



**XIV ATELIER  
HÉLOÏSE WORKSHOP  
PRAGUE  
NOVEMBER 13–14, 2025**

**Between Tradition and Innovation: Universities as Places of Knowledge  
from the Middle Ages to the Foundations of Modern Knowledge Societies**

**Conference Programme**

**Academic Conference Centre, Husova 4a, 110 00 Praha 1**

## 13th November 2025

### 09:00 – 09:30 | Opening Session

Welcome and Introduction

### 09:30 – 11:00 | Session 1: Pedagogy and Emergent Practices

**Rossana Scebba** – *Flora, Cosmos, Salvatio: Pre-modern Academic Institutions and the Spread of Ideas*

**Maciej Zdanek** – *New Textbooks and New Readings as a Way of Humanist Modernization of the Curriculum at the Faculty of Philosophy of the University of Krakow in the 16th Century*

**Tihana Luetić** – *Communicating Knowledge to Students in Croatia at the End of the 19th and the Beginning of the 20th Century: Students' Perspective*

### 11:00 – 11:30 | Coffee Break

### 11:30 – 12:30 | Session 2: Practical Knowledge Transference and Universities

**Stefania Zucchini** – *Basic University Disciplines with Social Utility: Grammar and Abacus between Schools and Universities in the Late Italian Middle Ages*

**Carla Frova** – *Basic Knowledges, Practical Knowledges in the Thinking of the Masters of the First University Centuries. Some Reflections on Disciplinary Levels*

### 12:30 – 13:45 | Lunch

### 13:45 – 15:15 | Session 3: Digital Approaches to Historical Sources

**Kaspar Gubler, Pim van Bree and Geert Kessels** – *Artificial Intelligence and the Study of University Knowledge Spaces in the Holy Roman Empire (1250–1550)*

**Kateřina Bobková-Valentová, Marek Brčák, Jana Synovcová Borovičková and Hedvika Kuchařová** – *Between Monastery and University: Mapping Philosophical Education in Early Modern Bohemia through Digital Prosopography*

**Matthieu Pichon** – *Dissertations by the Numbers: Decoding PhD Theses with Computational Methods. Findings and Questions from the University of Brussels Case (1890–2020)*

### 15:15 – 15:45 | Coffee Break

### 15:45 – 17:15 | Session 4: Networks of Knowledge Transfer

**Mlada Holá and Martin Holý** – *The University of Prague and Disseminating Knowledge to the Czech Lands in the Late Middle Ages and Early Modern Period*

**Cosmin-Ştefan Dogaru** – *Romanian Students in French and German Universities in the Late 19th and Early 20th Centuries: Networks and Spaces of Knowledge*

### 17:30 – 18:30 Meeting of the Board of Atelier Heloïse

### 19:00 | Joint Dinner

## 14th November 2025

### 09:30 – 10:30 | Session 5: Beyond the University: Law and Purpose

**Maria Teresa Guerrini** – *States' Use of Law Knowledge. The Bologna Graduates During the Early Modern Period*

**Marta Baranowska and Paweł Fiktus** – *The University – Spiritus Movens of the Codification Public International Law on the Example of the Activities of Polish Lawyers at the Turn of the 20th Century*

### 10:30 – 11:00 | Coffee Break

### 11:00 – 12:00 | Session 6: Knowledge, Exchange and Colonialism

**Charlotte Prauß** – *The University as an Enabling Space: Colonial Knowledge at the University of Göttingen*

**Regina Lupi** – *Useful Knowledge and Universities: The Debate on Humanities in Italian Universities in the early 18th Century*

### 12:00 – 12:30 Closing Remarks

## **Baranowska, Marta and Pawel Fiktus – The University – Spiritus Movens of the Codification Public International Law on the Example of the Activities of Polish Lawyers at the Turn of the 20th Century**

