

Peter Urbanitsch

The Creation of Higher Technical and Vocational Schools in Cisleithania in the last Decades of the 19th Century (with special regard to the South-Slav Lands). An Instrument for Modernizing the Austrian Educational System?

Dealing with the role of education and universities in the process of modernizing Central and South-Eastern European societies, it may seem a little bit odd to concentrate on technical and vocational schools instead of universities and other places of higher learning, as one would normally do. Yet, considering that the second half of the 19th century witnessed a hitherto unparalleled rise in technical knowledge and modern technology, it is certainly appropriate to draw one's attention to the aspect of formal education in industrial affairs.

Not that scholarly institutions for that purpose did not exist before the last third of the 19th century. As it is well known, the first Technical Institutes [*Polytechnisches Institut*] (comparable to the Technical Universities of today) on the realm of the Habsburg Monarchy were founded at the very beginning of the century, in 1806 in Prague, in 1815 in Vienna and later on similar institutions were established at other places.¹ Yet, in spite of the rapid development of commerce, crafts and industry in these days, institutions caring for a systematic education on a secondary level were sadly missing – although there were some institutions run by corporations or associations, cities and private people.² This lack became

1 Helmut Engelbrecht, *Geschichte des österreichischen Bildungswesens III: Von der frühen Aufklärung bis zum Vormärz* (Wien, 1984) p. 262; Hedwig Gollob, *Geschichte der Technischen Hochschule in Wien* (Wien, 1964).

2 Josef Schermaier, "Aspekte der Geschichte und Forschungsgeschichte des technisch-gewerblichen Unterrichtswesens in Österreich", in Elmar Lechner, Helmut Rumpfer, Herbert Zdarzil (eds.), *Zur Geschichte des österreichischen Bildungswesens. Probleme und Perspektiven der Forschung* (Wien: Österreichische Akademie der Wissenschaften, phil.-hist. Klasse, Sitzungsberichte 587, 1992) pp. 259–277; Rudolf Frh. von Klimburg, *Die Entwicklung des gewerblichen Unterrichtswesens in Oesterreich* (Tübingen: Wiener Staatswissenschaftliche Studien 2/1, 1900), pp. 20–25. Hereafter Klimburg, *Die Entwicklung des gewerblichen Unterrichtswesens*.

intensely evident especially after the character of the old *Realschulen* (established as part of the educational reforms effected after 1848/49³ and originally meant as an institution giving those aspiring to all kinds of industrial occupation a firm educational basis on a medium level at the most) was changed in 1867. Now they should prepare highly qualified pupils for the Technical Institutes, offering them at the same time some elements of humanistic *Bildung*, yet depriving the mass of potential pupils attending these schools of a more practical instruction needed for their future professional careers.⁴ In addition to this didactic change, it became increasingly apparent in the late sixties and early seventies that Austrian industrial products lacked both the technical maturity and the artistic finesse of comparable items produced in Western Europe, as could be seen for example at the various World Trade Exhibitions.⁵

Indirectly it was the Viennese Exhibition of 1873⁶ which sounded the starting shot for the development of a system of technical schools run by the state. More than one year before the Exhibition opened, a meeting was convened in January 1872 by the then Minister of Education, Carl von Stremayr, and attended by representatives of the Ministry of Education (*Ministerium für Cultus und Unterricht*), the Ministry of Trade and Commerce (*Ministerium für Handel und Volkswirtschaft*) and some experts, among them Wilhelm Schwarz-Senborn, who headed the committee in charge of the preparation of the World Exhibition. He proposed the creation of an industrial museum (following the example of London's South Kensington Museum) equipped with exhibits from the Viennese Exhibition which hopefully would be left back by many countries and which should then serve as a model for the practical education of Austrian producers.⁷ In the end nothing came of this plan, but the idea of a more intense advancement and promotion of technical education as such, also discussed at that meeting, was from then onwards never to disappear from the official agenda.

It was Carl Jelinek, a civil servant at the Ministry of Education, who immediately after the meeting of 1872 came up with the idea that in analogy to the schooling system as such, technical education run by the state should

- 3 For a thorough discussion of the plans of the reformers and their subsequent implementation – which fell somewhat short of what was originally intended – see Peter Wozniak, “The Organizational Outline of the Gymnasias and Technical Schools in Austria and the Beginning of Modern Educational Reform in the Habsburg Empire”, in Sonja Rinofner-Kreidl (ed.), *Zwischen Orientierung und Krise. Zum Umgang mit Wissen in der Moderne* (Wien–Köln–Weimar: Studien zur Moderne 2, 1998), pp. 71–107.
- 4 Armand Frh. von Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik im Industriestaate Oesterreich* (Wien, 1881), p. 5. Hereafter Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik*.
- 5 Ulrike Felber, Elke Krasny, Christian Rapp, *Smart exports. Österreich auf den Weltausstellungen 1851–2000* (Wien, 2000).
- 6 Jutta Pemsel, *Die Wiener Weltausstellung von 1873. Das gründerzeitliche Wien am Wendepunkt* (Wien, 1989).
- 7 Protokoll der Enquete-Sitzung vom 5. Februar 1872, Österreichisches Staatsarchiv, Allgemeines Verwaltungsarchiv (Wien), Ministerium für Cultus und Unterricht [=AVA, MCU], 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), Zl. ad 1545/72.

be offered on three different levels: primary, secondary and high – the last one already provided for by the Technical Institutes. Schools at the secondary level should be diversified according to different branches, and they should be open only to young people at the age of 14 or more who had already frequented the lower classes of other secondary schools. These higher technical schools should be installed in all great centres of industrial activity and in all capital towns of the provinces, the *Länder*.⁸ The memorandum by Jelinek was the basis Armand von Dumreicher, generally known as the “father of technical education” (*Vater des gewerblichen Schulwesens* or *organisierender Staatspädagoge*, as he was also called) could subsequently build upon.⁹

Although pride of place should therefore belong to Jelinek (a fact that is almost entirely forgotten) it was Dumreicher who in the years to come became the undisputed expert in this matter. He acquainted himself with the situation in various other states¹⁰ and became more and more convinced that it was the duty of the state to make provisions for an adequate education in commercial and industrial matters, concentrating its efforts only around the Ministry of Education. Over this view he had to fight out some disputes with the Ministry of Trade and Commerce¹¹ – which claimed to have a voice in matters regarding the schooling of their clientele because it already subsidized a number of lower vocational schools and training shops – and also the Ministry of Finance – that naturally wanted to keep down expenditure of the state as low as possible. In order to rub in this point to the Ministry of Education it pointed out that according to the constitutional arrangements of the so-called *Dezemberverfassung* it was at least doubtful whether technical schools fell into the competence of the state at all or in that of the *Länder*.¹² Eventually the Ministry of Education produced a lengthy

8 Memorandum Jelinek vom 16. Februar 1872, ebd. Zl. 1864/72.

9 On Dumreicher see Adele Dumreicher, *Armand Frh. von Dumreicher, Skizzen zu seinem Lebensbild* (Meran, 1913); Ferdinand Bilger, „Armand Freiherr von Dumreicher“, in *Neue Österreichische Biographie V* (Wien, 1928) 114–129; Gustav Grüner, „Armand Freiherr von Dumreicher. Eine Einführung in Leben und Werk des Schöpfers der österreichischen Staats-Gewerbeschule“, in *Die Deutsche Berufs- und Fachschule* 63 (1967), pp. 489–504.

