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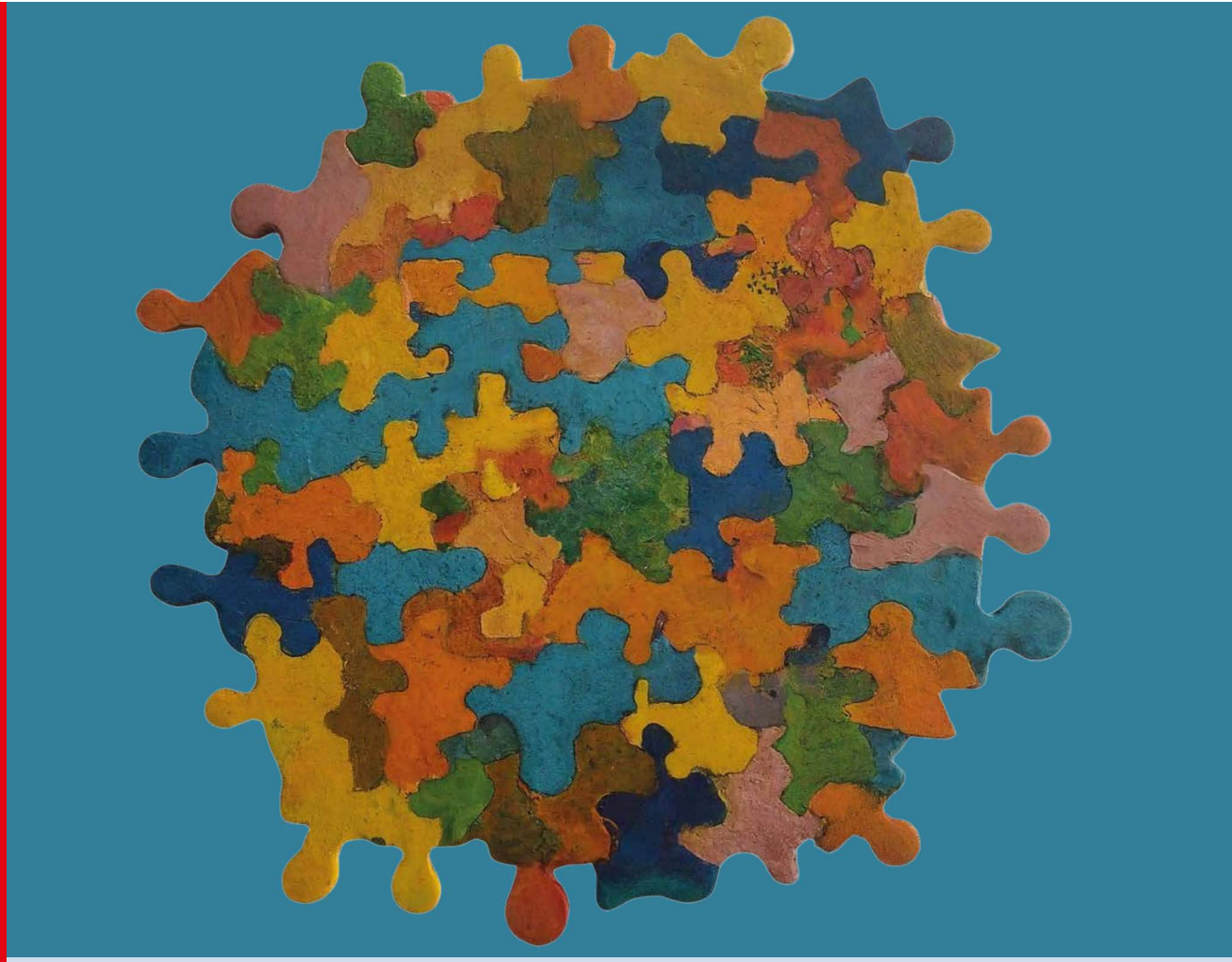

Vocational Education in European Regions

Lower Saxony and Lombardy in Comparison

DAAD
Deutscher Akademischer Austauschdienst
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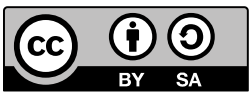

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Contents

Historical Perspectives on the vocational education and training systems at the national and local level

Evelina Scaglia

Abstract: The following contribution aims at reconstructing the historical roots of the conflict between the local and national levels in the vocational education and training system in Italy, which can be attributed to the changes in the school system outlined in Law 3725 of 13 November 1859 (known as the 'Casati Law') and have persisted since unification. Despite a few relatively insignificant changes, the system remained the same until 1962, when the first single middle school for 11- to 14-year-old pupils was introduced. At the local level, as in Lombardy, there are meaningful examples of institutions, such as the Pious Evening School in Bergamo Upper City and the Royal Technical Institute, that suffered from the uncertainties and difficulties associated with the hierarchical and centralist system of the Casati Law.

Keywords: 19th Century; History of Vocational Education and Training; Italian School System; School Dualism.

1 Invincible dualism

The Italian school system, as shaped by the Casati Law (1859), was characterised by its subdivision into three orders of studies (elementary, secondary and higher), which were structured in a hierarchical relationship with each other, due to the elitist and selective nature of secondary and, even more so, higher education. At this time, the law did not mention the vocational education and training (VET) schools provided by various local entities (e. g. religious bodies, professional associations, and private companies), which for decades had been operating in the central-northern areas for a heterogeneous population aged ten and over. Despite their strategic function for the economy of the newly-born Kingdom of Italy – a country characterised by the co-existence of under-development and growth, with a strong disparity between north and south, alongside high illiteracy rates – the VET schools were excluded from the national school system. This is because they were not considered proper schools due to their 'utilitarian' function of training for craft or industrial trades (Bonafede & Causarano, 2019, pp. 219–254).