The end of the 19<sup>th</sup> century is remembered in the history of public international law as representing a period of codification. *L'Institut de Droit International* in particular, which had been operating since 1873 in Brussels, fundamentally influenced the creation of new codes of international law. Polish lawyers such as Professor Gustaw Roszkowski, Professor Franciszka Kasparcka and Professor Antoni Białecki also participated in the work of L'Institut de Droit International. The work of this institute inspired the research of Polish jurists into the law of war and peace as well as into the various new phenomena that were emerging in international relations. New research institutes were organised at the University of Warsaw, the Jagiellonian University and the Franciscan University of Lviv to develop legal solutions that were then considered during the codification of public international law. Professor Gustaw Roszkowski, building on projects concerning the codification of the law of war and peace (such as the *The Laws of War on Land*, known as the *Oxford Manual*, 1880), developed new theories which then influenced the process of creating the Hague Conventions and the principles of their interpretation (e.g. *De la codification du droit international*, 1889, *Ober die Bestrebllllgen zur Erhaltung des Friedens in Europa*, 1892 or *On the Fourteenth Congress of Peace of 1906*, 1906). Professor Antoni Białecki commented on the law of war and peace in the works: *On the Geneva Convention*, 1878 or *The Correctness of International Relations*, 1874. Prof. Franciszek Kasparek, through his work *Works of the Institute for the Law of Nations on the subject of private international law*, contributed towards the popularisation of the institute's activities, which in turn played an important role in the question of the interpretation of international regulations.

The research focus of this presentation will also be the study of new areas that have only just emerged in the international space, such as the issue of air transport. In this case, the remarks of Prof. Gustaw Roszkowski presented in his work *The Right to Aerial Navigation* (1912), were important in creating public international law regulations.

The research objective of the presentation will be to show that the scientific research conducted in these universities had a fundamental impact on the codification and development of public international law. New issues, such as international peace or the codification of transport regulations, were developed in the academic discourse. The results of these new research foci then became the subject of political discussions and treaty agreements between states in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. In our view, the university was the *spiritus movens* of the codification of public international law.

## **Bobková-Valentová, Kateřina, Marek Brčák, Jana Synovcová Borovičková and Hedvika Kuchařová – Between Monastery and University: Mapping Philosophical Education in Early Modern Bohemia through Digital Prosopography**

In the Czech lands of the 17<sup>th</sup> and 18<sup>th</sup> centuries, the Catholic clergy constituted the largest professional group whose occupation required, in modern terms, a university-level education. According to the Council of Trent, access to higher ordination was contingent upon the completion of a course in philosophy and at least two years of theological study. This requirement was applied not only to secular clergy but also to members of religious orders, who constituted a substantial segment of the ecclesiastical milieu during the Baroque period. As of 1635, the Archiepiscopal Seminary became the primary institution responsible for the education of prospective parish priests within the Archdiocese of Prague. At the same time, secular and some religious clergy were also educated at the faculties of philosophy and theology at the University of Prague. Nevertheless, these faculties were fully controlled by

the Jesuits, who also held dominant positions in the education of clergy in the dioceses of Olomouc and Wrocław, through universities operated by the Jesuit Order itself. While members of religious orders were present at all these public institutions of higher learning, their education was characteristically integrated with their formation and conducted within the framework of the order itself. These so-called “studia privata” were fully developed in all older religious orders and were later adopted by modern orders as well. Research into the internal educational systems of individual religious orders remains in its early stages in the Czech scholarly landscape. The project Religious Orders’ “Studia” as an Alternative to University Education. The case study of the Bohemian-Moravian Capuchin Province, 1673–1783 seeks to open this topic as a fundamental area of investigation and to contextualize it within the broader history of universities. One of the central research themes of the project is the staffing of teaching positions within these religious educational institutions. The aim is to identify lecturers and professors and map the basic contours of their careers. Already in the first year of the project, the challenges associated with the structure and preservation of relevant sources, as well as the complexity of their systematic processing, became apparent. For the purposes of this conference contribution, we therefore opted for a relatively small, clearly defined data sample. Our focus is on professors or lecturers of philosophy who taught between 1711 and 1740. Specifically, we examine Jesuits teaching at the University of Prague, Capuchins leading courses at various order-run studia, and Strahov Premonstratensians teaching at the Archiepiscopal Seminary and in their own “studia privata”. Complete career profiles are being compiled within the Bio-Bibliographical Database of members of the religious orders (BBDR), developed in a library system based on the MARC21 standard. Data visualisation and analysis are conducted by exporting the dataset to the web-based research environment nodegoat. The conference paper aims to present three analytical dimensions of our work with this dataset:

1. To provide insights into the mobility of professors, the place of philosophy instruction within individual careers, and the strategies used by superiors in assigning philosophy lecturers.
2. To demonstrate how visualisations can help to identify deviations from common patterns, raise questions about their origins and reveal exceptional cases, gaps in the sources, or data errors.
3. To highlight the challenges encountered during data preparation and during the export/import processes

### **Dogaru, Cosmin-Ștefan – Romanian Students in French and German Universities in the Late 19th and Early 20th Centuries: Networks and Spaces of Knowledge**

Since the mid-19th century, Romanian upper-class and elite middle-class families have increasingly favoured education for their children abroad, particularly at prestigious universities in France and Germany, which were recognised in Romanian society as spaces of knowledge and prestigious institutions. Students pursued various fields of study, including law, political science, literature, and medicine. Their motivations included prestige, social recognition, and a respectable Western European university diploma. Compared to other European countries in the West, Romania noted delayed development in many areas, including establishing universities. The first universities founded in Romania were the University of Iasi (in the north) in 1860 and the University of Bucharest (in the country’s capital) in 1864. Toward the end of the century and during the early 20th century, members of the upper and elite middle classes continued to study abroad, predominantly in the French and German university milieus - just as their counterparts had done so in the past. They also

formed student associations and intellectual networks with peers from other nationalities. During this period, female students, primarily from the upper and elite middle classes, pursued their education in the country. In contrast, many male students from the established and new elites preferred to study abroad and engage with counterparts from diverse nationalities who expressed similar social standings and intellectual objectives. Upon returning to Romania, these students who completed their BA and a few PhD studies attained social recognition, and many successfully secured political positions within the Romanian state. Many of these young people chose the political field and joined the nation's two leading political clubs and parties: the National Liberal Party, established in 1875, and the Conservative Party, founded in 1880. This period was also marked by significant interactions between the two Romanian traditional elites – representing prominent upper-class families – and the emerging middle classes. This study aims to analyse the formation of intellectual and political networks among Romanian students and their peers from various nationalities within French and German university settings during the late 19th and early 20th centuries. The research will investigate how these cultural environments shaped the students' social and political trajectories, becoming many of them political leaders.

Therefore, the study will address the following questions:

How did young Romanians continue to favour the cultural environments of French and German universities during this period?

How did they adapt to these settings and effectively seize the opportunities available?

How did Romanian students cultivate intellectual connections with fellow students from different nationalities, resulting in enduring friendships?

To what extent did the universities in France and Germany contribute to future Romanian political leaders' social, cultural, and predominantly political development?

This analysis will use various sources, including press articles, memoirs, political speeches, and relevant secondary literature that offer helpful insights.

### **Frova, Carla – Basic Knowledge and Practical Knowledge in the Teaching of Medicine at the University of Rome, Sapienza, in the 16th Century**

In the 14<sup>th</sup> and 15<sup>th</sup> centuries, the production and circulation of knowledge occurs in contexts characterized by great intellectual and social dynamism, by intense institutional experimentation, by growing processes of specialization. This urges university culture to look beyond its own disciplinary boundaries, to knowledge that is not part of the educational *curricula* designed in the 13<sup>th</sup> century for the first *Studia Generalia*. By analyzing selected cases from disciplines of numbers, measurement and basic literary teaching, we will try to observe how university masters committed to questioning the theoretical possibility of taking into consideration contents and teaching methods that were, in principle, excluded from their interests. This was especially the case when such concepts were considered exclusively basic and/or too specifically oriented to have practical applications.

