op.cit., p. 146–49
24. V. Mercante, *La crisis de la pubertad* [The crisis of puberty], Buenos Aires, Peuser, 1918, p. 109.
25. This was closely associated with the decline of positivism and the scientific model it supported. See A. Korn, op. cit.; O. Terán, *Positivism y nación en la Argentina* [Positivism and nation in Argentina], Buenos Aires, Editorial Prontosur, 1987.

26. Mercante, *Charlas pedagógicas*, op. cit., p. 70.
27. Mercante, *La paidología*, op. cit., p. 92.
28. Mercante, *Charlas pedagógicas*, op. cit., p. 35–36.
29. An example of this predominance may be found in the persistence of the traditional baccalaureate system within the Argentinian middle school as opposed to vocational alternatives. See J.C. Tedesco, *Educación y sociedad [...]*, op. cit. It may also be observed in the persistence of the literary and scientific subject-based curriculum throughout this century.
30. V. Mercante, *Museos escolares argentinos y la escuela moderna* [Argentine school museums and the modern school], Buenos Aires, Juan Alsina Edición, 1893.
31. From the time he taught at the Paraná Teacher-Training College, Mercante was militantly anticlerical. He said in 1897: ‘In educational terms, the teaching of religion is to strike a two handed blow at all the progress hard won by modern methods, which proceeds through *observation and investigation* [. . .]. The teaching of the dogmas which lie at the base of theological religion would turn pupils into skilled hypocrites imbued with Jesuit teaching, because it makes them accustomed to saying what they do not mean and believing what they doubt’ (V. Mercante, *La educacion del niño y su instrucción (escuela científica)* [The education of the child and its instruction (scientific school)], Mercedes, Mingot y Ortiz Edición, 1897, p. 209).
32. Mercante, *La educacion del niño...*, op. cit., part III.
33. *Slöjdl* was a type of teaching activity introduced during the last century in Sweden by the educator Otto Salomon (1849–1907). Under his education system, pupils were taught wood and metal craft and lessons were adapted to the needs and intererests of each pupil. On this subject, see the profile published in *Prospects* in the series ‘Thinkers on education’ (vol. XXIV, no. 3/4, 1994).
34. Mercante, *Una vida realizada* [...], op. cit., p. 173 et seq.
35. See B. Braslavsky, *Cómo se enseñó a leer. I: desde 1810 hasta 1930* [How to teach reading: I: from 1810 to 1930], Buenos Aires, 1994, photocopy, p. 35.
36. C. Saavedra Lamas, *Reformas orgánicas en la enseñanza pública. Sus antecedentes y fundamentos* [Structural reforms in public education: antecedents and foundations], Buenos Aires, Imprenta Jacobo Peuser, 1916, vol. I, p. 43 et seq.
37. Mercante, *La crisis de la pubertad*, op. cit., p. 21.
38. Ibid.
39. Ibid, p. 23
40. Ibid, p. 34
41. Ibid, p. 33
42. Ibid, p. 24
43. Puiggrós, op. cit., p. 144 et seq.
44. Mercante, *La crisis de la pubertad*, op. cit., p. 246
45. Ibid, p. 36
46. The basic central core contained traditional humanist baccalaureate subjects (language and literature, history, geography, mathematics, modern languages, anatomy and physiology, logic and psychology) to which were added ethics. The scientific option in physics and mathematics contained three drawing courses as preparation for a career in engineering. The literary and philosophical option included three Latin courses and literature courses for the modern languages studied.
47. See Mercante’s foreword to *La crisis de la pubertad*, op. cit. and A. Puiggrós’, *Escuela, democracia y orden (1916-1943)* [School, democracy and order (1916–43)], Buenos Aires, Galerna, 1992, which collected the opinions of middle school headteachers in 1917.
48. Law 1420 of 1884 obliged children aged between 6 and 14 to attend school, but was enforced only in national schools. The education laws of many provinces limited compulsory education to four years. See. A. Puiggrós and Ossana, eds., *La educación en la provincias y territorias nacionales (1885-1945)* [Education in national provinces and territories (1885–1945)], Buenos Aires, Galerna, 1993.

Works by Victor Mercante

This list cannot claim to be exhaustive because no complete bibliographies are available. References were compiled by the author from the archives of the National Library, the Schoolteachers' Library, the National Congress Library and the IICE-UBA Library.

