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Universities in the Renaissance



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Abstract

The earliest universities appeared in the twelfth century in Bologna and Paris. These institutions grew out of preexisting schools already established in the two cities. Bologna and Paris provided a very influential model for newer institutions, with Southern European universities conforming to the example of Bologna, while Northern European universities adhered to the model of Paris. Northern European universities gave prominence to theology and arts teaching and mostly awarded bachelor's and master's degrees. By contrast, Southern European universities concentrated on law and medicine and mostly awarded doctoral degrees; they accorded marginal importance to theology, which was generally taught in the general schools of the mendicant orders.

Gradually, universities spread throughout Europe: until the first half of the fourteenth century, they proliferated mostly in the south and west of Europe; following the foundation of Prague University in 1348, they developed in Central Europe too. At the end of the seventeenth century, approximately 60 universities

were in operation in Europe. From the beginning of the seventeenth century, the growth of universities began to slow down gradually.

Renaissance European universities maintained the structure and organization of the medieval pattern. The innovation fostered, among other factors, by humanism, led to the foundation of new subjects (such as botany), to the application of humanist philological method to a wide spectrum of subjects, and to the expansion of the canon of authoritative texts. Humanists eventually took up positions in universities, becoming a driving force for change from the fifteenth century onward. Their entry into the academic world led to serious conflicts in Northern Europe, but they were received more positively in Southern Europe. European universities exerted a profound impact on society, which was not limited to research findings applied to everyday life. The Lutheran Reformation had its origin in an academic dispute which was to be held at the University of Wittenberg, where Luther was teaching biblical studies. His links with other colleagues, as well his teaching activity, played a crucial role in the defense and dissemination of the Reformation.

Universities

The university is an institution devoted to advanced learning and research. Today, it

normally comprises a college of liberal arts along with professional and science schools. It provides graduate and undergraduate programs in a range of subjects and has the power to confer undergraduate and graduate degrees in various academic disciplines. This state of affairs is the end result of a long-term evolution, which proceeded smoothly and without dramatic changes. Tellingly, Walter Rüegg has defined the university as “the only European institution which has preserved its fundamental patterns and its basic social role and functions over the course of history” (Rüegg 1992, XIX). He has also identified another crucial element of the university: its Europeanness. This is due to the influence that this institution has exercised both within and beyond European borders. Not only has it been vital for the development of European society, contributing to shaping a common cultural tradition, but its structure and organization have also been adopted in diversified societies worldwide beyond the continent’s borders (Rüegg 1992, XIX–XX).

Some scholars, mostly in the field of Islamic studies, have challenged this view. They have argued that the madrasas, in fact, provided the pattern (or, more cautiously, some features of the pattern) later adopted by European universities. Madrasas are institutions of higher education, first established in eleventh-century Iraq and still active in Muslim lands, which have represented for centuries the main source for the development and diffusion of religious and scientific knowledge throughout and beyond the Muslim world. Their teaching centers on law and theology. During the Middle Ages, they were very small schools (with just a few teachers – sometimes even just one) founded and sponsored by a wealthy patron as an act of charity. Drawing a comparison between universities and madrasas (at least, those around the Mediterranean sea), Darleen Pryds has noted significant similarities in the figure of the patron, as well as in the function of political training provided by both these institutions (Pryds 2000, 95–99). In her analysis, she explicitly rejects the opinion of George Makdisi, who, by contrast, systematically listed the fundamental differences between these two institutions.

Makdisi has stressed, in particular, that the European *licentia docendi* (permission to teach) was granted by the political authorities (such as a prince, king, or pope) who funded the university, whereas the Islamic *ijāza* was conceived as a personal qualification conferred by the master on the student. Furthermore, Makdisi has highlighted that the idea of *universitas*, as originally conceived in medieval Europe, was essentially alien to Muslim society. The Latin term *universitas* meant a guild, that is, a corporation formed to provide protection and pursue the common interests of its members. Only over time did the term gradually acquire the meaning of a “society of academics.” As we will see, this concept of corporation (*universitas*) proved to be crucial for the foundation and development of European universities (Makdisi 1970, 260–264).

Both Bologna and Paris claim the honor of being the site of the first European university. The title of oldest institution is generally assigned to Bologna. According to the traditional account, the foundation of the university dates back to 1088. This date was, in fact, chosen in the late nineteenth century by a committee chaired by the then rector Giovanni Capellini. The results of the committee’s investigation were celebrated in a powerful and passionate speech given by Giosuè Carducci (1836–1907). Famous poet and Bolognese academic, Carducci praised Bologna for its contribution to the rebirth of the ancient tradition of Roman law through its law schools and, later, university. According to his account, although it is not possible to date the birth of the university precisely, it is undeniable that it happened in the closing years of the eleventh century, making 1888 the 800th anniversary of its foundation (Carducci 1888). This effort to determine a specific date was evidently aimed at instilling a sense of pride, in the form of a certain cultural supremacy, in the people of the newborn kingdom of Italy. Contemporary scholars tend now to reject this legendary account. They instead regard the foundation of early universities as a gradual process which took place over a long period of time.

The University of Bologna grew out of the private law schools already present in the city in the last decades of the eleventh century.