### **Gubler, Kaspar, Pim van Bree and Geert Kessels – Artificial Intelligence and the Study of University Knowledge Spaces in the Holy Roman Empire (1250–1550)**

This contribution addresses both the methodological and thematic aims outlined in the conference's call for papers. It combines traditional methods of historical scholarship with innovative applications of artificial intelligence to shed new light on the role of German universities in the Middle Ages, situated between tradition and innovation.

At the centre of the investigation is the *Repertorium Academicum Germanicum* (<https://www.rag-online.org/>), a project documenting the biographies of over 60,000 scholars of the Holy Roman Empire between 1250 and 1550. Among the data collected are names, academic careers, degrees, positions, institutional affiliations, and networks of mobility and knowledge transfer.

Although the extensive RAG dataset has already been analysed from various perspectives, the use of artificial intelligence allows for extended possibilities in the analysis of how universities can be understood not merely as static centres of learning and tradition, but as dynamic hubs of regional and transregional developments within an ongoing process of institutional change.

For this contribution, selected RAG data have been analysed using the research environment nodegoat. In collaboration with the RAG project, a specific AI module (prototype) has been developed, enabling AI-driven analyses of historical data directly within the research environment. This allows for the identification and visualization of patterns in career trajectories, institutional cluster dynamics, and implicit group affiliations.

The innovation lies not merely in the application of AI, but in its seamless integration into a semantic research environment that facilitates the dynamic exploration and interpretation of historical datasets. The contribution thus understands AI as an instrument of epistemic expansion complementing traditional historical source criticism. At the same time, the question of scholarly authority arises: how can historical thinking maintain its agency when parts of pattern recognition are delegated to machines? The contribution therefore contributes methodologically to the conference theme but also to offer a concrete example of how universities - and the projects that study their history – can become laboratories of scientific innovation. Combining classical source corpora with semantic data models and AI-based analysis not only transforms university history research - it redefines the historian's toolkit in the digital age.

### **Guerrini, Maria Teresa – States' Use of Law Knowledge. The Bologna Graduates During the Early Modern Period.**

This paper aims to present the study and use of law in practice in Bologna during the first half of the early modern period. At the time of modern state formation, public institutions required a large number of people to work as judges, lawyers, administrators, ministers, sovereigns' collaborators. The university responded to this new need by promoting many graduates who would be employed in state administrative positions in different places and countries. The discussion will be enriched by showing a starting prosopography database - called ASTREA - that allows a better understanding of this phenomenon.

### **Holá, Mlada and Martin Holý – The University of Prague and Disseminating Knowledge to the Czech Lands in the Late Middle Ages and Early Modern Period**

#### **Luetić, Tihana – Communicating Knowledge to Students in Croatia at the End of the 19th and the Beginning of the 20th Century: Students' Perspective**

The enormous industrial and technological progress of the 19th century, the rise of new social groups, and the strong secularization of society all contributed to the transformation of European educational systems, significantly influencing the development of universities, including those in Central Europe. In most European countries, there was a noticeable increase in the number of new universities as well as the modernisation of old ones from the mid-19th century onward. The professionalisation and achievement of higher standards in

scientific and teaching aspects proceeded in tandem with specialisation and the establishment of new fields and departments, new forms of teaching in the shape of exercises and seminars, and the opening of new institutes and research centers.

One of the new universities established during this period in the Austro-Hungarian Empire was the Royal University of Franz Joseph I in Zagreb, opened in the autumn of 1874, with its three faculties: the Faculty of Law, the Faculty of Philosophy, and the Faculty of Theology. The presentation will focus on the period from the establishment of the modern university till the end of the First World War, after which the state framework in which the university operated and its structure changed.