10 See Armand Frh. von Dumreicher (ed.), *Über den französischen Nationalwohlstand als Werk der Erziehung. Studien über Geschichte und Organisation des künstlerischen und technischen Bildungswesens in Frankreich* (Wien, 1879).

11 Some Chambers of Commerce petitioned in favour of the Ministry of Trade and Commerce retaining its influence on the vocational schools because they argued that this Ministry would be in a better position to judge the situation of people directly concerned; *Petitionen mehrerer Handelskammern an den Reichsrat, enthalten in AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), Zl. 38013/74.*

12 Finanzministerium an MCU vom 21. Juni 1873, ebd. Zl. ad 8117/73. § 11 lit. i of the Gesetz vom 21. Dezember 1867, RGBl. Nr. 141, wodurch das Grundgesetz über die Reichsvertretung vom 26. Februar 1861 abgeändert wird, stipulates that only basic principles as to primary schools and *Gymnasien* (and universities) would fall into the realm of the state's legislation passed by the Reichsrat, implying that all other forms of schools belonged to the jurisdiction of the *Länder* or should be run by communal or private institutions. Since negotiations with the *Länder* did not yield the desired results (although there were some exceptions), the responsibility of the state was more or less tacitly accepted by everyone in the decades to come.

proposition to the Emperor, an *alleruntertänigster Vortrag*, as such a document is called in German, proposing the creation of a system of technical schools below the highest level of Technical Institutes, i.e. Technical Universities.¹³ With minor alterations this proposition (drawn up mainly by Dumreicher himself), which the Emperor agreed to on 11 October 1875, was also published as a booklet of its own which was intended to inform the public at large about the new possibilities the state was to offer its inhabitants.¹⁴

Subsequently Dumreicher's system was refined and enlarged a bit, in its fully matured form it provided for various types of schools and forms of instruction, according to technical needs as well as to the educational background of the pupils. At the lowest level there were to be so-called *Handwerkerschulen* (created only after 1885), schools that could be attended by youngsters instead of the last years of the general primary schools. They offered a little bit more of practical instruction, but only as far as the most elementary techniques were concerned. Next to them were the so-called *Fortbildungsschulen* or vocational schools where young boys – and to a small degree also girls – who were already working in a job, usually in an apprenticeship or as unskilled labourers, were given some more theoretical information on their jobs. However, since the educational background of these youngsters was rather low at times, these courses were not infrequently used only as an additional possibility to teach them the basic elements of reading, writing and arithmetic. As these young people were already working, their instruction took place in the evenings or on Saturday and Sunday afternoons; no wonder that the results were not always as bright as outside experts and observers had expected and hoped for.

Unlike the *Fortbildungsschulen*, the higher types of industrial training schools were day-schools, keeping those attending busy for something between 33 and 39 hours per week. There were two different types of schools: one, the *Werkmeisterschule*, was meant for people, workers and artisans alike, who had already acquired some practical knowledge in their respective field of work and who were eager to expand their knowledge in more theoretical aspects of their job, so that this additional knowledge should eventually enable them to rise a bit on their professional career-ladder. Schools of this type lasted for three or four semesters, while the other type, the *höhere Gewerbeschule* or *höhere Fachschule für gewerbliche Hauptgruppen*, lasted for eight semesters. It included several branches that were in one way or another related to each other, thereby forming four main groups of industrial compounds: building trade, engineering industry, chemical industry, arts and crafts. At the end of the 19th century, a fifth branch, electrical engineering, became more and more important. As potential students were

13 Au. Vortrag des Ministers für Cultus und Unterricht vom 25. Juli 1875, AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), Zl. 16280/75.

14 "Exposé über die Organisation des gewerblichen Unterrichts in Oesterreich", in *Jahresbericht des k.k. Ministeriums für Cultus und Unterricht für 1875* (Wien, 1876).

required to have successfully completed the first four years of a secondary school (*Gymnasium*, *Realschule* or – in exceptional cases – even *Bürgerschule*) this type, the higher Technical School, aimed primarily at members of the middle-class, heirs to industrialists, future managers in big companies, civil engineers, master builders and so on, people who aspired for jobs which required qualifications slightly less than those obtained at the Technical Institutes, that is to say qualifications below university level. The *Fachschule für einzelne gewerbliche Zweige*, usually combined with training shops (*Lehrwerkstätten*), could either serve one particular branch of industry dominant in the place where such a school was situated, for example metalworking or woodworking, or it comprised several closely connected crafts, e.g. in the textile industry. Such schools conferred master's certificates (without the recipients having undergone practical apprenticeship in a workshop or firm). If two or more *Fachschulen* were administratively united, usually plus *Werkmeisterschulen* and *Fortbildungsschulen*, such a complex was called *Staatsgewerbeschule*. Apart from directly instructing those who attended them, these *Staatsgewerbeschulen* were also intended to serve as example and model and as industrial centre for the entire region and they also served as training-camps for teachers working at the various *Fortbildungsschulen*, thereby passing on their expertise to other schools all over the country.¹⁵ The whole system was topped by the so-called *Gewerbliche Zentralanstalten*, institutions which radiated to all lands of Cisleithania and even beyond. In the decade before the First World War, the following institutions belonged to this group: *Österreichisches Museum für Kunst und Industrie* in Vienna, *Kunstgewerbeschulen* in Vienna and Prague, *Technologisches Gewerbemuseum*, *Graphische Lehr- und Versuchsanstalt*, *Lehr- und Versuchsanstalt für Lederindustrie*, *Zentral-Spitzenkurs*, *Fachschule für Kunststickerei*, *Musterwerkstätte für Korbflechterei*, all in Vienna.¹⁶

One of the main ideas underlying the creation of an all-encompassing system of technical schools run by the state as envisaged by Dumreicher and his fellow companions at the Ministry of Education was the combination of theory and practice (with particular emphasis on theory, as befits an ardent advocate of the liberal creed in “*Besitz und Bildung*”). He justified this position with the following sentences: „*Alle Bildung strebt vom Volksboden weg und hält sich fast nur mehr in oberen Schichten; die wissenschaftlich und künstlerisch höchst stehenden Leiter moderner Werke sehen unter sich nur mechanisch arbeitende Handlanger. Eine so*

15 For a concise description of the system established by the Ministry of Education see Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik*; Anhang A., *Grundzüge einer Organisation des gewerblichen Unterrichtswesens*, pp. 65–82.