Numerous groups of students gathered in the city to hear preeminent jurists, such as Imerius (c. 1050–after 1125) lecturing on civil law and later the Camaldolese monk Gratian (c. 1075–1145/1147) lecturing on canon law. Students gathered around – and paid – an eminent teacher in order to receive professional training in law. These law schools, which were attracting a growing number of students, remained private institutions until at least the second half of the twelfth century. According to Jacques Verger, “the crucial change would seem to have taken place around the years 1180–1190” (Verger 1992, 47–48). From 1189 the local government of Bologna was able to gain more control over professors, who swore an oath of loyalty to the city. The resulting stability favored the arrival of large numbers of students coming from places both nearby and distant. Foreign students, lacking legal protection, formed associations to assert their civil rights and avoid various forms of discrimination. They grouped themselves in accordance with their own place of origin and named these organizations *universitates*. Following the appearance of law schools in Bologna, teaching in other subjects gradually materialized. By the middle of the thirteenth century, philosophy and medicine had attained a strong position in the university; and by the end of the century, arts subjects also began to be taught. The school of arts and medicine was finally recognized in 1316. Another crucial factor in the development of the University of Bologna was papal intervention. In 1219, Pope Honorius III stated that permission to teach (i.e., the *licentia docendi*) had to be granted by the archdeacon of the city. This belated recognition of a situation already in existence (as the university had awarded degrees before this papal intervention) became an important precedent for other universities in following centuries, which were founded on the basis of a charter from a pope or emperor. Similarly, another crucial decision made by the University of Bologna set a further important precedent for other European institutions. Bologna regarded the university as a “civic enterprise” to whose development the city had to contribute (Grendler 2002, 21). Indeed, in the thirteenth century, the city began to pay –

despite a few interruptions – law professors’ salaries and to levy a tax on the citizenry to promote the university’s growth. The same decision was later taken by Padua in 1262. Italian and European cities sponsored universities because they could increase their cultural and political prestige and contribute to the city’s economy. Moreover, by paying for the universities’ expenses, city governments essentially gained a firmer control over these institutions, taking over the power previously wielded by students.

A very similar chronology applies to the birth of the University of Paris. From the closing decades of the eleventh century, schools began to proliferate in the French city. Alongside the traditional ecclesiastical schools, well represented by the chapter of Notre Dame, which taught theology, many private schools were established, offering a curriculum based on the arts. After 1150, law and medical schools appeared, run by Italian-educated professors. The rapid expansion of these schools raised organizational issues. Continuous strife with city dwellers persuaded students to remain under the church’s control. Students obtained the privileges of clerics, while the Church assumed direct control over the schools. Probably starting from the 1170s, these schools determined to be organized in guilds. The first guilds of students and masters appeared between 1200 and 1210. The pope did not interfere with this trend, whereas the local bishop and chancellor, who possessed a discretionary authority over these schools, fiercely opposed it. With the support of the pope, masters and students of Paris achieved a notable victory after 25 years of hostilities. They gradually attained all the features which were essential to form a corporation. By 1215, masters were able to gain control of the enrollment in the schools and to have statutes. In 1231, Pope Gregory IX asserted once and for all the legality of the academic statute.

As indicated above, both Bologna and Paris developed spontaneously from preexisting schools. The case of Oxford University is similar, growing out of schools that were active as early as the middle of the twelfth century. A provisional form of university was already in place at the beginning of the thirteenth century before it

received the first papal statutes in 1214. Sometimes the birth of early universities occurred as a consequence of a migration from another institution. The foundation of Cambridge University is the result of a migration from Oxford, which happened between 1209 and 1214; analogously, the University of Padua owes its origin to a secession of students from the University of Bologna that happened in 1222 (Arnaldi 1977). The birth of a university could also be dependent on the will of the secular or religious authority. Emperors, popes, and European sovereigns had the power to create universities and often used it. Emperor Frederick II, for instance, founded the University of Naples in 1224. Similarly, Spanish political authorities put a great deal of effort into the creation of new universities: in addition to the short-lived *studium* of Palencia, the kings of Castile were responsible for the foundations of the universities of Salamanca (1218) and Valladolid (whose date of founding is disputed) before the end of the thirteenth century.

Despite some discrepancies in the data provided by historians, it is possible to observe some trends in the foundation of universities and to draw a general outline of their diffusion. From the foundations of the first universities of Bologna and Paris until the beginning of the seventeenth century, there was a dramatic growth in the number of universities. As we shall see, this growth saw a strong increase in the fifteenth century, followed by a slowing of pace in the last period considered here (1500–1625). The year 1650 marks the turning point in this prolonged growth: thereafter, the number of new foundations more or less equals the number of universities which were closed down, transferred, or merged. By the end of the fourteenth century, there were around 30 universities in operation (31 according to Verger 1992, 57; 29 according to Grendler 2004, 2). The majority of universities that were newly founded in this century were located in the south and west of Europe (Italy, France, and Spain). The foundation of Prague University by Emperor Charles IV in 1348, however, marked the beginning of a powerful movement for the creation of new universities in present-day Germany and in Central Europe. Not by chance, the fifteenth

century saw a general increase in the creation of universities throughout Europe and a sharp rise in Germany and in Northern Europe. Germany established 15 new universities; lacking medieval institutions, Scotland created 3 universities (St. Andrews, 1413; Glasgow, 1451; Aberdeen, 1495) and Scandinavia 2 (Copenhagen, 1475; Uppsala, 1477) before the end of the century. New institutions were also founded in Spain, France, Italy, and on the eastern fringes of Europe. By 1500, around 60 universities were in operation in Europe (63 according to Verger 1992, 57; 57 according to Grendler 2004, 2) – a doubling in the course of a century. In the following period, from the sixteenth century until the first quarter of the seventeenth century, 18 new universities were established in Europe (Grendler 2004, 2). The foundation in the sixteenth century of the universities of Marburg, Helmstedt, Jena, Wittenberg, and Frankfurt an der Oder made the central-eastern area of Germany particularly fertile in such institutions.