A school system that was mainly concerned with the advanced education of the *elite* could not have guaranteed the foundations of generalised economic progress, which required the propulsive power of popular education, as evident in some areas of

Northern Italy, such as Lombardy, in the first decades of the 19th century. During this period, nascent industrialisation had found a valid ally in the early literacy offered by festive parochial elementary schools and in the special training provided by technical-professional schools. Only later, as economic development consolidated and expanded, did secondary and higher education become decisive for the growth of Italy (Zamagni, 1990, pp. 250–251).

The poor response of the Casati Law to addressing the educational needs of the working class reflected a strategic orientation toward 'popularising' elitist culture among the masses. It was also closely linked to the centralising principle of public education (Talamo, 1960, pp. 14–16). This choice, in the face of the heterogeneity of the political, economic, and scholastic systems in the pre-unitary states, accentuated the existing disparities, rather than seeking to reduce or even them out. The resistance that arose at the local level against King Savoia's intervention, worsened by the 'differences of regime and political feeling between the various parts of Italy', contributed to repressing any possible impulse for renewal (Castronovo, 2006, p. 4). The liberals in power were convinced that only a school, conceived as an 'apparatus' invested with a 'public and civil function', could justify a direct intervention of the state in promoting a particular field, namely that of education, which until then had been subject to a monopoly of the clergy, religious congregations, and local entities in the various territories (Morandini, 2001, pp. 9–10; Bertagna, 2008, pp. 25–26).

The public school, like the army, was conceived as an institution devoted first and foremost to realising the 'Italianisation' of the country (i. e. the construction of the linguistic, cultural, and value-based unity that was still lacking after 1861). From here, it was only a short step away to transforming the school into a device for the 'reproduction' of social inequalities. This was demonstrated by the oscillation between the primacy of the principle of selection and that of socialisation in the exercise of the scholastic function, which was particularly evident in the sphere of education for the 10- to 14-year-old age group, which saw the prioritisation of the classics, accorded to humanistic studies, remain unchallenged (Barbagli, 1974, pp. 18–21). Nothing could be further from a spirit of elevating the 'humble labours of the workshop' to a new civil dignity and freeing the workers from the subordinate conditions of their despised manual work. The latter objective was reflected in the animated demands of the Risorgimento debate, thanks to men such as Carlo Cattaneo, one of the staunchest supporters of simultaneous scientific, technological, and economic development (Lacaita, 1973, pp. 17–18). These recommendations were repeatedly expressed in Parliament by one of the 'founding fathers' of the united Italy, Camillo Benso, Earl of Cavour, who supported the promotion of popular and professional education to build a national education system in agreement, and not disagreement, with the needs of civil society.

In this way, the Casati Law showed its 'Achilles heel' – namely, its failure to overcome the opposition between liberal and scientific culture, on the one hand, and manual activity and instrumental knowledge on the other. Behind it, there was a twofold tendency, which was even stronger in the post-elementary schools, to consider school as a device for the selection, and not the promotion, of each single pupil, while the

adjective 'public' continued to be interpreted as a synonym for the 'state' (Bertagna, 2008, pp. 5–19). This explains why, although the previous Boncompagni Law (1848) provided for a channel of 'special' (VET) schools alongside the secondary schools, Article 272 of the Casati Law considered the newly established technical school to be an integral part of the elementary order, and thus culturally inferior, despite its task of 'giving young people who intend to devote themselves to certain careers in public service, industry, commerce and the conduct of agrarian affairs, the appropriate general and special culture' (Art. 272, Casati Law). Also, as part of this operation, the pre-existing constellation of practical and VET schools (e. g. in the commercial, industrial, agricultural, and nautical fields) was placed under the direct control of the Ministry of Agriculture, Industry, and Commerce according to Article 308 of the Casati Law, as they were considered residual schools not worthy of recognition in their formative role, but only for the provision of an utilitarian and empirical application of technical-practical knowledge. Nevertheless, as illustrated by Mario Alighiero Manacorda, many of these schools were the embodiment of the ideals expressed by the Mutual Aid Societies, as afforded by the Albertine Statute in 1848 (Manacorda, 1992, p. 202), to prepare skilled workers. This is not to mention the schools founded by religious orders, such as the Lasallians and the Salesians, which were considered institutions of the 'ignorant' in the hands of the clergy and thus excluded from any form of recognition by the public school system.

Through these choices, the Italian ruling class exhibited their lack of a 'vision of the country's real needs, tendencies and aptitudes', which led to the spread in public opinion of the prejudice that the 'VET schools' were merely 'simple charitable conservatories of assistance for children less privileged by fortune' and thereby left to the 'goodwill of private individuals, charitable works and local administrations', as they were not worthy of state intervention (Castelli, 1915, p. 41). The same discourse could also be extended to apprenticeships, which were common experiences for many children and young people from the lower classes, who were often forced to skip compulsory education for an early start in the workplace. Apprenticeships were promoted in traditional settings (e. g. artisan workshops and merchant stalls) and industrial environments (e. g. factories and spinning mills), as well as in pious works, orphanages, and houses of correction, through forms of learning the trade by imitation on the job. In the first post-unification years, about 13,329 pupils were involved in apprenticeships. In the following decades, the Salesians, the Giuseppini, the Pavonians, the Artigianelli, and the Brothers of the Christian Schools stood out for enriching these learning experiences by systematically offering adequate tools and knowledge to cope with the needs of the new capitalist industrial context. These approaches reflected the cultural sensitivities that were to flow into Pope Leo XIII's encyclical *Rerum Novarum* of 1891, which was issued in response to the spread of secular and materialist ideologies of socialist inspiration among the working masses (Lacaita, 1973, pp. 72–73).