WORKS ON EDUCATIONAL MATTERS

- Museos escolares argentinos y la escuela moderna (educación práctica)* [Argentine school museums and the modern school], Buenos Aires, Juan A. Alsina, 1893.
- La educación del niño y su instrucción (escuela científica)* [The education of the child and its instruction (scientific school)], Mercedes, Mingot & Ortiz, 1897.
- Cultivo y desarrollo de la aptitud matemática del niño* [Cultivating and developing the child's mathematical ability]. Buenos Aires, Cabaut, 1905.
- Psicología de la aptitud matemática del niño* [Psychology of the child's mathematical ability]. Buenos Aires, Cabaut, 1906.
- Los estudiantes* [Students]. Paraná, Rabelais & Cía., 1908. Later edition with foreword and notes by Amaro Villanueva, Buenos Aires, Libr. Hachette, 1961.
- Metodología especial de la enseñanza primaria* [Primary school special method]. Buenos Aires, Cabaut, 1911 (2 vols.)
- Psicofisiología de la aptitud ortográfica y su cultivo* [Psycho-physiology of writing skill and its development]. La Plata, Biblioteca Pedagógica, 1911.
- La verbocromia: estudio de las facultades expresivas* [Verbochromia: a study of expressive abilities]. Buenos Aires, Cabaut, 1911.
- Florentine Ameghino: su vida y sus obras* [Florentine Ameghino: his life and works]. Buenos Aires, 1911.
- La crisis de la pubertad y sus consecuencias pedagógicas* [The crisis of puberty and its educational consequences]. Buenos Aires, Peuser, 1918.
- Charlas pedagógicas (1890–1920)* [Educational speeches (1890–1920)]. Buenos Aires, Gleizer, 1925.
- La paidología* [Paedology]. Buenos Aires, Gleizer, 1927.
- Maestros y educadores* [Teachers and educators]. Buenos Aires, Gleizer, 1927–30 (3 vols.)
- La instrucción pública en la República Argentina* [Public instruction in the Argentine Republic]. Buenos Aires, 1928.
- Una vida realizada: mis memorias* [A fulfilled life: my memoirs]. Buenos Aires, Ferrari Hnos., 1944.

TEXTBOOKS

- Problemas, interclases (Síntesis aritmética). Cuarto, quinto, sexto grado y primer año* [Problems, between classes (arithmetical synthesis). Fourth, fifth and sixth grade and first year]. Luján, La Hispano Argentina, 1901.
- Zoología* [Zoology]. Extracts from the works of Déléage, Verdun, Claus, James, etc. Buenos Aires, Cabaut, 1906.
- Ejercicios de historia argentina: atlas de croquis y gráficas* [Exercises in Argentine history: atlas of drawings and diagrams]. Buenos Aires, 1914.
- La lámina: libro de lectura para niños de 8 a 10 años* [The transparency: reading book for children aged 8 to 10]. Buenos Aires, 1919.
- La lectura: segundo libro* [Reading: second book]. Buenos Aires, 1920.
- El libro del maestro: enseñanza de la lectura en primer grado* [Teacher's book: teaching reading in the first grade]. Used in conjunction with *La cartilla*. La Plata, 1920.
- La cartilla: primer libro de lectura (marzo, abril, mayo y junio)* [The booklet: first reading book (March, April, May and June)]. La Plata, 1921.
- Leo: segundo libro de lectura para primer grado (julio, agosto, septiembre y octubre)* [I read: second reading book for the first grade (July, August, September and October)]. La Plata, 1921.
- La lectura* [Reading]. New, revised edition. Buenos Aires, 1926.
- Nociones de geografía argentina y americana para 3º y 4º grados* [Fundamentals of Argentine and American geography for the third and fourth grades]. Buenos Aires, Kapelusz, s/f.
- El abecé: primer libro de lectura* [ABC: first reading book]. Buenos Aires, 1931.

Guía metodológica de el abecé para la enseñanza de la lectura [Methodological guide to the ABC for the reading teacher]. Buenos Aires, Kapelusz, 1933.

Nuevo curso graduado de escritura americana: sistema spenceriano. Cuadernos: A, B, C, D, E, F [New graded course of American writing: Spencer system. Sections A, B, C, D, E, F]. Buenos Aires, Linari, 1937.

Curso graduado de escrituras americana. Sistema spenceriano. Cuadernos 1-7 [Graded course of American writing: Spencer system. Sections 1–7]. Buenos Aires, Kapelusz, 1939.

PLAYS AND LITERARY WORKS

Cuentos [Stories]. Buenos Aires, 1933

El paisaje musical [Musical countryside]. Buenos Aires, Ferrari Hnos., 1933.

Frenos (Parábola del genio). Damma lírico in quattro atti [Brakes (Parable of a genius): lyrical play in four acts]. Buenos Aires, Cabaut, 1918.

Lin-Calel. Tragedia lírica en un acto (dos cuadros) [Lin-Calel: lyrical tragedy in one act (two parts)]. Buenos Aires, 1941.