The diffusion pattern of European universities reflects the overall economic and “cultural development of the continent” (Patton 1969, 26). Yet, this diffusion was also heavily influenced by some other major factors such as political, religious, or ideological aims. The foundation in the sixteenth century of German universities and of French universities (Douai, 1559; Pont-a-Mousson, 1572; Besançon, 1564) run by Jesuits clearly reflects the will to back the respective religious and political causes of Protestants and Catholics. Similarly, Spanish Catholic authorities founded the University of Gandia in the newly conquered south of Spain to educate converted Moriscos and assert direct control over the area (Frijhoff 1996, 70–71). These factors might also explain the absence of universities in certain areas, for example, the populated and developed areas of the Low Countries and the Baltic where no universities were founded in the fifteenth century. This seems to have been due to the unfavorable perception of Northern European universities, modeled on the example of Paris and thus mostly oriented toward arts and theology, subjects which did not attract pragmatic Northern European merchants (Patton 1969, 18–19, 26).

The universities of Paris and of Bologna, besides their chronological priority over newer institutions, also exerted a profound influence on them. They embodied, in fact, the differing archetypes of Northern and Southern European universities (Gieysztor 1992, 109–113; Grendler 2004, 3–12; Lines 2012, 2–7). Major differences originated from their curriculum as well as their structure and organization. Southern universities concentrated on law and medicine. They adopted the two-faculty system established in Bologna, where a separate faculty in arts and medicine was formally constituted after the establishment of the law school. In these universities, theology occupied a marginal place in the curriculum and was mostly taught in the general schools of mendicant orders, which were separate institutions. By contrast, the Paris model was structured into four faculties, with arts as the lower faculty and law, medicine, and theology as the higher faculties. A successful course of study in arts was seen as preparatory for more advanced classes and was generally required in Northern European universities in order to attend any of the three higher faculties. As a result, arts faculties “were the dominant element both numerically and juridically” in these institutions, within which “they also had the youngest and the most volatile membership” (Leff 1992, 309).

Law was the largest faculty in Italian universities, with arts and medicine equally divided between them. In Bologna, for instance, the number of law professors was consistently higher than the number of arts and medicine professors until the beginning of the sixteenth century, when the long-standing pattern was reversed (Grendler 2002, 9). It is possible to conclude that “about seventy-five percent of Italian professors taught law and medicine, another twenty percent taught arts” (Grendler 2004, 6). The remaining 5% taught theology, which acquired increasing importance in the mid-sixteenth century with the Council of Trent (1545–1563). Although some Italian universities had acquired the right to confer degrees in theology from the mid-fourteenth century, it was only in the last third of the sixteenth century that the number of theology professorships rose a little.

Whether or not universities had been teaching theology continuously since their foundations, they appointed one or more members of the clergy to theological professorships during or following the Council of Trent. It was only Padua that had a more consistent and established presence of theology in its university from the middle of the fifteenth century. The appointment of professors of metaphysics and theology was favored by inter-related interests. On one hand, the Venetian senate wanted to tackle the drop in matriculation numbers in certain areas of the curriculum of the University of Padua and to furnish it with prestigious teachers; on the other hand, students of arts and medicine had been expressly requesting a post in theology since 1433. Therefore, in 1442, the Venetian senate created a professorship of Thomistic metaphysics, which was followed in 1474 by a professorship of Scotist metaphysics. Since metaphysics was taught using Aristotle’s treatise on the subject interpreted from a Christian perspective, it was essential as preparation for the study of theology. Then, in the last quarter of the fifteenth century, the Venetian government founded two additional professorships in Scotist (1476) and Thomist theology (1490). Finally, in 1551, the Venetian senate created the first permanent position in Sacred Scripture in Italy. In the sixteenth century, then, the University of Padua could boast the second largest presence (after Rome) of religious studies among all Italian universities. Its five professors of religious studies, out of a total average number of 56 lecturers, amounted to almost 10% of the whole professorship (Grendler 2002, 366–372).

The percentage of theology professors in Northern European universities was far higher than in Southern European ones. This is especially true for Paris and Oxford, which received an exclusive right from the pope to confer degrees in theology until the fourteenth century. Since Northern European universities showed a marked inclination theology and arts, they awarded bachelor’s and master’s degrees, which were directly linked to these faculties, whereas Southern universities essentially conferred doctorates. The bachelor’s degree in arts was normally awarded after 4 years, while the master’s degree was

conferred after 6 years in Paris and 7 years in Oxford. The degree in theology was at the top of the scale. In Oxford, in order to become a master in theology, a student had first to finish a master's in the arts. This rule did not apply to Paris, where a student had to go through different stages in order to become a *bacchaliarius formatus* in theology; therefore, he had to continue his training for a total of 12–16 years before becoming a master. As a result of this prolonged course of studies, the minimum age for graduating as a master in Theology in Paris was 35.

Despite these differences, Northern and Southern European universities shared some key elements. Firstly, the language used throughout the medieval and Renaissance academic world was Latin. A few attempts to lecture in the vernacular were made in sixteenth-century German universities and later in other countries but did not prove to be either successful or lasting (Burke 2004, 76–78). Secondly, Aristotelian thought provided the dominant (although not exclusive) philosophical framework until the end of the seventeenth century in university learning. Thanks to its flexibility and its adaptability, it was the most suitable to accommodate new research findings. Furthermore, it seemed to contemporaries more systematic, more rigorous, and therefore “much more didactically useful” than other alternative philosophical traditions (Bianchi 2007, 50). The third common element was the teaching method, which consisted of lectures and disputations. Lectures were of three kinds: ordinary, extraordinary, and cursory, in decreasing order of importance. Ordinary lectures were required to obtain the degree and were given by the most distinguished professors; extraordinary lectures were normally optional and were taught by less experienced professors; cursory lectures were open to the community and had an ancillary purpose in the curriculum and a more informal character. Disputations complemented lectures. Students were requested to attend or to take part in these disputations, in which the presiding master posed a question and participants were expected to back the positive or the negative side of the argument. Finally, the question was answered by the presiding master. These disputations were also

designed to train students in dialectical reasoning, which lay at the heart of scholasticism.