16 Ernst Pliwa, “Die Entwicklung des gewerblichen Unterrichtswesens in Österreich während des letzten Dezenniums”, in *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 24, 1906, pp. 485–512, p. 491. Hereafter Pliwa, „Die Entwicklung des gewerblichen Unterrichtswesens“; Josef Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen im Vielvölkerstaat Österreich* (Frankfurt am Main et. al., 1999), pp. 13–94. Hereafter Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*.

*naturwidrige Trennung von Kopf und Arm, eine solche Ausschließung der arbeitenden Classe vom geistigen Gehalte ihres eigenen Thuns läßt für die Concurrenzkraft des Gewerbewesens und die gesellschaftlichen Verhältnisse Oesterreichs das Ernsteste befürchten. Und da kann nur der Staat mit seiner Schule helfend eingreifen. Denn der einzelne Gewerbszweig ist bei dem heutigen Höhestand der Industrie nicht mehr in der Lage, unter seinen Mitgliedern die Traditionen des Handwerks voll und schulgerecht weiter zu führen, in der Art etwa, wie die Bauhütte des Mittelalters sich ihre Schule selber zog und den Arbeiter, den Steinmetz zum Baumeister, ja zum Künstler heranzubildete.*¹⁷ But it was not only the simple workers who needed more insight into the theoretical aspects of what they were doing; future industrialists, managers and other members of the middle classes were also in need of a sound theoretical foundation. The curricula of the *Staatsgewerbeschulen* bear witness to these ambitions. Apart from subjects specific for various *Fachschulen* the students were taught in German (or Czech and Polish, respectively) language and literature, history and geography, chemistry, physics, geometry, algebra, drawing, accountancy, bill business and industrial legislation.¹⁸ The schools were meant to be a technical gymnasium, so to speak. No wonder that at the labour market the graduates of these institutions were eagerly sought after and that most of them immediately found adequate jobs. An official controlling the *Fachschulen* for the textile industry confirmed in 1887 that “*mir ist auch keine Klage bekannt, dass die stattliche Zahl der Absolventen, welche jährlich diese Fachschulen verlassen, in der Praxis nicht Aufnahme gefunden hätten.*”¹⁹ Three years later, a similar judgement was passed when surveying the situation at technical departments.²⁰ In 1904, it was officially stated that only about 5 % of those having attended one of the various branches of a *Staatsgewerbeschule* did not work in a job which they had been trained for at these schools. Breaking down the results of this enquiry into more detail, it became apparent that – not surprisingly – students of a *Werkmeisterschule* did primarily serve the needs of local industry, roughly two thirds of these students finding jobs in smaller firms in the regions where these schools were located, whereas two thirds of graduates of a *höhere Fachschule* worked in bigger industrial establishments spread over all parts of Cisleithania and abroad as well.²¹

Impressive as the program developed by Dumreicher and the Ministry may have been and certainly was in theory, the realization somewhat lagged

17 These sentences were already contained in the Au. Vortrag vom 25. Juli 1875, quoted above (n. 13). The text is cited according to Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik*, p. 18.

18 *Ibid.*, pp. 95–98.

19 Franz Schmorranz, Inspektor für Textilfachschulen, an Ministerium für Cultus und Unterricht vom 8. Oktober 1887, AVA, MCU, 16 A, Fasz. 3429 (Gewerbliche Lehranstalten in genere, 1881–1889), Zl. 20457/1887.

20 See Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, p. 121.

21 “Protokoll über die XLVII. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 2. März 1904”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 22, 1904, pp. 184.

behind this grand design. Several reasons can be held accountable for this, financial restrictions were certainly responsible for many a retardation in the implementation of the original program. Had Jelinek in his memorandum of 1872 pleaded for the establishment of higher technical schools in all capital towns of the provinces plus great industrial centres,²² the Ministry in its proposition to the Emperor of 1875 had to cut down its demands. No doubt the economic crash of 1873 and its aftermath made itself felt. In addition to the already existing *Fachschulen* run by the state in Brünn (in Moravia), in Czernowitz (in the Bucovina) and in Bielitz-Biala (in Silesia), the Ministry now proposed the creation of only five other *Staatsgewerbeschulen*, namely in Vienna, Prague (Bohemia), Reichenberg (also in Bohemia), Graz (Styria) and Salzburg.²³ Other *Fachschulen* were to follow, if from a general point of view the necessity of such an establishment was evident and if financial means permitted to take such a step, as the Ministry of Finance did not grow tired of insisting once and again.

Although it was practised as a general rule that the cost (or at least substantial parts of it) for the erection of the school-building, its maintenance and the equipment had to be provided for by the town and to a lesser degree also by the land where the school was to be set up, the Ministry of Education calculated in 1885 that a *Staatsgewerbeschule* would cost the treasury about fl. 20,000 annually.²⁴ Therefore the creation of a comprehensive and all-inclusive net of technical schools could be realized only gradually. Nevertheless, by the end of the 19th century, there were 16 *Staatsgewerbeschulen* (8 of them had *höhere Gewerbeschulen*, the others only various kinds of *Werkmeisterschulen*, *gewerbliche Fortbildungsschulen* and several special courses) and 96 *Fachschulen für einzelne gewerbliche Zweige*: 14 for lace-working, 31 for weaving and knitting, 30 for wood- and stone-working, 6 for ceramic and glass-industry, 10 for metalworking and 5 for other specific kinds of industry (for example, the production of musical instruments).²⁵ The cost for these schools (together with the *Gewerbliche Zentralanstalten*, the *Handwerkerschulen* and *allgemeine Zeichenschulen* run by the state) amounted to almost 6 million crowns (which corresponds to 3 million fl.) in 1898 and 6,06 million crowns (=3,03 million fl.) in 1899.²⁶ Of course, the costs for individual schools differed greatly: in 1899 the *Staatsgewerbeschule* in Prague needed 102,800 fl., the one in Czernowitz only 37,000 fl., for the school for lace-working in Cles (in the southern part of Tyrol) the state had to afford

22 Memorandum Jelinek vom 16. Februar 1872, AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, -1880), Zl. 1864/72.

23 Au. Vortrag des Ministers für Cultus und Unterricht vom 25. Juli 1875, ebd. Zl. 16280/75.

24 Ministerium für Cultus und Unterricht an Finanzministerium vom 30. Juni 1885, AVA, MCU, 16 A, Fasz. 3429 (Gewerbliche Lehranstalten in genere, 1881-1889), Zl. 10335/1885.

25 "Frequenz der gewerblichen Lehranstalten zu Beginn des Wintersemester 1898/99", *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 17, 1899, pp. 147-156.