It will attempt to answer the question of whether and to what extent the newly established university in Zagreb tried to meet the modern demands of the time regarding the organisation of teaching. However, it will primarily focus on how knowledge was communicated to students, especially from the students' perspective.

Sources for such research include contemporary student journals, correspondence, and autobiographical sources. From these, a multitude of themes can be deduced concerning university teaching, its implementation, teaching methods, examination literature, and students' evaluation of the lectures. Additionally, a variety of data can be gleaned about the introduction of new forms of teaching, such as seminars, professional excursions, the formation of new institutes, and the introduction of modern disciplines at the university. Finally, considering the significant student fluctuation and student emigration from Croatia during this period, it is possible to gain a comparative insight into some foreign universities where Croatian students completed part of their higher education (primarily in major university centers in the Monarchy such as Vienna, Prague, and Graz), thus placing the topic in a broader Central European context. In this comparative perspective, the evaluations of the University of Zagreb are predominantly lower in comparison to those abroad, particularly regarding the methods of knowledge transfer.

### **Lupi, Regina – The Debate on Humanities in Italian Universities in the early 18th Century**

At the beginning of the 18th century, many Italian universities (such as Rome, Perugia, Naples, Turin and Padua) were faced with the need to revise their curricula, mainly as a result of two phenomena: on the one hand the changes introduced into European culture by the “scientific revolution” and, on the other, pressure from governments that wanted to impose, or reinforce, their control over the training of the ruling class, in the various states of the peninsula. The governments asked many high-value scholars to give their opinion, thus some intellectuals produced texts concerning universities, their social function and their relationship with modern science (among the other, the follow will be particularly taken into consideration: Gianvincenzo Gravina, *Orationes*, 1712; Scipione Maffei, *Parere intorno al sistema dell'Università di Padova*, 1715; and Giambattista Vico, *De nostri temporis studiorum ratione*, 1708). They proposed ideas, strategies or actual projects to reshape academic courses; in the field of natural sciences the goal is quite obvious, concerning the founding of new chairs and laboratories dedicated to the new branches of study or more practical learning to take into account the new science born of the scientific revolution. The present research focuses on a lesser known and less clear aspect: the way the humanities were treated in this debate. In fact, the arts and humanities were also affected by developments in the culture and gnoseology between the 17th and the 18th centuries, thanks to the introduction of a new way of producing knowledge and a new ambition of learned people to participate in public administration. In the writings of these scholars, history, philosophy, literature and poetry assumed a political and social function as means of educating people, as essential tools for ministers and as a source of strengthening public

power, so their teaching in universities had to be completely rethought. Only rarely did the ideas expressed in these years translate immediately into concrete achievements, but they provided a cultural basis for the great reform season of the second half of the 18th century.

### **Pichon, Matthieu – Dissertations by the Numbers: Decoding PhD Theses with Computational Methods. Findings and Questions from the University of Brussels Case (1890–2020)**

In the 2010s, the archive department of the Université libre de Bruxelles (ULB, Belgium) took the initiative of digitising and OCR cataloguing all the PhD dissertations that were held in its collections. Although the initial and main goal was to preserve and publicise these documents, it soon became clear that they could also be used as a great resource for research. Embracing this idea of “collection as data”, the *Déchiffrer la recherche à l’ULB* (Deciphering Research at ULB) project began in 2024 with the key ambition of making sense of this corpus by mobilising computational tools and methods from the field of digital humanities. In total, this corpus consists of almost 10,000 theses, defended between the 1890s and the 2020s in all the disciplines taught at ULB, from natural or physical sciences to social science and humanities. Even if the period covered by the project is more contemporary than the focus of the workshop, we believe that its findings can be of interest to all.