The curriculum of European universities had much in common throughout Europe. The main differences appeared in the arts faculty, which taught a miscellaneous group of subjects from within the liberal arts. The focus was on three major fields of study: philosophical and linguistic training, providing classes on grammar, rhetoric, logic, natural, and moral philosophy; an overview of mathematical sciences (arithmetic, geometry, astronomy); and music. In Northern European universities, the faculty established a close link to theology and therefore acquired a philosophical orientation. By contrast, in Southern Europe, the arts faculty in French, Spanish, and Italian universities, developed a more practical orientation and established links to law and medicine. It is no surprise, then, that until the fifteenth century, a subject with an essentially legal function such as the *ars dictaminis* (i.e., the art of writing Latin letters conforming to certain rules and models) was still included in the arts curriculum of Italian universities. Particular emphasis was also placed on rhetoric, which had value for students of the law.

University legal instruction centered on civil and canon law. Canon law was based on Gratian's *Decretum*, a collection of papal letters, council decrees, and other ecclesiastical writings. The teaching of canon law implied the reading and the interpretation of the *Decretum* and its glosses. Canon law experienced a grave crisis in the sixteenth century due to the increasing secularization of society. Civil law was based on the *Corpus juris civilis*, a compilation of Roman law assembled by the officials of Emperor Justinian in the sixth century. After the *Corpus juris civilis* was revitalized by Bolognese glossators in the twelfth and thirteenth centuries, it was re-interrogated and interpreted by fourteenth-century commentators or post-glossators. The philosophical background used by the early post-glossators such as Cino da Pistoia (1270–1336) was provided by the application of the Aristotelian “four causes” as elaborated in the French universities of Paris and Orleans and the adoption of their dialectic method (Kelley 1979, 782–783). Within this tradition, the two

major post-glossators, Bartolus of Sassoferrato (c. 1313–1357) and Baldo degli Ubaldi (c. 1327–1400), both Perugia-educated, taught in various universities in central and northern Italy. Their teachings spread throughout Europe under the name of *mos italicus*. As we will see, in the sixteenth century, the *mos italicus* was rivaled by the *mos gallicus*, which implied the adoption of a philological perspective to the study of law.

University teaching of medicine was common to many universities. The first organized European medical school was located in Salerno, in the south of Italy, and was founded in the ninth century by Benedictine monks. The *Schola medica salernitana* is generally considered the forerunner of all university medical schools. Despite its obscure origins, the school attained great fame in the eleventh and twelfth centuries and notably hosted acclaimed female professors of medicine such as Trota of Salerno (twelfth century). The school lost its leading role in medicine in the thirteenth century, when the universities of Bologna, Montpellier, and Paris opened their medical schools. In the fifteenth century, Padua and Ferrara also joined this select group (Siraisi 1990, 55).

The medical curriculum focused on the intellectual role of medicine, which, at the time, was conceived as “a diverse collection of areas of knowledge and of intellectual interests” (Siraisi 2012, 492). As such, it included various disciplines and developed a practical character embedded in a theoretical framework. This philosophical orientation explains the links that medicine established chiefly to the faculty of arts. In addition to some disciplines such as logic which had a clear preparatory nature with respect to medicine, other subjects in the arts curriculum sparked the interest of medical students. These were natural philosophy and astrology. Natural philosophy was conceived in Aristotelian terms and, due to its closeness to medicine, was regarded as directly useful for medical students, who also had to take astrology into account since it considered the influence of celestial bodies on the health and psychological condition of human beings (Siraisi 1990, 66–68). The basic texts adopted in the medicine curriculum were a series of Latin translations

of treatises attributed to Greek authorities such as Hippocrates, Galen, and Aristotle. Due to the volume of this material, the teaching of medicine largely relied on compendia, abbreviated treatises, and Arabic medical works in Latin translation, especially Avicenna’s *Canon*. These texts, adopted throughout Europe, remained more or less the same until the second half of the fifteenth century, when humanists were able to produce more accurate Latin versions of Greek texts than the medieval ones, as well as translating newly recovered Greek texts, thus dramatically improving knowledge of classical medicine.

Heritage and Rupture with the Tradition

For decades, the universities of the Renaissance have been regarded as old-fashioned bastions of tradition. This questionable assumption was motivated by two factors. First, Renaissance universities stuck to a largely Aristotelian curriculum. By so doing, they delayed the appearance of modern science, whose emergence “is usually taken to be the results of throwing off the shackles of an old-fashioned Aristotelian worldview and its gradual replacement. . . by a ‘new’ science” (Schmitt 1984, 35). Secondly, scholasticism, the predominant method adopted in university classes, has traditionally been considered to be an antiquated, dry, and orthodox system of thought. Scholasticism’s emphasis on the speculative sciences, its rigid and convoluted dialectic, and its deference to Aristotle have probably been exaggerated and have condemned it to a somewhat undeserved fate.