26 "Protokoll über die XLIV. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 5. December 1901", *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 20, 1902, p. 144.

only 730 fl., in contrast to 26,500 fl. for the school for metalworking in Steyr (in Upper Austria).²⁷

Apart from financial restrictions, there is another reason responsible for the rather slow increase in numbers of industrial schools in the first years after the initiation of the new system: the fact that parents preferred to send their children to the already existing and well established secondary schools, the *Gymnasia* and *Realschulen*, even if they aspired for their offspring a career in industry, trade and economics. Partly as a result of such an attitude, but for many other reasons as well, the number of students in secondary schools was rising year by year. For example in 1879/80, 19,400 young people attended secondary schools in Bohemia, whereas in the three *Fachschulen* in Prague, Reichenberg and Pilsen there were together not more than 270 pupils.²⁸ The number of those attending all the *Staatsgewerbeschulen* that existed in Austria in 1880 amounted to 728 only.²⁹

This situation was criticized by an official at the Ministry of Education who bluntly stated that “*der Staat erzieht somit jährlich zu viele Menschen, die nur schreiben und sprechen und zu wenig solche, die arbeiten können*” and he warned that if there were too many graduates of secondary schools (and subsequently of universities), these members of the educated classes would only become jobless – and therefore dangerous – “intellectual proletarians”.³⁰ No doubt, reminiscences of the years before 1848 and the role played by these “intellectual proletarians” were at the bottom of this argument.³¹ In accordance with this line of argumentation, the Ministry even issued an ordinance to the headmasters of secondary schools the tenor of which was for the headmasters to discourage future pupils whose family background and abilities made it seem likely that they would eventually end up in business, from attending secondary schools and to recommend their parents instead to send their kids to higher technical schools.³² Such an attitude – which was regarded by many as anti-intellectual, an outcome of the conservative turn in Austrian politics in the early eighties,³³ but which in truth was focussing on the more practical aspects of everyday life – was prevalent among many circles in these days. Even Dumreicher, obviously no friend of the Conservatives, argued that popular prejudices in favour of “the pen over the

27 Klimburg, *Die Entwicklung des gewerblichen Unterrichtswesens*, p. 187.

28 Promemoria des Landesschulinspectors für Böhmen Heinrich Schramm vom 26. Juli 1880, AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), ad Zl. 12050/1880.

29 Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, p. 306.

30 Einsichtsakt des Ministeriums für Cultus und Unterricht vom 30. Juli 1880, AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), ad Zl. 12050/1880.

31 See Waltraud Heindl, *Gehorsame Rebellen. Bürokratie und Beamte in Österreich 1780–1848* (Wien: Studien zu Politik und Verwaltung 36, 1990).

32 Erlaß des Ministeriums für Cultus und Unterricht vom 20. August 1880, AVA, MCU, 16 A, Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), Zl. 12050/1880, also published in Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik, Anhang C*, pp. 99–105.

33 Gary B. Cohen, *Education and Middle-Class Society in Imperial Austria 1848–1918* (West Lafayette, 1996), pp. 95–119. Hereafter Cohen, *Education and Middle-Class Society*.

tool” harked back to “die Zeit der absoluten Monarchie mit ihrer allmächtigen Bürokratie, in der das kleinste Amt über ein viel höheres Prestige verfügte als die produktivste Werkstätte” and he advocated to “encourage young people from handicraft, small manufacturing and farming backgrounds to pursue vocational training and remain in those economic sectors”³⁴. As late as in the last years of the existence of the Habsburg Monarchy, Eugen Ehrlich, an eminent sociologist teaching at the University of Czernowitz, followed suit when – talking about the situation in the Bukovina – he wrote: “Hofräte sind gut, zuerst aber brauchen wir Bauern”³⁵. Yet, in the eighties, the move of the Ministry did not prove very successful, the number of students at secondary schools continued to rise for quite a while. Headmasters reported that they could not effectively comply with the wishes of the Ministry as long as the number of higher technical schools was not sufficient and, what was more important, not more or less evenly distributed all over the country.³⁶

In fact, the comparatively low number of students of technical schools in the early years of the state’s program owes more to the uneven distribution of such schools than to the possibly scant interest on the part of the people actually concerned. Dumreicher may have been exaggerating but there was certainly more than a grain of truth in it when he wrote that the necessity for technical schools producing technicians of a medium level can be read off the fact that in many industrial plants in Austria these posts were filled by foreigners and that on the other hand “*Hunderte von Österreichern ins Ausland gehen, um dort jenes berufliche Wissen zu erwerben, das ihnen die Heimat zu bieten unterlassen hat*” and he continued, specifically referring to the situation in northern Bohemia, that the population in question “*wünsche aus der geistigen Abhängigkeit vom Ausland herauszukommen*”³⁷. In the end the number of graduates of higher technical schools slowly but gradually increased: in 1887/88 it amounted to 2,763 for the *Staatsgewerbeschulen* and 5,710 for the *Fachschulen* for individual branches, in 1898/99 the *Staatsgewerbeschulen* were attended by 5,252 students (not counting the *gewerbliche Fortbildungsschulen* and special courses), the *Fachschulen für einzelne gewerbliche Zweige* by 4,090 (again without *gewerbliche Fortbildungsschulen* and special courses), the corresponding numbers for 1912/13 are 7,619 (20,101, if taken together all categories of people attending) for the *Staatsgewerbeschulen* and 31,748 for the *Fachschulen für einzelne gewerbliche Zweige* (again taken all

34 Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik*, p. 46.; Cohen, *Education and Middle-Class Society*, p. 101.

35 Eugen Ehrlich, *Die Aufgaben der Sozialpolitik im österreichischen Osten, insbesondere in der Bukowina mit besonderer Beleuchtung der Juden- und Bauernfragen* (Czernowitz, 1909), p. 17.

36 Ministerium für Cultus und Unterricht an Finanzministerium vom 30. Juni 1885, AVA, MCU, 16 A, Fasz. 3429 (Gewerbliche Lehranstalten in genere, 1881–1889), Zl. 10335/1885.

37 Au. Vortrag des Ministers für Cultus und Unterricht vom 25. Juli 1875, ebd., Fasz. 3428 (Gewerbliche Lehranstalten in genere, –1880), Zl. 16280/75.

together).³⁸ In some cases, prospective pupils even had to be rejected because of the lack of space in individual schools. Reasons for this continuous increase may be found on the one hand in a greater social appreciation of graduates from a *Fachschule* by granting them among others the right of *Einjährig-Freiwillige*,³⁹ on the other hand in various reforms of the educational profile of the schools and a considerable rise in their number effected after 1905 (see below). Yet, the great rush that was experienced in the years before the First World War was also attributed by some to a change of mentality on the part of the parents: whereas in former times parents interested in a practical education preferred the old type of *Realschule* instead of sending them to a *Staatsgewerbeschule*, they now thought of sending their children to this institution if they were not good enough to pass a *Gymnasium*, but the introduction of a kind of entry-exam soon separated the chaff from the wheat in the *Staatsgewerbeschulen* as well.