Behind the conditions of 'indeterminacy' and 'silence' in which these formative opportunities for Italian preadolescents emerged, thanks to the Casati Law, it is possible to discern the 'elitist and hierarchical' inspiration of the entire Italian liberal (moderate and radical) world. Italy at this time was affected by a sort of 'social classism' that

also had among its effects an 'aristocratisation' of much of the bourgeoisie, who were ready to swell the ranks of the privileged few who had access to high school in the name of an assumed principle of 'social distinction' (Bourdieu & Passeron, 1972; Bertagna, 2013, pp. 62–63). Hence, the tendency emerged to use the term *zavorra* (ballast) to define all those young people – coming from the petite bourgeoisie and artisan classes – who were enrolled by their parents in grammar or technical school under the 'incautious aspiration' to climb the social ladder and reach future job positions in public administration. It was feared that this would turn the grammar school into a passepartout school, and the technical school into a general culture school with modest professional aims.

The 'inadequacy' with which the Casati Law tackled the problem of Italian VET can, at this point, be interpreted as a symptom of the 'incompleteness' of the bourgeois revolution in Italy and the 'impossibility' on the part of the school system to govern the tumultuous emergence of the popular classes on its own. Paradoxically, however, it represented the 'best coefficient' capable of prolonging the existing conditions, thereby initiating a condition of permanent reformism due to the 'inability' of the law itself to respond to the modernisation of Italian society in the central and northern regions. The Italian school system did not have up-to-date cultural tools capable of creating a real connection between education and the extension of its practical usefulness. The various attempts at change, often announced but almost never realised, went hand in hand with the difficulty of conceiving of 'less rigid and more open forms of schooling', but also with the refusal to make the most of what had already been done by non-state initiatives in terms of early literacy and professional training for workers; these latter forms of education were indispensable for breaking the vicious circle between unemployment/underemployment and the social and cultural lag of the country (Gonella, 1981, pp. 74–100).

The statistics were clear: the 1871 census, conducted ten years after the proclamation of the unification of Italy, still reported a worrying illiteracy rate of 72.96 % of both sexes among the population, with some negative peaks, especially in the most 'remote' regions of the South, such as Calabria and Lucania. The rate recorded after the first census in December 1861 had been 78 %, while in 1863, the schooling rate of the Italian population aged between 6 and 12 was 43 %, with a wide disparity between the 83 % recorded in Lombardy and the 14 % in Sicily (Vigo, 1971, p. 74). The fact that the Lombardy territories of the former Lombard-Venetian Kingdom had a higher literacy rate than other areas of Italy should be interpreted in light of what has already been stated above regarding the enduring presence of a network of parochial schools encouraged by Habsburg legislation and technical-professional schools for the training of workers – a heritage that the Casati Law was unable to exploit and extend to other regions.

Against this background, Dina Bertoni Jovine, a well-known communist scholar, did not hesitate to recognise that,

> "There was fear, in 1859, of accepting the lesson that came from Cattaneo, from Sacchi, from De Sanctis, there was fear of modern science and technology, fear of breaking away from the schemes of the Jesuit school, mistrust of the educated peasant who had been removed from superstition and submission, even if all these qualms ended up consecrat-

> ing, at a time when the most serious national problems should have been set exactly, with the mind turned to the future, such a delayed pace of progress as to give the impression of stasis." (Bertoni Jovine, 1959, p. 117)

2 Bergamo at the 'dawn' of Italian unity

In the context of regional imbalances and the wider gap between North and South at the dawn of Italian unification, the city of Bergamo – located in the Lombardy region – represented an interesting case study. This is because it was characterised by an incipient process of industrialisation, favoured by the early introduction of textile machinery and a climate that prioritised the modernisation of economic and social relations, the roots of which were to be found decades earlier. An increasing number of entrepreneurs were particularly inclined to hire literate workers, who were considered better able to master 'the most elementary factory services' (Belotti, 1959; Fumi, 1997, p. 319).

The specificity of the local context shows how in a country such as Italy, still 'poised between backwardness and development', the presence of economic, social, and intellectual groups committed to changing the foundations of public life was able to make a difference in terms of exercising a propulsive drive for innovation (Castronovo, 2006, p. 4). Among the region's strengths, there was the fact that in Bergamo Province – despite the presence of a predominantly mountainous territory – there had been a significant diversification of production, with intensive agriculture (especially silkworms) emerging in the plains at the south of Bergamo, the industrial production of textiles taking place in the Seriana and Brembana valleys, and metalworking having developed along the course of the Brembo River. While there were several entrepreneurs from German-speaking Switzerland who had contributed to setting up the first cotton mills (i. e. the Honegger family in Albino and the Legler family in Ponte S. Pietro-Brembate Sopra), it should be noted that the number of small and medium-sized entrepreneurs of indigenous origin grew steadily around the time of the unification of Italy, thereby demonstrating how the process of industrialisation was taking root in a capillary manner (Fumi, 1997, p. 347).