Although scholasticism occupied a central role in university learning, humanism also established a place for itself in universities’ halls. Humanism introduced crucial changes in every discipline taught in universities and contributed to the creation of new ones. The impact of humanism, which occurred throughout Europe, affected universities to different degrees. Humanist scholars and beliefs enjoyed a very different reception when they seeped into the academic environments and curricula of Northern and Southern European universities. The advent of humanism in Northern

institutions led to rivalries between humanists and scholastics. Historians have offered different interpretations of these conflicts, portraying them as mere reflections of internal academic and personal antagonisms within the general coexistence of scholasticism and humanism or, alternatively, as the result of an unavoidable incompatibility between these two antagonistic systems of culture. Charles G. Nauert has compared the different positions, concluding that “the conflicts... may have been localized, personal, and muddled; but they reflect a disharmony that is fundamental. Conflict was not accidental; it was fated, irrepressible” (Nauert 1998, 432). Reciprocal criticism concentrated on a few major, and essentially intertwined, issues. Firstly, humanists and scholastics challenged each other’s methods. Humanists proposed an innovative approach to textual criticism, based on philological and linguistic skills, while scholastics claimed the validity of their established method of dialectical disputation and dismissively labeled humanist speculations as irrelevant *poetria* (poetical things). Along the same lines, scholastics and humanists quarreled over sources, with scholastics relying primarily on medieval commentators and humanists on classical authorities. Scholastics also criticized humanists for their marked reluctance to accept texts as they were traditionally transmitted within the academic environment. This, of course, was a crucial matter when it comes to theology and sacred texts. Scholastics foresaw a potential danger of heterodoxy in the humanist treatment of religious texts. They argued that humanists, untrained in theological studies, should not be allowed to deal with the Bible and theological matters. Due to their lack of competence and qualification, humanists, in the opinion of scholastics, should not be allowed to approach scriptural texts. Humanists, for their part, attempted to rebut their opponents’ claims. Erasmus of Rotterdam (1466?–1536), in particular, condemned scholastics for their focus on pointless questions, their neglect of the correct and original meaning of the Bible, their reliance on some ignorant medieval theologians, and their practice of extracting single passages out of their contexts and assuming them as the revealed truth (Nauert 1998, 431).

By contrast, the penetration of humanism into the Italian university environment happened with relative ease. Some key factors facilitated this process. Firstly, the lack of powerful faculties of theology prevented that potential impediment to the diffusion of humanism. Secondly, the higher degree of specialization in Italian universities hindered the emergence of conflicts between professors teaching different subjects. Normally Italian professors were expected to teach a narrow range of subjects and to stay within their subjects’ traditional boundaries. Professors of rhetoric, for instance, could not teach medicine or law. Therefore, they could not pose a threat to members of other faculties. Lastly, the “notable people” who appointed new university professors normally belonged to families imbued with humanist culture and values. Consequently, they looked favorably on exponents of humanism, who also were often the most in-demand professors on the academic market (Lines 2006, 339–340). Initial contacts between humanists and Italian universities happened at a very early stage. The first humanists were usually students of law who pursued (but mostly did not obtain) university degrees: Petrarch (1304–1374) and Coluccio Salutati (1331–1406), for instance, both studied law in Bologna. Still in the fourteenth century, Leonardo Bruni (1370–1444) studied law at the University of Florence until he abandoned university studies to dedicate himself to the translation of classical Greek works. Again in Bologna, Leon Battista Alberti (1404–1472) received a degree in canon law prior to 1428. This (still limited) interaction between humanists and the university has led scholars to reevaluate this complicated relationship and to reconsider the supposed aversion of humanists to universities.

At this stage, however, their participation did not bring about any significant modification to the university environment. This happened only when a substantial number of humanists served as university professors, assuming the responsibilities of teaching, running, and organizing courses. According to Paul Grendler, the growing involvement of humanists in Italian universities passed through a series of stages (Grendler 2002, 204–248). Until the first quarter of the fifteenth

century, they were not tempted to teach in the universities, and when they opted for a teaching career, they preferred to train students in boarding schools. University posts were not particularly appealing as the subjects usually taught by humanists were still poorly paid and did not confer great prestige on those appointed to teach them. The case of Vittorino de' Rambaldoni (1378–1446), known as Vittorino da Feltre, provides a good example of the shared lack of interest in university posts. He was appointed in 1422 to teach grammar and rhetoric at the University of Padua, but he resigned shortly afterward, disgusted by the rude manners of his university students. He then moved to Venice and later to Mantua, where, for more than 20 years, he ran a boarding school (Ca' Gioiosa) open to young aristocrats. The next generation of humanists gradually began to apply for and hold university positions on a more consistent basis. By the first half of the fifteenth century, the major Italian universities appointed humanists and provided a larger forum for humanist studies. The growing impact of humanism within Italian society corresponded to a more stable presence of humanists within the university environment, which welcomed them rather benevolently. It is then interesting to assess to what extent this general assumption applies to the notorious case of the troubled relationship between Lorenzo Valla (c. 1407–1457) and the law professors at the University of Pavia. He was appointed to teach rhetoric in Pavia in 1431. Following an initial friendly welcome from the other university teachers, the situation worsened dramatically in 1433, when Valla published a controversial pamphlet. The trigger to write it was a comparison made by one of the university jurists between Cicero and Bartolus of Sassoferrato, favorable to the latter. Valla rebutted this opinion, stressing the obscurity of Bartolus's language, the incoherence of his syllogistic reasoning, and his lack of philological skills. Quite consciously, circulating this piece of writing, Valla became the defender and the advocate of humanist culture, which was gradually gaining strength in Italian universities. According to his pamphlet, even a jurist had to develop humanist skills in order to be able to interpret and contextualize historical Roman law,