As already mentioned, the geographical distribution of the higher technical schools was a very uneven one at the beginning. In 1883 there were *Staatsgewerbeschulen* in Vienna, Salzburg, Graz, Prague, Pilsen, Reichenberg, Brünn, Bielitz, Krakau, Czernowitz, and the *Fachschulen* for individual branches were also concentrated mainly in the northern areas of Cisleithania. This changed a little in later years. Although before the turn of the century the *Staatsgewerbeschulen* were still concentrated in the north (out of 18 existing in Cisleithania, four of them were situated in Bohemia, two in Moravia and one in Silesia) the number of *Fachschulen* had risen considerably in other parts of the state⁴⁰. This was not so much the result of financial considerations, but was primarily due to a change in the philosophy of what these technical schools should be good for. This in turn had consequences for the decision where such schools should be established. Dumreicher and his colleagues at the Ministry were decidedly of the opinion that the main function of technical schools was to support and encourage existing industries, not to modernize time-honoured but outdated forms of cottage industry [*Hausindustrie*] or to create new branches of industries in areas where they did not already have a sound basis and where they were alien to the local population. They opposed any endeavours to create new industries

38 Klimburg, *Die Entwicklung des gewerblichen Unterrichtswesens*, p. 146; „Frequenz der gewerblichen Lehranstalten zu Beginn des Wintersemester 1898/99“, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 17, 1899, pp. 147–156; Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, p. 306.; „Frequenz sämtlicher gewerblichen Lehranstalten [...] im Schuljahre 1912/13“, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 32, 1914, p. 378.

39 „Erlaß des Ministers für Cultus und Unterricht vom 31. März 1885, Zl. 4631/1885“, cited in Gustav Grüner (ed.), *Quellen und Dokumente zur Entwicklung der österreichischen Staats-Gewerbeschulen. Ein Beitrag zur Geschichte der berufsbildenden höheren Schulen Österreichs und einschlägiger Schulen osteuropäischer Staaten* (Köln–Wien, 1987), p. 150.

40 „Frequenz der gewerblichen Lehranstalten zu Beginn des Wintersemester 1898/99“, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 17, 1899, pp. 147–156.

or bolster up the cottage industry “on humanitarian grounds”, as they said, that is the setting-up of new industries as a means to overcome the difficult economic situation of a region. They argued that the hoped-for positive results would show – if ever – only in the distant future. Dumreicher wrote in 1881: *“Man muß sich den Unterschied klar machen zwischen industriellen und humanitären Zwecken. Wird dies unterlassen, so entsteht die Gefahr, dass trotz großer, nominell dem gewerblichen Bildungswesen gewidmeter Summen eine Reihe lebensfähiger, aber der didactischen Förderung bedürftiger Industrie der Bildungsinstitutionen entbehren muß, weil jene Summen von Unternehmungen verschlungen werden, die gar nicht unter den gewerbepolitischen Gesichtspunkt fallen, sondern dem Bereiche öffentlicher Mildthätigkeit angehören. Die Enttäuschung müßte dann eine doppelte werden: einmal würde nach einiger Zeit ein grelles Mißverhältnis constatirbar sein zwischen dem angeblich zur intellectuellen Hebung des Gewerbewesens gemachten Gesamtaufwand und dem fortschrittlichen Gewinn, welcher der Landesindustrie thatsächlich aus diesem Aufwand erwachsen ist, und andererseits würde man sich überzeugen, dass auch die humanitären Bestrebungen fehlgeschlagen haben, weil eben meist die von allgemeinen wirthschaftlichen Factoren bedingten Erwerbsverhältnisse einer Gegend durch den einzelnen, kleinen Factor der Fachschule nicht merklich geändert werden können. In jenen zahlreichen Fällen z.B., wo sich auf einem Gebiete der große Kampf der Maschine mit der Menschenhand vollzieht, werden der letzteren didactische Mittel nicht immer Hilfe bringen können. Oft mag die Natur des Productionszweiges es gestatten, durch Zuführung des künstlerischen Elements die Handarbeit in eine neue gesunde Entwicklung hineinzulenken; noch öfter wird die Einwirkung der Schule eine so minimale bleiben, dass ihre Gegner nicht einmal mit Recht behaupten dürfen, sie verlängere grausam die Agonie einer absterbenden Production.”*⁴¹

Yet, this position, expression of a creed in unfettered laissez-faire liberalism – a position that was also backed by the *Central-Commission für Angelegenheiten des gewerblichen Unterrichts*⁴² – encountered severe opposition from many quarters, especially from those regions and branches that suffered most from economic recession, but also from political representatives of the *Länder*, who with an eye on the material situation of the people and its socio-political consequences wanted a more decisive say in matters of promotion and improvement of the local economy. It is interesting to see that in the end Dumreicher’s position did not prevail, schools “on humanitarian grounds” continued to exist up to the First World War. In a survey published in 1913 we read that among the *Fachschulen für einzelne gewerbliche Zweige* there were so-called “*Notstands- und*

41 Dumreicher, *Ueber die Aufgaben der Unterrichtspolitik*, p. 58.

42 Denkschrift über die Grundsätze für die Errichtung gewerblicher Fachlehranstalten, verabschiedet in der Sitzung der Central-Commission für Angelegenheiten des gewerblichen Unterrichts vom 31. Jänner 1882, AVA, MCU 16 A, Fasz. 3429 (gewerbliche Lehranstalten in genere 1881–1889), Zl. 1823/1882.

*Erwerbsschulen, besonders für Spitzenarbeiten und für Korbflechtereier, welche die gebrauchsfertigen Erzeugnisse ihrer Schüler und der Absolventen verkaufen und dadurch für die hausindustrielle Bevölkerung in manchen verarmten Gegenden Verdienstmöglichkeiten schaffen.*⁴³

The debate on the character of technical and vocational schools was not devoid of constitutional and political overtones: the question of centralism versus federalism was voiced just as was the nationality problem or the question which governmental agency should exercise jurisdiction over technical education: if the field of technical education was to be given over to the *Länder*, the Chamber of Trade and Commerce in Graz suspected that nationalistic points of view would gain the upper hand on strictly economic ones. Others, also inspired by liberal ideas, held similar views.⁴⁴ Under the auspices of a new Minister of Education, the Ministry was at first not unsympathetic to the idea of giving the *Länder* more influence in determining matters as to technical schools, yet in the end nothing came of it, because only a minority of *Länder* actually pushed the idea.⁴⁵ Only three years before this discussion reached its apex, the *Ministerium für Cultus und Unterricht* won a long-standing battle with the *Handelsministerium* over the jurisdiction of all technical and vocational schools, including the *Fortbildungsschulen* (which up to then had been under the authority of the latter Ministry and which were run and financed mainly by communities, associations or privates with only marginal subsidies provided for by the state). However, in order to grant those directly involved in economics continuous influence on matters pertaining to technical schools, a new advisory body was created, the *Central-Commission für Angelegenheiten des gewerblichen Unterrichts*, which consisted of representatives of the *Handelsministerium*, of various *Handelskammern* and of a number of industrialists and other experts and which had to give advice on all matters of some importance the Ministry wanted to enact.⁴⁶ In 1908, the jurisdiction over technical education was transferred to the newly created *Ministerium für öffentliche Arbeiten*, thus combining the “*didaktische Gewerbeförderung (gewerbliches Bildungswesen)*” with activities in the fields of “*technische und wirtschaftliche Gewerbeförderung*” (which so far had been administered by the *Handelsministerium*).⁴⁷