In addition to these factors, a widespread popular form of education played a significant role in fostering overall economic growth in the Bergamo area, thanks to the effective work carried out since the times of the Austro-Hungarian dominion by the festive elementary schools opened in the parishes. These schools were an investment of the scholastic reform that took place in the Theresius-Joseph Era, with the fundamental task of promoting the literacy of the people. This confirms what Vera Zamagni emphasised about the propulsive role of elementary education in the early stages of economic development (Zamagni, 1990, pp. 250–251). Now, however, Bergamo was moving towards a new phase of consolidating this development, due in large part to the opening of new production sectors (e. g. cement, artificial fertilisers, flour, etc.) and the sedimentation of an attentive awareness to the spread of technology, capitalist development, and, consequently, the promotion of an education that went beyond the elementary level (Vigo, 1971, p. 3).

One of the liveliest examples of a fruitful interaction between the transformation of productive structures and a broader cultural shift was the Società Industriale Bergamasca (Bergamo Industrial Society), which as early as 1859 had launched an evening school for drawing and the plastic arts open to workers, and from 1860 had added evening literacy courses for men, who mainly included farmers, vegetable growers, carpenters, bricklayers, and blacksmiths. At the local level, there were also other initiatives, such as the Drawing School at the Academy of Fine Arts, called 'Giacomo Carrara', in Bergamo and the Pious Evening School at the Seminarino in Bergamo's upper city, already active for decades, which were supplemented with linguistic, civil, and technical literacy courses for adults of both genders due to the commitment of the Catholic movement to improving rural areas (Valota, 1983; Fumi, 1997, p. 347). What should be emphasised is the emergence of an increasingly urgent need to initiate a process of systematising the technical and professional training of workers on the basis of the valorisation of 'manual knowledge'.

2.1 The Pious Evening School in Bergamo upper city

The Pious Evening School in Bergamo upper city was born in 1796 as part of the broader process of launching new experiences in the field of youth pastoral work, which was undertaken a few years earlier by the archpriest of Bergamo's cathedral, Luigi Mozzi, a former Jesuit priest. Father Mozzi was one of the many priests who, embodying the post-Tridentine model, placed assistance and education activities aimed at the poorest population at the centre of his apostolate, with peculiar attention being directed to youth education, along with a new sensitivity to social challenges (Bassi, 1823; Altini, 1884; Zanchi, 1988, p. 196). The school, which aimed at providing young male workers with a first exposure to linguistic and technical literacy, was suddenly closed in 1797, because of the proclamation of the Napoleonic Republic in the Bergamo area. It resumed its activities in 1814, on the initiative of two priests, Giuseppe Benaglio and Marco Celio dei Passi, when Bergamo had by then come under Habsburg rule. Both priests belonged to the Apostolic College of Bergamo and wanted to follow the original project of Father Luigi Mozzi. In their view, they knew best how to interpret the new role of the priest in both the Church and society in Lombardy in the aftermath of the Restoration, which confirmed the reunification of the former Venetian and Habsburg lands of Lombardy (Valsecchi, 1869; Dentella, 1930).

The lessons started in 1814 in a makeshift room, while the following year, the school was moved to another location near the church of St. Matthew. It was only after 1845 that a permanent location was found at the Seminarino in Tassis Street, a 16th-century cloister that had long been the seat of the diocesan seminary. From 1853, the young priests of the Apostolic College settled at the Seminarino at the behest of Giuseppe Benaglio, who continued, from there, the apostolic work of preaching and assisting the youth. Giuseppe Benaglio was responsible for the selection and training of suitable personnel to run and manage the Pious Evening School, according to a model like that of the Christian doctrine schools: there was a prefect, responsible for the management of the entire institution, who was assisted by coadjutors and other volunteers who provided their services free of charge (Ghidini, 1848, pp. 10–12).

At that time, the school comprised seven sections, located in as many classrooms, in which "the young workers were instructed in reading, writing, arithmetic and letters", according to the provisions of Chapter I Article II of the *Compendio delle regole* (Compendium of Rules), which were in line with the original inspiration dictated by Father Luigi Mozzi in 1796 (Altini, 1884, p. 78). In the first six sections, the pupils were initiated into the acquisition of elementary culture, learning the rudiments of reading, writing, spelling, and mental and written arithmetic, while the seventh section, called the 'ornament and architecture' section – introduced a few years later than the others – was dedicated exclusively to learning drawing. The teachers and supervisors of the Pious Institute were recommended to study Joseph Peitl's *Insegnamenti di metodica* (Teachings of Method), in the Italian translation by Francesco Cherubini, as well as Jean-Baptiste De La Salle's *Guida delle Scuole Cristiane* (Guide to the Christian Schools). It has also been reported that "every semester there were examinations and merit awards for the best students, consisting of money or clothing" (Ghidini, 1848, p. 17).

The Pious Evening School was attended, on average, by 250 pupils who lived within the walls of Bergamo upper city, which at the time was inhabited by about 7,000 people, but exceptions were made for those who lived near the ancient doors of S. Lorenzo and S. Alessandro. The boys, all male, were between seven and 20 years old; many of them had never attended elementary school or had attended it only occasionally. During the first enrolment at school, the presence of one of their parents was formally required, as was the custom at the time; for enrolment in subsequent years, this obligation was waived. Most of the pupils were of humble origins, and almost all were already engaged in manual work during the day. For this reason, the Pious Institute opened its doors, under the supervision of a clergyman appointed for this purpose, when 'the public bell, one hour before evening, announces the end of the workday' (Ghidini, 1848, p. 20). The lessons began at dusk, and their duration varied according to the seasons; in winter, it was about two hours, and in summer less, because the workday was longer due to the greater number of daylight hours available. The school year began on November 21, the feast of the Presentation of the Blessed Virgin Mary in the Temple, and ended on June 30 (Ghidini, 1848, p. 128).