to write eloquently in a refined and classical Latin, and to acquire the moral and linguistic skills of the Roman orator. Valla paid a heavy price for this polemical writing: although the actual course of the events is still hazy (as accounts differ on a few important details), it is known that he had to leave his teaching post and even the city to avoid the outrage of the local law professors (Speroni 1979). The case of Valla is interesting because the initial reception that he enjoyed confirms once more the positive attitude toward humanists in fifteenth-century Italian universities. The later hostile reaction against his controversial pamphlet, however, reveals the underlying tension between humanists and scholastics, prone to escalate into bitter disputes. In the period between the middle of the fifteenth century and the last quarter of the sixteenth century, humanist studies and humanists obtained a central position in Italian universities. Until the beginning of the *Cinquecento*, the two leading humanistically oriented institutions were the universities of Bologna and Florence. Bologna could boast a cohesive group of humanists, led by the eminent figure of Filippo Beroaldo the Elder (1453–1505). He was best known for his encyclopedic knowledge, which was greatly admired by contemporaries. He was also very successful in his teaching, which he undertook from 1479. According to contemporary sources, his classes were packed with hundreds of students. He was a prolific writer and was among the small group of humanists who first conducted comparative and philological analyses of classical texts, breaking with the traditional commentary tradition. The philological method was later raised to a higher level by Angelo Ambrogini, known as Politian (1454–1494; Grafton 1977). He was appointed in 1480 as professor of poetics and rhetoric at the University of Florence through the direct influence of Lorenzo de' Medici, unofficial ruler of the city. The appointment of such a young and ambitious man, who was also one of the leading figures of the new generation of humanists, was intended to provoke a reaction in the Florentine academic establishment. This was led at the time by the eminent humanist Cristoforo Landino (1425–1498), aged 56, whose rather conservative teaching was beginning to appear outdated. While Landino's star was starting to slowly

fade, Politian's star was rising: this is testified to by the growth of his salary, which reached the very considerable amount of 450 florins in 1491–1492. In his teaching, he developed a radical philological approach, aimed at reestablishing the original (or the closest to the original) form of the classical work he was reading and commenting on. For his explanations, he mostly relied on earlier commentaries, which he often criticized in order to assert his own preeminence in this literary genre. From 1490 onwards, Politian applied his philological skills to Aristotle's *Nicomachean Ethics*, invading the traditional field of the philosophers. To counter the adverse reaction of his colleagues in philosophy, Politian devoted his 1492 inaugural lecture to arguing against them. He proudly claimed for himself the supposedly pejorative title of *grammaticus* ("grammarian"), which, according to him, meant that he possessed the necessary skills to read ancient works (in the original language), to restore them to their original form, and then to adopt these emended texts in place of the defective editions and the "barbarous" commentaries employed by philosophy professors (Mandosio 2008). Humanist influence declined in universities in the closing decades of the sixteenth century. The proliferation of Jesuit schools, which offered free teaching in theology and humanist studies, partially accounts for this decline.

Innovative and Original Aspects

Much of the cultural innovation stemming from European universities is due to the influence exerted on these institutions by humanism. It played a decisive role in some of the crucial developments which took place in universities. Firstly, it contributed to changes in the relative positions of subjects within the hierarchy of the curriculum and even to the foundation of new subjects quite alien to the medieval curriculum such as botany, which emerged as a separate subject at the dawn of the sixteenth century. In the fifteenth century, the study of the healing properties of plants had been included in theoretical medicine. A major change occurred when humanists turned their attention to Dioscorides's

De materia medica and Pliny the Elder's *Historia Naturalis*, both invaluable for the study of botany. Dioscorides's treatise was published in the original Greek by Aldo Manuzio in 1499 and was translated into Latin by the Venetian scholar Ermolao Barbaro (1453/1454–1492) in the 1480s, though published posthumously in 1516. The latter attracted a great deal of attention for its richness of botanical terminology – as well as for its textual errors. Botany then became an independent academic subject: the University of Rome was the first to found a lectureship in botany in 1514, followed by Padua in 1533 (Grendler 2002, 343–345). Gradually, the aims of the subject became more and more independent from medicine. Indeed, it evolved as its focus moved from the medical effects of plants to a broader knowledge of natural history. Possibly, the leading authority in this field was the Italian Ulisse Aldrovandi (1522–1605), who taught botany from 1556 until 1600 in Bologna. In addition to creating a botanical garden in 1568, Aldrovandi also collected numerous natural specimens and classified them according to scientific criteria.

Within that same field of the medical studies, developments in the study of anatomy were also a consequence of the humanist approach to the subject. Anatomy was taught in Italian universities from an early age; however, after humanists focused their attention on Galen's works, (re) translated in more correct Latin in the first half of the sixteenth century, the study of anatomy changed radically. Galen's treatises enabled medical professors to gain a deeper understanding of the human body. Dissections became more frequent and more rigorous. The leading figure in this field was Andreas Vesalius of Brussels (1514–1564). He came into contact with the works of Galen at an early age, when he was a student in Paris and in Louvain. He was appointed by the Venetian senate as professor of surgery at the University of Padua in December 1537 with the express request that he undertake a systematic program of human dissection. His tireless efforts to improve research in the field of anatomy further led to the publication of *On the Fabric of the Human Body*, which he composed in parallel to his role as a translator of Galen. This monumental work, published in 1543 and in a revised edition

in 1555, presented a comprehensive and exhaustively detailed overview of anatomical matters and, even more significantly, directly and polemically challenged Galen himself. In a similar way to Vesalius, other important anatomists were appointed by Italian universities, and finally, the University of Bologna established an ordinary professorship in anatomy in 1570 (Grendler 2002, 338).