43 Alfred Schappacher, *Gewerbliches Bildungswesen und Gewerbeförderung in Österreich* (Wien, 1913), p. 10.

44 Handels- und Gewerbekammer Graz an Ministerium für Cultus und Unterricht vom 18. März 1884, AVA, MCU 16 A, Fasz. 3429 (gewerbliche Lehranstalten in genere 1881–1889), Zl. 7175/1884; Handels- und Gewerbekammer Innsbruck an Ministerium für Cultus und Unterricht vom 6. Juni, Ebd. Zl. 11162/1884; and similar letters by various Chambers, ebd.

45 Ministerium für Cultus und Unterricht an Statthaltereier Prag vom 11. Dezember 1885, ebd., Zl. 17722/1885; Referentenerinnerung vom Jänner 1886, ebd. Zl. 184/1886.

46 *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 1, 1883, p. 32.

47 Gesetz vom 27. Juni 1908, RGBl. Nr. 123/1908; “Erlaß des Ministers für öffentliche Arbeiten an die gewerblichen Lehranstalten anlässlich der Aufnahme der Tätigkeit des Ministeriums”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 27 (1909), p. 6.

Uniting the competence for technical and vocational schools in the hands of the *Ministerium für Cultus und Unterricht* in 1883, Dumreicher – who had fought for this unification for many years – could have been content with what he had achieved. Yet the change in the person of the Minister and opposition to all ideas Paul Gautsch von Frankenthurn, a stern conservative, stood for, prompted Dumreicher, a champion of the liberal cause (and later on of the German national as well), to resign from his post at the Ministry in 1886.⁴⁸

Under the new leadership pleas – coming from economically underdeveloped areas – for the establishing of technical schools run by the state and for subsidizing vocational schools run by towns or various corporations had now a greater chance to be successful. Among the beneficiaries of this change in policy was also the population in the south-Slav lands of Cisleithania. Up to the middle eighties, they could only fall back on the *Staatsgewerbeschule* in Graz; it was established as such in 1875, but numerous predecessors had existed before that date. It consisted of a *Werkmeisterschule* for building trade and one for arts and crafts plus an additional drawing-studio. Adjoined to it was a vocational school, a *Fortbildungsschule*. In its first year, 1876/77, the school was attended by 161 people, five years later, 1881/82, there were already 525 pupils, 212 in the daily *Werkmeisterschulen*, 313 in the *Fortbildungsschule*, where instruction took place only in the evenings and on Sunday. In its exposé of 1875 the Ministry (that is Dumreicher) hoped that the *Staatsgewerbeschule* in Graz would radiate well into the south Slav–Italian lands of Cisleithania and into the neighbouring regions of Hungary as well. In a certain way this expectation came true: of the total of 525 pupils in 1881/82 there were 348 coming from Styria, 19 from Carniola, 18 from Carinthia, 4 from the Küstenland and 2 from Dalmatia and there were also 17 from Croatia-Slavonia. As to their mother-tongue, 443 were Germans, 35 Slovenes, 8 Magyars and 5 Serbs and Croats. In 1893/94 the school was attended by 816 pupils; as a consequence of organizational changes this number fell in the following years, it ran up to between 600 und 700 until the beginning of the First World War.⁴⁹ The *Staatsgewerbeschule* in Graz served also as controlling and inspecting organisation for the *Fortbildungsschulen* in Carniola. At the same time, it also provided courses for teachers at *Fortbildungsschulen* in order to assure that the latest teaching methods should also become known to them.⁵⁰

For many years there had been an Academy for nautical science and for commerce in Trieste, as was only natural in a place where commerce and

48 For his career after his retirement from the civil service – immediately afterwards he was made a member of Parliament representing the Chamber of Commerce of Klagenfurt until 1895 – see the literature mentioned in Fn. 9.

49 Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, p. 213; *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 16, 1897, pp. 60–65.

50 See e.g. the report of the headmaster of the *Staatsgewerbeschule* in Graz, C. Loužil, on his tour d'inspection in March and April 1881, AVA, MCU 16 A, Fasz. 3812 (gewerbliche Lehranstalten, Krain in genere), Zl. 6729/1881.

navigation played a major part in the city's economy. After several reorganisations, this institute was transformed to a *Staatsgewerbeschule* in 1887. It consisted of *höhere Fachschulen* for building trade and for mechanical engineering industry and of *Werkmeisterschulen* for arts and crafts and one for lace-making. In the last years of the 19th century, a special course on electrical engineering and another on shipbuilding was added. In addition to this there was also a *Fortbildungsschule*. The number of those attending the various types of schools rose from 654 in 1888/89 to 977 in 1894/95, and to 2012 in 1913/14.⁵¹ It is noteworthy that among the *Staatsgewerbeschulen* existing in the southern parts of Cisleithania at the end of the 19th century only the one in Trieste had the status of a *höhere Gewerbeschule*. All the others were only *Werkmeisterschulen*, not meant for the education of top people.

In the nineties, a school of that type was also planned for Spalato (Split). It should consist of a *Werkmeisterschule* for building trade, for woodworking and – atypical for technical schools – of a commercial school. These plans – as well as those for *gewerbliche Fortbildungsschulen* in Zara (Zadar) and Ragusa (Dubrovnik) – were not realised at the time; Dalmatians interested in some form of higher education were given scholarships to attend the respective schools in Trieste or in Laibach (Ljubljana).⁵² A *Fachschule für gewerbliches Zeichnen* was eventually established in Spalato, it was changed into a *Bau- und Kunsthandwerkerschule* in 1909, which in 1912/13 was composed of 10 different branches housing 882 students (more than half of them female).⁵³

For a long time Carniola did not possess higher technical or vocational schools run by the state. Up to the early seventies there were several lower technical schools, run by towns or corporations, „*doch trügen einige weniger den Charakter von eigentlichen Gewerbeschulen als Wiederholungsschulen an sich [...] und bei ihren dürftigen Unterrichtsprogrammen und ihrer ganzen inneren Einrichtung [ließen sie kaum] eine erhebliche Einwirkung auf Hebung der Gewerbe erwarten*“, one can read in an official document by the Ministry of Education, mentioning at the same time that it had subsidized the city of Laibach with the sum of 2,000 fl. for the extension of its Sunday-school (founded in 1856) to a *gewerbliche Fortbildungsschule* in 1872.⁵⁴ In the following years, these *Fortbildungsschulen* were subsidized and in turn also controlled by the appropriate organs of the Ministry of Education. Reading the reports of the inspectors, one gets the impression that

51 Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, pp. 258, 262–265.