Once the lessons were over, the boys returned to their homes organised in squads, depending on the district or quarter from which they came. One of the main formative goals of the Pious Evening School was to safeguard the religious and moral conduct of the pupils, who were firmly recommended to attend the Marian congregation (if it existed in their own parish), parish mass services, and Christian doctrine on all festive days, even after the school year had ended. Moreover, the school tried to initiate a process of moral regeneration of families through the creation of a close interrelationship between school and family, in which the 'instructor' was a kind of second father for his pupils (Ghidini, 1848, pp. 40–41).

The Pious Evening School at the Seminarino experienced a brief interruption of activities between 1859 and 1863, coinciding with the Second Italian War of Independence and the ensuing political upheavals that led to the unification of the Italian peninsula. When it reopened its doors, the school had to come to terms with a number of

changes that had taken place in the meantime, including the affirmation of the compulsory lower course of elementary schools for all children from six to eight years of age (under the Casati Law of 1859, which extended to the entire Kingdom of Italy) and the spread of the three-year royal technical schools, which had been set up as lower courses for access to technical institutes.

In that new historical and cultural context, its task as a popular school aimed at providing elementary education disappeared; it was left only as an evening drawing school 'with post-elementary intentions'. Therefore, only the old 'ornament and architecture' section continued to function, which was itself threatened by competition from other technical and professional training institutions that had sprung up in the meantime in the Bergamo area (Agazzi, 1989, p. 32).

2.2 First uncertain 'steps' of Bergamo's Royal Technical Institute

In 1860, Bergamo reached 44,765 inhabitants, out of a population of 357,220 in its province, thereby deserving recognition as a 'centre of significant industrial and commercial activity'. This designation made it suitable for the establishment of a Royal Technical Institute, as outlined by the conditions set forth in Articles 283 and 284 of the Casati Law. The proposal to open this kind of institute, 'at the mixed expense' of the local authorities and the state (with the possible contribution of the Royal Treasury up to half the amount of the teachers' salaries), was put forward thanks to the interest of the Provincial Council of Schools, the Chamber of Commerce and Industry, and the Municipal Representation (Zambetti, n. d., p. 4).

The control of the Royal Technical Institutes had passed, in the meantime, from the Ministry of Public Education to the Ministry of Agriculture, Industry, and Commerce (MAIC), entrusted under Royal Decree 347 of November 28, 1861, with the task of looking after institutions designed to increase agriculture and industry. Consequently, such a move opened up a rift of competition between the two ministries. It was therefore the MAIC that sent to Bergamo, with a dispatch dated June 30, 1862, the order and the programme of studies of the new institute, which included the administrative-commercial, physical-mathematical, and chemical sections, and not the agronomic section that was the subject of ministerial studies for improvement. After the inauguration took place on December 9, 1862 at the premises in the municipal building of the New Magistrate's Court in Bergamo lower city, the regular start was held the following January 23. The 16 'spacious, comfortable, and airy' rooms were attended in the first year by 41 students, of whom only 17 were full students, while four were paying auditors, and 20 were free auditors. Nine teachers delivered a total of 529 lessons (Zambetti, n. d., p. 5).

The users' area was potentially large, especially considering that this was the first Royal Technical Institute in the entire Province of Bergamo, in the territory of which as many as nine lower secondary technical schools were located, respectively, in Bergamo, Lovere, Treviglio, Martinengo, Clusone, and Celana in Caprino Bergamasco (Fumi, 1997, p. 347). In this context, it is interesting to see how the Royal Technical Institute exemplified the expression of genuine stakeholder activism from the local economic,

industrial, and commercial world, with these stakeholders being particularly attentive to the modernisation and development of education in the technical-professional field, while the state was perceived as distant from the real needs of the territory. In fact, as early as in the second school year, the need to revise the educational offerings began to be perceived, with the suggestion to make it more 'attractive', at least on paper. A proposal was made by headmaster Luigi Ottavio Ferrero – a member of the Italian Society of Natural Sciences – to the Provincial School Council of Bergamo on June 18, 1864 to open a high school course for the preparation of head-miners and head-masters to be employed in the local mining and forestry industry (Scaglia, 2019, p. 109).