Secondly, the spread of the humanist philological method moved beyond the traditional boundaries of humanist studies and contributed to transforming and overhauling many subjects. The great Milanese jurist Andrea Alciato (1492–1550) is regarded as the first to apply humanist methodology to the study of law. He trained in Pavia and Bologna and graduated from the University of Ferrara. Despite his Italian education, he spent about 10 years in French universities (Avignon and Bourges) as a university professor, before returning to teach for 17 years in Italian universities (mostly at Pavia). His main aim was to reform legal education through application of humanist skills, usually regarded with hostility by jurists. Alciato's rethinking of law studies was based on two humanist principles: the development of a philological approach and the application of a historically aware interpretation of classical sources. His tenure at the University of Bourges was of crucial importance for the establishment of a new legal tradition, an alternative to the *mos italicus* and known as the *mos gallicus*. This reformed conception of law became dominant in France – and secondarily in Germany – while in Italy the *mos italicus* remained predominant. In the Italian peninsula, the legal tradition was, in fact, more “concerned to preserve the spirit of Classical forms rather than the letter of Classical texts” (Kelley 1979, 784). Recent scholarship, though, has argued that this opposition of approaches should not be seen as rigid since the two conceptions of law often coexisted in the university environment (Birocchi 2012). Such was the case, for instance, in the University of Pavia, where distinguished and lesser-known law professors between the sixteenth and the seventeenth century showed a general appreciation of humanist ideas and an inclination to follow the renowned exponents of

the *mos gallicus* (di Renzo Villata 2015). Furthermore, a certain underlying tension in relation to this new reformed vision of law is testified to by the explicit request made by students of the University of Bologna: in a memorandum drafted in 1583 and sent to Ulisse Aldrovandi, they asked to be taught the *Pandects*, part of the *Corpus juris civilis*, in accordance with the French teaching style (Lines 2012, 19–20).

The new approach to the sources and their form helps to explain the third crucial development brought about by humanists: the reassessment of the canon of authorities and (on a more practical note) the replacement of texts and textbooks employed in university courses. Perhaps the insertion of Platonic theories into the canon of university courses was the most influential change. This process was neither smooth nor rapid nor long-lasting in a theoretical framework dominated by Aristotle. It was possible only after fifteenth-century humanists provided fresh Latin translations of Plato's works, making it easier for scholars to lecture on them. Following pioneering attempts to offer a course on Plato's works in fifteenth-century Ferrara and sixteenth-century Pavia, the first unpaid lectureship on Plato in the Italian peninsula was established in Pisa in 1576, and the first ordinary professorship of Platonic philosophy was created in Ferrara in 1577 (Grendler 2002, 297–304). The Ferrara chair was first held by the Platonic philosopher Francesco Patrizi of Cherso (1529–1597), who proposed Platonism as a philosophical alternative to Aristotelianism. Despite the increased interest in Platonic works, Platonism as an academic subject never succeeded in firmly establishing itself within the university curriculum, and the number of Platonic lectureships decreased in the closing decades of the sixteenth century. In addition to Plato himself, the humanist determination to unveil new sources also brought in other philosophers belonging to the Platonic tradition.

In general, the pragmatic humanist approach also had consequences for everyday university life. For instance, it encouraged revision of the texts or materials used for teaching. There was often debate as to which books to use in class. Humanists teaching grammar in sixteenth-century German universities disapproved, for instance, of

Alexander of Villedieu's *Doctrinale*. They emphasized its lack of elegance and opted instead for the works of humanist grammarians. This apparently minor quarrel over a textbook actually implied a more profound discussion of the subject's aims: on the one hand, traditionalists prepared students to engage in dialectical reasoning by acquiring a superficial and instrumental knowledge of Latin; humanists, on the other hand, wanted students to be able to comprehend and write Latin texts properly. The humanists won this battle, and the *Doctrinale* gradually fell into disuse in universities (Heath 1971, 16–17, 26–28; Nauert 1990, 804–805). Again in German universities, the efforts of humanists were instrumental in introducing Cicero and Quintilian into the teaching program of rhetoric (Nauert 1990, 806).

The assumption that humanism was the only factor encouraging innovation within the European university should be rejected for two reasons. First of all, the spread of the humanist methodology did not exclude scholasticism from universities. It is now clear that the resulting dichotomy cannot be drawn in rigid terms. The diffusion of humanist techniques throughout the curriculum did not replace the dialectic method of scholasticism in university teaching. It was, then, a merger of these two apparently opposing methods that fostered development in many disciplines. Furthermore, modern scholars have arrived at a more unprejudiced and balanced interpretation of scholasticism. Although they have not denied a certain degree of backwardness, they have also recognized that this approach to education was creative and responsible for some important cultural advancements (Lines 2006, 344–345). For instance, the philosophy professor Pietro Pomponazzi of Mantua (1462–1525), who taught in Padua, Ferrara, and Bologna, played a key role in the development of the debate on the immortality of the soul, asserting the independence of the philosophical perspective from theology. In his major work, *Treatise on the immortality of the soul* (1516), he stated that while the intellectual soul is mortal in philosophical, that is, Aristotelian, terms, it is immortal according to faith (Grendler 2002, 290–292).

To conclude, neither scholasticism nor humanism alone proved to be the key factor in fostering innovation in universities. On the contrary, it was more likely the evolution of this relationship that was the impetus behind the new developments mentioned above as well as many others. The Renaissance university, then, despite its still quasi-medieval structure, provided the most suitable venue for producing this evolution. It might, therefore, be tempting to conclude that early modern universities, together with other formal and informal institutions, such as academies, religious schools, courts, and humanist circles, were among the main centers of Renaissance innovation.

Impact and Legacy

As we have seen, Renaissance universities had a tremendous impact on several areas of learning. Yet, they had an even bigger impact on early modern society. These institutions provided a major contribution to the emergence and dissemination of the Protestant Reformation. The starting moment of the Reformation was in all respects an academic exercise, a disputation on a specific topic. The 95 theses composed by Martin Luther (1483–1546) in October 1517 were structured as an academic disputation, concerning the topic of indulgences, expected to take place at the local University of Wittenberg. Although the disputation never took place, the links between the university and the Reformation were nonetheless highly significant for its deeper implications. Indeed, the defense and the spread of the Reformation enormously benefitted from Martin Luther's position at the University of Wittenberg. His tenure as a professor of biblical studies lasted more than 30 years, during which he enjoyed the loyal support of his colleagues, who firmly backed his position. More importantly, Luther and his colleagues were able to gain the passionate commitment of many students, who became followers and then leaders of the Reformation. A considerable number of his students became university professors during the sixteenth century

and spread Reformation ideas even further through the collaboration of their own students (Grendler 2004, 14–20).