52 “Protokoll über die XXXIX. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 24. April 1895”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 14, 1895, p. 51.

53 *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 27, 1909, p. 381; *Ibid.*, 32, 1914, p. 325.

54 Ministerium für Cultus und Unterricht an Handelsministerium vom 10. Jänner 1873, AVA, MCU 16 A, Fasz. 3812 (gewerbliche Lehranstalten, Krain in genere), Zl. 15241/1873.

the level of instruction and the results did indeed improve over the years, even if at times some inspectors bemoaned the poor knowledge of the apprentices, so that lessons had primarily to be confined to teach them how to read and write.⁵⁵ The pupils at these *Fortbildungsschulen* were a very mixed bag indeed: in 1881, 66 apprentices registered for the *Fortbildungsschule* at Rudolfswert (Novo Mesto), 44 of them kept on to it until the end of the year, they belonged to 19 different professions (with shoemakers, commercial clerks and bakers in the majority), 2 had German, the other 42 Slovene as their mother-tongue⁵⁶. In 1885, there were five *Fortbildungsschulen* subsidized by the state in Carniola, however, the sums offered to them by the government were rather small: 400 fl. for the school in Rudolfswert already mentioned, the same amount for the one in Krainburg (Kranj), 150 fl. were given to the one in Neumarkt (Tržič), 100 fl. to the one in Gottschee (Kočevje). Only the school in Laibach got 2,000 fl. (in addition to that, the city contributed 500 fl. and the land 380 fl. to its expenses).⁵⁷

The *Fortbildungsschule* in Gottschee was connected with a *Fachschule* for woodworking, opened in December 1882 with only 9 students and financed mainly by the *Deutsche Schulverein* and private donations, so that no school fees had to be asked for, fees that in any case could not have been paid by the students who were very poor.⁵⁸ Four years after the school had started its activities, the number of students rose to 24. It was reported that the curriculum usually assigned to this type of school had to be adapted to local circumstances, partly because the students who mostly could not afford to live in town and therefore had to commute each day for quite a while were simply overstrained by the sheer amount of class hours, partly because it seemed necessary to accommodate a bit to the tastes and needs of the population on whose well-meaning the success of the school depended to a certain degree. When the first graduates had left school the idea came up to form a workers-association in connection with the school in order to enable the graduates to continue their work and to give them an opportunity to earn money, since their chance on the free labour-market was rather bleak.⁵⁹

55 Inspektionsbericht des Julius Ritter von Siegl über die Fortbildungsschule Rudolfswert vom 23. Mai 1886, AVA, MCU 16 A, Fasz. 3822 (gewerbliche Lehranstalten Krain, Rudolfswert), Zl. 12075/1886.

56 The Fortbildungsschule came into existence in 1873, like many others of this type it was attached to some higher school, in this case to the k.k. Staats-Obergymnasium. Jahresbericht der Fortbildungsschule Rudolfswert für das Schuljahr 1880/81 vom 21. Juli 1881, AVA, MCU 16 B1, Fasz. 3822 (gewerbliche Lehranstalten Krain, Rudolfswert), Zl. 12530/1881.

57 Inspektionsbericht des Julius Ritter von Siegl über die Fortbildungsschulen in Krain vom 19. März 1886, AVA, MCU 16 A, Fasz. 3812 (gewerbliche Lehranstalten Krain, in genere), Zl. 6631/1886; see also ebd. Fasz. 3813 (gewerbliche Lehranstalten, Krain in genere), Zl. 19122/1883.

58 Jahresbericht der Fachschule für Holzindustrie in Gottschee für 1882/83, AVA, MCU 16 A1, Fasz. 3815 (gewerbliche Lehranstalten Krain, Gottschee), Zl. 12667/1884.

59 Jahresbericht der Fachschule für Holzindustrie in Gottschee für 1885/86, ebd., Zl. 23479/1886.

Discussing the takeover of this privately run institution, which was threatened by being closed down (the *Deutscher Schulverein* announced to withdraw the subsidies for the school because instruction in German was gradually being replaced by that in the Slovene language), into complete state administration in 1896, an official of the Ministry of Trade and Commerce recommended this takeover because the population in this area was very poor and everything should be done to avert emigration;⁶⁰ the takeover eventually took place in 1898. When only a couple of years later the results of the technical schools as regards the fate of their graduates was assessed, the author of this assessment reported that most of the workers that had attended the *Fachschule* at Gottschee had found jobs either at home or more frequently abroad, many of them had gone to North America where they earned about three times as much as in Austria⁶¹.

Up to the eighties, the *Fachschule für Holzindustrie* in Gottschee (in 1906 transformed into a *Fachschule für Tischlerei*) and the *Fachschule für Spitzenklöppelei* in Idria, both of rather local importance and influence, were the only higher technical schools in Carniola. There had been various attempts to create such schools for different crafts (basketwork, woodwork, ironwork, leather dressing) earlier on, but they were generally considered as *Notstandsschulen*, meant to alleviate the dismal economic situation of a specific segment of the population.⁶² Since the prerequisites for higher schools being successful were wanting in the eyes of the Ministry (being under the influence of Dumreicher's thoughts in these matters) no such school was eventually set up, itinerant teachers (which were of course much cheaper) were sent to these regions instead. In some cases, their activities proved highly successful and by raising the general qualification of the populace, the basis was laid for future developments.⁶³

In 1886, both the Chamber of Trade and Commerce in Laibach and the *Landesausschuss*, the highest body of the autonomous administration, applied again for the establishment of a *Fachschule*, this time a *Fachschule für Holzindustrie* and a *Fachschule für holzverarbeitende Hausindustrie, Korbflechterei und Weidenkultur*, to be situated in Laibach, the centre and heart of the *Land*, as Andrej Winkler, the only Slovene *Landespräsident* of Carniola, wrote when backing the motion. In promoting their demand, the Carniolan officials also used arguments connected with the bad general economic situation in the

60 "Protokoll über die XLI. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 17. December 1896", *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 15, 1896, p. 153.

61 Klimburg, *Die Entwicklung des gewerblichen Unterrichtswesens*, p. 228.

62 Krainer Landesregierung an Handelsministerium vom 21. Dezember 1881, AVA, MCU 16 A, Fasz. 3812 (gewerbliche Lehranstalten Krain, in genere), Zl. 711/1882.