From the very first lines of his report, Ferrero warned his interlocutors of the difficulties encountered thus far in managing technical education within the complex interplay between the centre and periphery of the Italian state. Ferrero agreed to propose a reduction of the sections of the Royal Institute of Bergamo down to two, which included the administrative-commercial and the industrial-agronomic ones, the latter of which were organised in such a way that young people could, in their third year, also be introduced to university studies, as was already the case for the physical-mathematical and chemical sections. The real novelty was the opening of a higher course in mining and metallurgical studies, lasting two years and accessible only to those who had graduated from the industrial agronomy section and were destined to train miners and workshop managers. This would have represented an asset to the Bergamo Institute, which aimed at training 'intelligent chiefs' in guiding the excavation of minerals and ancillary operations within the mines, and workshop chiefs called upon to manage the plant of mechanical and metallurgical companies (Ferrero, 1864, pp. 3–4). For Ferrero, the 'inertia' and 'inability to manage' mining and industrial enterprises on the part of local technicians and engineers, still in many cases overcome by foreign personnel, could no longer be tolerated. Only a cultural project, such as the one he hoped for, would have ensured the preparation of professional figures who could serve as intermediaries between the 'man of concept' and the 'labourer'; these professionals would be capable of knowing 'practically' how to work and, at the same time, be in possession of a greater knowledge, as they themselves were the "bearers of a medium position between science and applied force" (Ferrero, 1864, pp. 78). Equipped in this way, they would be able to undermine the predominance of 'empiricism' in most local industries, which very rarely saw internally trained workers at the helm, and also combat the "sinister prejudice against the social inferiority of the worker by bringing science closer to work" (Ministero di Agricoltura, Industria e Commercio, 1875, pp. XIX–XX).

Despite their broad articulation, Ferrero's proposals were only partially accepted by the MAIC, since in the meantime, at the national level, the Royal Technical Institutes had undergone significant changes in their organisation and programme, in connection with their transformation from 'provincial governmental technical institutes' to 'royal special VET schools'; there were now 26 possible specialisations, pursuant to the Royal Decree of August 13, 1864 (Lacaita, 2009, p. 14).

The Bergamo Institute was thus transformed into a Royal Special Institute of Mineralogy and Industrial Metallurgy. The Provincial Deputation immediately intervened

to issue a proposal of intermediation to the MAIC with respect to the established order, which concerned the possibility of also annexing a section of Accounting and Commerce to the Technical Institute, given the needs expressed in this regard by the local territory. The MAIC did not accept this, believing that a course of studies 'so disparate', or at any rate, 'not very homogeneous', could not be combined with a mining-metallurgical institute. The deputation did not give up, since under the same Royal Decree of August 13, 1864, it was allowed to make a request to have the technical institute's teachers work, duly paid, for other public courses designed for free learners. Thanks to this 'loophole', it was possible to open a Provincial Section of Accounting and Commerce, separate from the Royal Special Institute of Mineralogy and Industrial Metallurgy, but animated by its own teachers. Despite the regular start of classes, the MAIC did not recognise scholastic equalisation, so the new course of studies faced a challenging start due to the lack of a definitive set-up of the Institute (authorless, 1909, p. 5).

All those decisions showed a clear subordination – also in terms of economic investments – of the deliberations undertaken by the peripheral body to the directives coming from the centre. The course of studies offered by the Royal Technical Institute demonstrated its struggle to integrate itself within a socio-economic context that saw a fervent interest in technical education, almost entirely satisfied, however, by a constellation of training initiatives that could not be assimilated to the technical school-technical institute chain outlined by the Casati Law.

Two years after the start of the new system, the number of enrolments mirrored its difficulties: at the Royal Special Institute of Industrial Mineralogy and Metallurgy, there were four students, while at the Provincial Section of Accounting and Commerce, there were 16. What explains these low enrolment numbers? One of the plausible hypotheses concerned the lack of attractiveness of a 'high' technical-professional profile, such as that of a mining expert, accessible after completing studies in the industrial agronomy section, when most of the native labour force employed in the mines was still made up of simple workers, poorly paid and employed under unhealthy working conditions (there were numerous deaths due to silicosis in the Bergamo area in those decades; Scaglia, 2019, p. 113).

At this point, the Provincial Deputation felt that the project to open a certified School of Accounting, Administration, and Commerce could no longer be postponed, given the commercial and industrial nature of the local territory. The initiative obtained the support of the Municipality of Bergamo, the Provincial Council of Schools, the Institute's Teachers' Council, and the newly established local Board of Supervision, so much so that it was formally presented to the MAIC in September 1866, given the urgency of safeguarding the future fate of the institute (Tonelli, 1964, p. 23). This time, a favourable opinion was received from Rome, with the MAIC sending a note on the following November 3, containing the study plan for the new section. According to the Royal Decree of November 4, 1866, which provided for a balance between preparation for a wide range of professions and the provision of common fundamentals for all specialisations, the school took on the new name of the Royal Industrial and Professional Institute, with sections for mineralogy and metallurgy, as well as administration, com-

merce, and accounting. The cooperation of the local authorities and teaching staff proved indispensable in achieving the desired change, although once again, it was not enough. The enrolment of only five students in the entire three-year study period in the mineralogy and metallurgy section was a clear sign of a dilemma (authorless, 1909, p. 8).

Given the rather complicated situation, the ministry delegated Francesco Brioschi, one of the greatest exponents of 19th-century technical culture in Italy, Senator of the Kingdom, and member of the *Consiglio Superiore sopra l'Istruzione Industriale e Professionale* (Superior Council on Industrial and Vocational Education), to 'concretise' the desired reform (Lacaita & Fugazza, 2013, pp. 157–173). After all the necessary bureaucratic steps from the centre to the periphery, the new order was finally approved before the end of the calendar year and officially came into force with the Royal Decree of January 10, 1869. The solution identified by Brioschi was to immediately suppress the section of mineralogy and metallurgy and replace it with that of construction and mechanics, in the hope that the introduction of the professional profile of mechanical and construction experts would be the ideal choice to 'launch' the Bergamo Institute. The administration, commerce, and accounting section was retained, with slight modifications (Scaglia, 2019, p. 115).