Cross-References

- ▶ Aldo Manuzio
- ▶ Andreas Vesalius
- ▶ Ermolao Barbaro
- ▶ Humanism
- ▶ Martin Luther
- ▶ Reformation
- ▶ Scholasticism
- ▶ Ulisse Aldrovandi

References

- Arnaldi, Girolamo. 1977. Le origini dello studio di Padova dalla migrazione universitaria del 1222 alla fine del period ezzeliniano. *La Cultura* 15: 388–431.
- Bianchi, Luca. 2007. Continuity and change in the Aristotelian tradition. In *The Cambridge companion to Renaissance philosophy*, ed. James Hankins, 49–71. Cambridge: Cambridge University Press.
- Birocchi, Italo. 2012. *Mos italicus e mos gallicus*. Un indirizzo nuovo per la scienza giuridica. In *Il contributo italiano alla storia del pensiero-Diritto*, 94–101. Rome: Istituto della Enciclopedia Italiana.
- Burke, Peter. 2004. *Languages and communities in early modern Europe*. Cambridge: Cambridge University Press.
- Carducci, Giosuè. 1888. *Lo studio Bolognese. Discorso di Giosuè Carducci per l'ottavo centenario*. Bologna: Zanichelli.
- Di Renzo Villata, Maria G. 2015. Insegnare diritto a Pavia tra Cinque e Seicento: dal *mos italicus* a più ampi orizzonti. *Annali di storia delle Università italiane* 19: 45–73.
- Frijhoff, Willem. 1996. Patterns. In *A history of the university in Europe, vol. 2: Universities in early modern Europe (1500–1800)*, ed. Hilde de Ridder-Symoens, 43–110. Cambridge: Cambridge University Press.
- Gieysztor, Aleksander. 1992. Management and resources. In *A history of the university in Europe, vol. 1: Universities in the Middle Ages*, ed. Hilde de Ridder-Symoens, 108–143. Cambridge: Cambridge University Press.
- Grafton, Anthony. 1977. On the scholarship of politician and its context. *Journal of the Warburg and Courtauld Institutes* 40: 150–188.
- Grendler, Paul F. 2002. *The universities of the Italian Renaissance*. Baltimore: The Johns Hopkins University Press.
- Grendler, Paul F. 2004. The universities of the Renaissance and Reformation. *Renaissance Quarterly* 57 (1): 1–42.
- Heath, Terrence. 1971. Logical grammar, grammatical logic, and humanism in three German universities. *Studies in the Renaissance* 18: 9–64.
- Kelley, Donald R. 1979. Civil science in the Renaissance: Jurisprudence Italian style. *The Historical Journal* 22: 777–794.
- Leff, Gordon. 1992. The trivium and the three philosophies. In *A history of the university in Europe, vol. 1: Universities in early modern Europe (1500–1800)*, ed. Hilde de Ridder-Symoens, 307–336. Cambridge: Cambridge University Press.
- Lines, David A. 2006. Humanism and Italian universities. In *Humanism and creativity in the Renaissance. Essays in honor of Ronald G. Witt*, ed. Christopher S. Celenza and Kenneth Gouwens, 327–346. Leiden/Boston: Brill.
- Lines, David A. 2012. Reorganizing the curriculum: Teaching and learning in the University of Bologna, c. 1560–c. 1590. In *History of Universities*, vol. 26/2, 1–59. Oxford, UK: Oxford University Press.
- Makdisi, George. 1970. Madrasa and university in the Middle Ages. *Studia Islamica* 32: 255–264.
- Mandosio, Jean-Marc. 2008. Un enseignement novateur. Les cours d'Ange Politien à l'université de Florence (1480–1494). *Histoire de l'éducation* 120: 33–54.
- Nauert, Charles G. 1990. Humanist infiltration into the academic world: Some studies on northern universities. *Renaissance Quarterly* 43 (4): 799–812.
- Nauert, Charles G. 1998. Humanism as method: Roots of conflict with the scholastics. *The Sixteenth Century Journal* 29 (2): 427–438.
- Patton, Clyde P. 1969. The origins and diffusion of the European universities. *Yearbook of the Association of Pacific Coast Geographers* 31: 7–26.
- Pryds, Darleen. 2000. Studia as royal offices: Mediterranean universities of medieval Europe. In *Universities and schooling in medieval society*, ed. William J. Courtenay and Jürgen Miethke, 83–99. Leiden/Boston/Cologne: Brill.
- Rüegg, Walter. 1992. Foreword. In *A history of the university in Europe*, vol. 1, XIX–XXVII. Cambridge: Cambridge University Press.
- Schmitt, Charles. 1984. Science in the Italian Universities in the sixteenth and early seventeenth centuries [1975]. In *The Aristotelian tradition and Renaissance universities*, 35–56. London: Variorum Reprints.
- Siraisi, Nancy G. 1990. *Medieval and early Renaissance medicine. An introduction to knowledge and practice*. Chicago/London: Chicago University Press.
- Siraisi, Nancy G. 2012. Medicine, 1450–1620, and the history of science. *Isis* 103: 491–514.
- Speroni, Mario. 1979. Lorenzo Valla a Pavia: il *libellus* contro Bartolo. *Quellen und Forschungen aus italienischen Bibliotheken und Archiven* 59: 453–467.
- Verger, Jacques. 1992. Patterns. In *A history of the University in Europe, vol. 1: Universities in early modern Europe (1500–1800)*, ed. Hilde de Ridder-Symoens, 35–75. Cambridge: Cambridge University Press.