63 See "Protokoll über die XXXV. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 10. April 1894", *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 13, 1894; "Protokoll über die XLI. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 17. December 1896" in *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 15, 1896, p.155.

land, stressing the positive effects the production of wooden items and their subsequent export would have on the economy as a whole, given the decline in other economic sectors, and for the people at large.⁶⁴ Now the officials in Vienna were in favour of creating a *Fachschule* in Laibach, Wilhelm Exner, inspector for technical schools, explicitly stated that so far “*Krain mit gewerblichen Schulen verhältnismäßig wenig bedacht wurde*”.⁶⁵ In 1888, the *Fachschulen* took up their activities, but instead of the one for wooden cottage industry and basketwork a *Fachschule für Kunststickerei und Spitzennäherei* was established, both were much sought after immediately.

Only a few years later, the *Landesausschuss* petitioned again, this time for a *mechanisch-technische Werkmeisterschule*, a school for mechanical engineering. After the authorities had examined the situation and had come to the conviction that the industrial situation would merit the establishment of a school of that kind (although this opinion was not shared by everybody), the Ministry decided to go along with the plans to create a *Staatsgewerbeschule* in Laibach, uniting the two already existing *Fachschulen* for woodworking and for lace-working with the newly planned institution.⁶⁶ Deliberations between the Ministry, the city of Laibach and the Landtag as to the financial share of each institution and to technical details (the building site was hotly debated among various quarters in Laibach itself) delayed the project for quite a while, but in November 1911 the new *Staatsgewerbeschule* opened its doors.⁶⁷

By the time the new *Staatsgewerbeschule* in Laibach was agreed upon, a number of other towns pleaded to create a new *Staatsgewerbeschule* in their cities (national considerations – that is the question of the language of instruction – playing a not insignificant part in these demands). The Ministry treated such demands with utmost reserve, partly because of financial consideration, partly, however, because a thorough reform of the entire system of technical and vocational education was already under consideration. The upshot of these deliberations was that no new *höhere Gewerbeschulen* should be created in the foreseeable future but existing schools should be diversified and specialized. Many participants had complained that the instruction offered by technical schools would no longer fit the actual demands, it was regarded as too theoretical

64 Krainer Landesregierung an Ministerium für Cultus und Unterricht vom 17. November 1886, AVA, MCU 16 A, Fasz. 3812 (gewerbliche Lehranstalten, Fachschule Laibach), Zl. 22865/1886.

65 Referentenerinnerung des Ministeriums für Cultus und Unterricht, Ebd.

66 “Protokoll über die XXXVIII. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 23. April 1895”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 14, 1895, pp. 40–43. As the creation of the Staatsgewerbeschule took some time the two Fachschulen were combined in a single Kunstgewerbliche Fachschule in 1901; “Protokoll über die XLV. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 5. December 1901”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 20, 1902, p. 225.

67 J. Šubic – J. Foerster, “Die k. k. Staatsgewerbeschule in Laibach”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 32, 1914, pp. 228–247.

and too devoid of practical experience and training (which was even worse since some of these schools served as substitute for an apprenticeship) or that these schools offered a kind of education which prompted graduates not to return to their original place of work but to seek a “better” job, thus being lost for a more simple occupation. The main thrust of complaints was aimed at the *Handwerkerschulen* and the *Fachschulen für einzelne gewerbliche Zweige*, which did not come up to the expectations originally placed on them, namely to support the members of small trade and small scale industries. Therefore a new type of schools was created, the so called *Bauhandwerkerschule*, which was supposed to give priority to practical supplementary education instead of basic instruction.⁶⁸ With the transfer of utmost responsibility from the *Ministerium für Cultus und Unterricht* to the *Ministerium für öffentliche Arbeiten* (in 1908), the trend towards an education laying more emphasis to practical aspects of the graduates’ later employment grew even stronger. For example, the *höhere Gewerbeschule bautechnischer Richtung* was transformed into a *Baufachschule*, in which the students were obliged, at least “*eine sechsmonatige Sommerbaupraxis durchzumachen, die aber keine Bureaupraxis sein darf, sondern tatsächlich auf dem Bauplatz abgeleistet werden muß*”.⁶⁹ Contrary to the intentions voiced a decade before, the number of *Staatsgewerbeschulen* (in their new form) – as the most prestigious institutions – again rose considerably. Between 1910 and 1914, 12 new schools were established.⁷⁰ Taking into account all kinds of technical and vocational schools, in 1912/13 there were⁷¹:

Institutions	Number	Students
Gewerbliche Zentralanstalten	8	10,447
Staatsgewerbeschulen	31	20,101
Bau- und Kunsthandwerkerschulen	8	3,716
Fachschulen f, einzelne Gewerbe	201	31,748
Lehrwerkstätten	15	332
Allg, Handwerkerschulen	7	2,302

68 “Protokoll über die XLIV. und XLV. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 5. December 1901”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 20, 1902, pp. 137–242; “Protokoll über die XLVII. und XLVIII. Sitzung der Zentralkommission für Angelegenheiten des gewerblichen Unterrichtes am 2. März 1904”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 22, 1904, pp. 157–270.

69 Verordnung des Ministers für öffentliche Arbeiten vom 17. Dezember 1909, Zl. 166–XXIa/18, zit. *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 28, 1910, 149.

70 Schermaier, *Wirtschaftsförderung durch zentralstaatliche Bildungsmaßnahmen*, p.108.

71 “Generelle Übersicht der Gesamtfrequenz der staatlichen und nicht staatlichen gewerblichen Lehranstalten, einschließlich jener für die weibliche Bildung in diesen Berufsrichtungen im Schuljahr 1912/13”, *Zentralblatt für das gewerbliche Unterrichtswesen in Österreich* 32, 1914, p. 378.

Institutions	Number	Students
Gewerbliche Fortbildungsschulen	1,500	193,580
Lehranstalten für weibliche Jugend	1,777	29,770
Together	2,947	291,996

Compared to the beginnings in the seventies of the 19th century, these numbers – including independent institutions (for male and female students alike) run by the state, the *Länder*, communes or associations – show quite a considerable growth in the field of technical and vocational education. Yet one aspect remained more or less the same: the regional disproportion. But that was not primarily the fault of the administration but the result of an uneven geographical distribution within Cisleithania owing to the vicissitudes of economic development. Ernst Pliwa, one of the leading civil servants concerned with the technical and vocational education first in the *Ministerium für Cultus und Unterricht*, then in the *Ministerium für öffentliche Arbeiten*, put it bluntly: “*Wo Kohle ist, da findet sich auch Industrie,*” and he might have added: “*wo Industrie ist, da sind auch Schulen*”.⁷²

72 Pliwa, “Die Entwicklung des gewerblichen Unterrichtswesens”, p. 512.