Even in the latter case, the novelty introduced at the local level was short-lived due to the changes made to Royal Technical Institutes at the national level in terms of their organisation and culture, a sign of the difficulty for technical education in finding its own identity a decade after the implementation of the Casati Law in Italy. With the Royal Decree of March 30, 1872, and as a result of the reform project initiated by Minister Minghetti in August 1871, a sort of 'return to the past' was sanctioned. The increase in the length of studies to four years, with two years of general education of a propaedeutic nature followed by two years of special studies, did not help bridge the gap between school culture and work culture. On the contrary, it accentuated it, due to the hierarchisation created within the same Royal Technical Institutes between the physical-mathematical section (the only one open to higher education) and the sections for commerce, agronomy, mechanics, and construction (with no ladders to higher education; Tonelli, 1964, pp. 25–26).

Following the Minghetti reform, the Royal Technical Institutes in Italy found a more stable structure. After being moved to the Bergamo upper city in an old building overlooking the central place, formerly the town hall, the Bergamo Royal Technical Institute was dedicated in 1878 to the late King Victor Emmanuel II. Its definitive 'launch' took place in the 1885/1886 school year with the opening of the industrial section, thanks to which it gradually managed to gain a prominent role in the training of technicians to be employed in industries not only locally, but also regionally and nationally (Scaglia, 2019, p. 116).

Once again, the proposal was put forward by the periphery, starting from the Institute's local supervisory board and headmaster, Ottorino Luxardo, in December 1884, which suggested opening such a section as part of a broader project of interlinking the world of school and the world of work. Particularly shrewd was the decision to create a

fruitful collaboration with the Bergamo Industrial Society; this would entail that the new section of the institute be annexed to the technical and professional training courses for workers that had been offered for some time, with both being realised on the same premises and taking advantage of more extensive teaching material. The purchase by the Bergamo Industrial Society of Buildings (formerly the Zuppinger cotton mill), located in Pradello Street in Bergamo lower city, with free use granted to the industrial section of the technical institute, sanctioned the definitive convergence of all "the forces from which the industrial life of the city was expressed to a single end, uniting the initiatives in a new school body designed to address the diverse need of the community" (authorless, 1909, p. 16).

Behind this synergetic understanding lies the conviction that "industrial education succeeds whenever, between real industry and the school founded for it, there is an intimate bond, a continuous exchange of ideas, desires and favours" (Scaglia, 2019, p. 117). Such a condition is indispensable for building the foundations of a professionalism based on a close circularity of theory and practice, which is itself capable of overcoming the dichotomy between general and specific skills and competences. The strong attendance numbers in the following years and the awards obtained by the Royal Technical Institute in the *fin de siècle* transition testified to the effectiveness of this choice.

3 Summary and outlook

It is worth concluding this contribution with the words of Dario Turri, a cotton entrepreneur who served as the president of the Royal Technical Institute's Supervisory Board in 1906. During the reorganisation of Italian VET into schools of arts and crafts initiated by Minister Francesco Cocco Ortu, Turri expressed his support for a model of a 'workshop school or school of things'. His intent was to refer to the experiences of Krefeld, Lyon, Zurich, and Vienna, but above all to the German *Gewerbeschule*, which was very similar to the school opened by the *Società di incoraggiamento d'arti e mestieri* (Society of Encouragement for Arts and Crafts) in Milan, with the hope of one day being able to open schools "to all classes of citizens, that is, to all intelligences and to all courageous vocations" (Turri, 1906, pp. 13–14). This is because the Casati Law had not been able to respond to the needs of the working people and the demands of industry due to a state-type conception of public education that did not respect and promote local autonomies.

Both the experiences of the Pious Evening School in Bergamo upper city and the Royal Technical Institute in Bergamo have demonstrated Lombardy's pioneering role in Italian vocational education and professional training since the 19th century, a role it still holds today (as highlighted in Francesco Magni and Virginia Capriotti's contribution in this volume). Furthermore, the region has served as a laboratory for innovation and future perspectives on the VET system, as explained in Giada Ragone's paper in the same volume.

References

Agazzi, C. (1989). *Ogni bene. Scritti minimi di don Carlo Agazzi da "Il Seminarino" 1933–1964, notiziario periodico dell'oratorio interparrocchiale di Bergamo Alta*. Litostampa Istituto Grafico.

Altini, F. (1884). *Vita del p. Luigi Mozzi d. C. d.G. già arciprete della Cattedrale di Bergamo descritta dal p. Francesco Altini della medesima compagnia*. Tipografia S. Alessandro.

Authorless. (1909). *Cenni storici sull'ordinamento del Regio Istituto Tecnico V. E. II dalla sua fondazione ad oggi, con la Statistica dei licenziati dalla Sezione Industriale e dalla Annessa Scuola Biennale di Meccanica, Filatura, Tessitura fino a tutto l'anno scolastico 1906–07*. Mariani.

Barbagli, M. (1974). *Disoccupazione intellettuale e sistema scolastico in Italia*. Il Mulino.

Bassi, G. (1823). *Vita del padre Luigi Mozzi della Compagnia di Gesù*. Miglio.

Belotti, B. (1959). *Storia di Bergamo e dei bergamaschi. Vol. VI*. Bolis.

Bertagna, G. (2008). *Autonomia. Storia, bilancio e rilancio di un'idea*. La Scuola.

Bertagna, G. (2013). L'istruzione tecnica e la formazione professionale. In M. Bocci (Ed.), *Non lamento ma azione. I cattolici e lo sviluppo italiano nei 150 anni di storia unitaria* (pp. 59–92). Vita e Pensiero.