After several months of research, this paper aims to offer a provisional assessment of two major challenges at stake in the project. Firstly, we will discuss the originality and value of PhD dissertations as material for the history of science and universities: originally conceived as an academic exercise and a compulsory step towards graduation, thus encouraging the reproduction of knowledge, the PhD dissertation increasingly assumed new objectives, in particular the production of original and cutting-edge research contributing to scientific progress. Does the corpus allow us to identify such a “scientification” and, if so, what does it tell us about the development and differentiation of scientific disciplines? Secondly, we examine the relevance of computational methods for making sense of such a large corpus. By evaluating the results that computation can achieve, while acknowledging what it still fails to do, we defend and promote the development of a robust and critical digital history of science and universities.

### **Prauß, Charlotte – The University as an Enabling Space: Colonial Knowledge at the University of Göttingen**

At European universities – whether in Belgium, France, England, or Germany – ethnographic objects collected in the colonies under conditions of violent domination were researched and, in part, served to affirm a sense of “progress” and self-assurance. At European universities, human experiments were analysed – including those conducted around 1900, in what is now Tanzania, during studies on sleeping sickness. At European universities, astronomical data and observations from so-called “border regulation expeditions” were evaluated to map the borders between one European colony and another. Consequently, these research endeavours gave rise to novel academic disciplines and subfields at European universities, including ethnology, tropical medicine and colonial geography.

The universities' objective was evident: to enhance the governance and economic exploitation of the colonies through the knowledge produced within them. In this regard, universities functioned not merely as passive spaces, but rather as active enablers of the colonial project, from which they derived substantial benefits. One such benefit was derived from financial resources, as colonial research was deemed a matter of state

interest and the training of civil servants for the colonies was a necessity. Universities played a pivotal role in the establishment of the colonial project in Europe.

Historical research on German colonialism has been primarily focused on specific institutions in colonial political centres, such as the Kolonialinstitut in Hamburg or the Seminar für Orientalische Sprachen in Berlin. However, the role of universities in general, and especially those outside these centres, has largely remained unexamined. This contribution is intended to address the following question: How did the university become an enabling space for knowledge *from* and *about* the colonies? The University of Göttingen serves as a case study in this regard.

From a microhistorical and history-of-knowledge perspective, this paper draws on course catalogues between 1880 and 1945 to demonstrate how knowledge from and about the colonies entered the intellectual routines of Göttingen and contributed both to the professionalisation of knowledge and to the establishment of scientific authority. It is argued that such knowledge should not be regarded as an exception or peripheral phenomenon; rather, it should be considered an integral part of academic norms and disciplinary formation processes. It belonged to everyday academic life. Moreover, the course catalogues reveal how deeply colonial thinking was embedded in the daily operations of the university – and how it persisted across political ruptures.

Overall, the contribution seeks to elucidate that colonial knowledge was not confined to specific institutes or colonial seminars. Even universities located far from the colonial metropolises were active participants in the colonial project. They functioned as genuine *enabling infrastructures*.

### **Scebba, Rossana – Flora, Cosmos, Salvatio: Pre-modern Academic Institutions and the Spread of Ideas**

While good ideas can emerge anywhere, it takes a community to develop and disseminate them. In premodern Europe (1084-1793), there were approximately 200 universities and 150 academies of sciences, which were home to thousands of scholars and created an extensive network of intellectual exchange. By reconstructing interpersonal connections that were made via institutional affiliations, we demonstrate how the European academic landscape facilitated the diffusion of ideas and led cities to develop: examples include botanic gardens, astronomical observatories, and Protestantism. Counterfactual simulations reveal that both universities and academies played crucial roles, with academies being particularly effective at connecting distant parts of the network. Moreover, we show that the diffusion of ideas through the network is remarkably resilient, even if we remove key regions such as France or the British Isles. In Europe, ideas gain prominence when they are channelled effectively by powerful institutions.