Bertoni Jovine, D. (1959). La legge Casati nella critica contemporanea. *I problemi della pedagogia*, 1, 77–117.

Bonafede, P., & Causarano, P. (2019). Istruzione tecnica e formazione professionale. In F. De Giorgi, A. Gaudio, & F. Pruneri (Eds.), *Manuale di storia della scuola italiana. Dal Risorgimento al XXI secolo* (pp. 219–254). Scholé.

Bourdieu, P., & Passeron, J.-C. (1972). *La riproduzione: teoria del sistema scolastico ovvero della conservazione dell'ordine culturale*. Guaraldi.

Castelli, G. (1915). *L'istruzione professionale in Italia*. Vallardi.

Castronovo, V. (2006). *Storia economica d'Italia. Dall'Ottocento ai giorni nostri*. Einaudi.

Dentella, L. (1930). *Il conte canonico G. Benaglio e un secolo di storia ecclesiastica bergamasca*. Secomandi.

Ferrero, L. O. (1864). *Modificazioni ed amplificazioni al piano degli studi tecnici locali. Relazione presentata al Consiglio scolastico provinciale dal prof. Luigi Ottavio Ferrero, preside dell'Istituto Tecnico di Bergamo con osservazioni in merito dell'ingegnere delle miniere del Distretto di Milano Cavaliere Axerio*. Bolis.

Fumi, G. (1997). L'istruzione professionale e tecnica dall'Unità al primo conflitto mondiale. In V. Zamagni & S. Zaninelli (Eds.), *Storia economica e sociale di Bergamo. Fra Ottocento e Novecento. Lo sviluppo dei servizi* (Vol. 5, Issue 3, pp. 319–391). Bolis.

Ghidini, A. (1848). *Dell'origine, della costituzione e dello spirito della scuola serale di carità pei giovani artisti della città alta in Bergamo. Discorso intitolato all'egregio signor conte Clemente Giacomo Suardo, cavaliere degli ordini de' Santi Maurizio e Lazzaro e di Santo Stefano di Toscana, letto in adunanza generale degli operarii e dei protettori del Pio Istituto, aggiuntevi note, pezze giustificative e formole di cancelleria*. Wilmant e figli.

Gonella, G. (1981). Dalla legge Casati alla Costituzione democratica. In G. Gonella, *Cinque anni al Ministero della Pubblica Istruzione. La rinascita della Scuola dopo la seconda guerra mondiale* (Vol. 1, pp. 74–100). Giuffré.

Lacaita, C. G. (1973). *Istruzione e sviluppo industriale in Italia 1859–1914*. Giunti-Barbera.

Lacaita, C. G. (2009). Istruzione tecnico-professionale e modernizzazione fra Otto e Novecento. In C. G. Lacaita (Ed.), *La leva della conoscenza. Istruzione e formazione professionale in Lombardia fra Otto e Novecento* (pp. 9–19). Giampiero Casagrande Editore.

Lacaita, C. G., & Fugazza, M. (Eds.), (2013). *L'istruzione secondaria nell'Italia unita 1861–1911*. FrancoAngeli.

Manacorda, M. A. (1992). *Storia illustrata dell'educazione. Dall'Antico Egitto ai giorni nostri*. Giunti.

Ministero di Agricoltura, Industria e Commercio. (1875). *L'istruzione tecnica in Italia, studi di E. Morpurgo*. Barbera.

Morandini, M. C. (2001). Da Boncompagni a Casati: la costruzione del sistema scolastico nazionale (1848–1861). In L. Pazzaglia & R. Sani (Eds.), *Scuola e società nell'Italia Unita. Dalla Legge Casati al Centro Sinistra* (pp. 9–46). La Scuola.

Scaglia, E. (2019). Il caso del Regio Istituto Tecnico di Bergamo nel primo quindicennio unitario. *Annali di storia dell'educazione e delle istituzioni scolastiche*, 26, 103–117.

Talamo, G. (1960). *La scuola dalla legge Casati alla Inchiesta del 1864*. Giuffré.

Tonelli, A. (1964). *L'istruzione tecnica e professionale di stato nelle strutture e nei programmi da Casati ai giorni nostri*. Giuffré.

Turri, D. (1906). *La scuola industriale di Bergamo. Proposte e programmi, dicembre 1906*. Bolis.

Valota, B. (1983). "L'istruzione tenuta nei giusti limiti...". La Società industriale bergamasca e le scuole popolari. *Studi e ricerche di storia contemporanea*, 20, 40–62.

Valsecchi, A. (1869). *Teresa Eustochio nobile Verzeri e Mons. Giuseppe conte Benaglio fondatori dell'Istituto delle Figlie del Sacro Cuore*. Sonzogni.

Vigo, G. (1971). *Istruzione e sviluppo economico in Italia nel secolo XIX*. UTET.

Zamagni, V. (1990). *Dalla periferia al centro. La seconda rinascita economica dell'Italia (1861–1990)*. Il Mulino.

Zambetti, A. (n. d.). *Regio Istituto Tecnico Commerciale "Vittorio Emanuele II"*. Stamperia Conti S. A.

Zanchi, G. (1988). L'età post-tridentina e il consolidarsi della tradizione bergamasca. In A. Caprioli, A. Rimoldi, & L. Vaccaro (Eds.), *Diocesi di Bergamo* (pp. 181–196). La Scuola.

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