### **Zdaneek, Maciej – New Textbooks and New Readings as a Way of Humanist Modernization of the Curriculum at the Faculty of Philosophy of the University of Krakow in the 16th Century**

University of Krakow in the 16th century experienced a significant change in its position and importance due to new cultural, social, religious and political challenges. This was the result of the rise of humanism, the Reformation, the new, dense network of academic and secondary education centers, and the growing importance of the nobility as the ruling group in the Polish-Lithuanian monarchy under rule of Jagiellonian dynasty. Until the 1520s, the University of Krakow was a flourishing center of science and culture with a supra-regional impact area of Central Europe. From about 1536 it entered a period of solstice, and from the middle of the century (with the symbolic date 1549, i.e. so-called “secession of the students”)

began a phase of crisis and sharp social criticism towards university as an outdated conservative institution and a stronghold of Catholicism. Tensions became particularly acute in the Faculty of Philosophy, where supporters of traditional teaching based on Aristotelian philosophy clashed with supporters of modernising the curriculum along humanistic ideas. In the face of resistance from the academic elite, the canon of textbooks and the form of teaching underwent very slow changes (codification of statutes in 1536, modifications 1538, 1548, 1554). Humanistic content and forms of teaching (including Greek, Hebrew and ancient authors) were introduced from below through private teaching in student colleges and dormitories (*bursae*), and especially through new textbooks, commentaries and translations in extraordinary and ordinary lectures. Bottom-up changes, the work of a younger generation of professors, the threat of external rivals and the growing public expectation of modernising education eventually led to a profound reform of the curriculum of the Faculty of Philosophy in 1579 under the rector Jakub Górski. The paper shows the increasing trend of these changes using the example of the authors selected by professors during their lectures by analysing the oldest two volumes of the *Libri diligentiarum Facultatis Philosophicae* series in statistical terms: volume one from 1487-1563, published 1886, volume two from 1564-1656, unpublished, Jagiellonian Library MS 220). The aim is also to show if and how the use of these data can be presented in the *Corpus Academicum Cracoviense* database, whose primary purpose is prosopographical, and if and how it can also be a tool for analysing another research area, namely, those of knowledge transfer.

### **Zucchini, Stefania – Basic University Disciplines with Social Utility: Grammar and Abacus between Schools and Universities in the Late Italian Middle Ages**

This paper seeks to examine the transformations in the teaching of grammar and abacus arithmetic in Italian schools and universities between the 14<sup>th</sup> and 15<sup>th</sup> centuries, relating these to the profound political and social changes that shaped Italian urban centres during the same period. The geographical focus is on north-central Italy, where the later Middle Ages witnessed the emergence and consolidation of communal civilisation and its subsequent evolution into signorial governments.

With the shift from a universalist conception of knowledge, as transmitted in monastic settings, to instruction in specialised subjects delivered by urban masters, the university both responded to and actively fostered societal change since the beginning.

This bidirectional relationship between university and society extended across all disciplines, most notably law and medicine, which formed the core of Italian university curricula, but also encompassed the “humbler” subjects of grammar and abacus arithmetic. These latter served a dual purpose: they underpinned subsequent specialist studies and addressed the need for literacy of an urban population increasingly engaged in written communication and requiring elementary computational skills for artisanal and mercantile activities.

Building on these premises, this study undertakes a comparative investigation of the development of grammar and abacus instruction in late-medieval Italian cities, with particular attention to the liminal status of these disciplines. In some locales—such as Florence and Genoa—grammar and abacus were taught in public or private urban schools, while in others they were incorporated within the *Studium*. For the latter configuration, different models are examined, for instance Bologna, where speculative grammar formed part of the *Artes* curriculum, and Perugia, whose *Studium* included masters of grammar specifically appointed to promote civic literacy.

Finally, this paper addresses the channels of communication between the scholastic and university spheres through the career of certain masters, such as the *magister abaci Antonius Silvestri* of Florence, who taught in Perugia during the 1430s before moving to the abacus school of Florence.