

The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy

Original

The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy / Bonavero, Federica; Cassatella, Claudia. - In: PLANNING, PRACTICE & RESEARCH.. - ISSN 1360-0583. - STAMPA. - (2022).
[10.1080/02697459.2022.2034284]

Availability:

This version is available at: 11583/2954875 since: 2022-02-09T08:52:11Z

Publisher:

Routledge

Published

DOI:10.1080/02697459.2022.2034284

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

Taylor and Francis postprint/Author's Accepted Manuscript con licenza CC by-nc

This is an Accepted Manuscript version of the following article: The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy / Bonavero, Federica; Cassatella, Claudia. - In: PLANNING, PRACTICE & RESEARCH.. - ISSN 1360-0583. - STAMPA. - (2022). [10.1080/02697459.2022.2034284]. It is deposited under the terms of the CC BY-NC License

(Article begins on next page)

The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy

Federica Bonavero*

Interuniversity Department of Regional and Urban Studies and Planning, Politecnico di Torino, Torino, Italy

federica.bonavero@polito.it

<https://orcid.org/0000-0003-1146-916>

Claudia Cassatella

Interuniversity Department of Regional and Urban Studies and Planning, Politecnico di Torino, Torino, Italy

claudia.cassatella@polito.it

<https://orcid.org/0000-0002-0461-0274>

*corresponding author

This is an Accepted Manuscript of an article published by Taylor and Francis in **Planning Practice & Research** on 8 February 2022, available online: <https://doi.org/10.1080/02697459.2022.2034284>. It is deposited under the terms of the Creative Commons Attribution-Non Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided that the original work is properly cited.

The Italian Planner: Insights from 20 Years of Planning Education and Practice in Italy

In Italy, urban and regional planning education is a comparative newcomer to higher education, just as planners are among built environment professionals. Through an original collection of data, this paper investigates the outcomes of 20 years of planning education and practice, paying attention to the (mis)matches between the two and to the emerging internationalization of both. How many planning graduates are there? How are they trained? What do they do? What is their professional status? Findings confirm a situation of lights and shadows, the development of a distinctive professional identity remaining imperative to ensure future relevancy for the Italian planner.

Keywords: professional planner; planning education; planning practice; internationalization of higher education; Italy

Introduction

Urban and regional planning is both an academic discipline and a profession. On the one hand, planning degree programs exist in at least 80 countries and 550 universities worldwide (Stiftel et al., 2009), as also testified by international associations of planning schools and associations networks such as the Global Planning Education Association Network (GPEAN), the Association of European Schools of Planning (AESOP) in Europe, and the Association of Collegiate Schools of Planning (ACSP) in North America. The United Nations itself has called for planning education, explicitly stating its commitment to train planners at Article 102 of the New Urban Agenda: “We will strive to improve capacity for urban planning and design and the provision of training for urban planners at national, subnational, and local levels” (UN-Habitat, 2016a).

On the other hand, the evidence for planning as a profession is witnessed by national professional associations and institutes, such as the Royal Town Planning Institute

(RTPI), the American Planning Association (APA), and the Planning Institute of Australia (PIA) just to name a few, international umbrella associations, such as the European Council of Spatial Planners (ECTP-CEU) and the Global Planners Network (GPN), and global networks of individual practitioners, such as the International Society of City and Regional Planners (ISOCARP). Nevertheless, planning remains a contested education and profession domain, that suffers from a relatively weak disciplinary identity (Wildavsky, 1973; Krieger, 2000; Davoudi & Pendlebury, 2010; Alexander, 2016).

In Italy, urban and regional planning education is a comparative newcomer to higher education, just as planners are among built environment professionals. Until the past 20 years reforms of the Italian university (D.M. 509/1999; D.M. 270/2004; L. 240/2010) and of the regulated professions (D.P.R. 328/2001) systems – which have determined the conditions for the delivery of planning-only degrees and established the profession of planners as a regulated profession –, planning education was often associated with the schools of architecture, and planners were largely represented by practitioners of the architectural, engineering and surveying fields, who had hands-on experience in planning. It was only as a result of these reforms that, at the turn of the 2000s, the first planning degree programs began to be offered by different public university institutions, and planners gained recognition as a profession in its own right. First- and second-cycle degree courses in planning were formally introduced and the professional figures of the *Pianificatore iunior* [Junior Planner] and *Pianificatore Territoriale* [Territorial Planner] appeared alongside but separate from that of the Architect, within the restructured Order of Architects, Planners, Landscape Architects and Conservationists (OAPPC).

Since then, planning graduates have exceeded 12 thousand – 8,377 BSc graduates and 3,743 MSc graduates over the period from 2003 to 2018, according to the data from the Italian Ministry of Education, University and Research (MIUR, now MUR), plus a further three thousand graduates under the pre-Bologna agreement regime¹ – and licensed planners have held positions of high professional standing and responsibility in the public sector, as well as in the private and non-profit sector.

However, two decades after the first planning students enrolled, the status of planning education and profession in Italy is still disputed, both among academic and practitioners circles, and in the wider policy context. During 2020, the National Council of Architects, Planners, Landscape Architects and Conservationists (CNAPPC) put forward a proposal for a new reform of professional titles that would phase out the current separate titles and registers, coming back to the architect as a single figure and confining the planner's area of expertise to a specialization (CNAPPC, 2020), undermining the very reason for existence of standalone planning degrees. At the same time, the National University Council (CUN) – an elected body representing the Italian university system that serves as an independent source of advice and recommendations to the MUR² – conducted a review of all degree classes, basically reaffirming the current planning education model in terms of cultural objectives, disciplinary content, and career opportunities. Under this backdrop, the recent provisions of Italy's National Recovery and Resilience Plan on the so-called 'qualifying degrees' (made into law by L. 163/2021) adds further uncertainty. By merging graduation and the state licensing examination, the new law opens the possibility for immediate licensure of planning graduates, with possible impacts also on program structure and focus.

It is therefore timely and critical to investigate the outcomes of 20 years of planning education and practice, with particular attention to the (mis)matches between

the two and to the emerging internationalization of both. Unlike other countries, the figure of the formally trained Italian spatial planner has not (or only marginally) been addressed in the literature, especially in the international literature (as can also be seen in Frank (2006) annotated bibliography). Italy is almost absent from both comparative and nation-specific outlooks in peer-reviewed articles or books on this research topic (e.g., among others Frank et al., 2014; Frank & Silver, 2018; Green Leigh et al., 2020), with the few exceptions being largely represented by the surveys and reports led by planning schools, professional associations, or their representative organizations, within the framework of conferences, meetings and thematic groups (e.g., Jammal, 1993; Fubini, 2004; Davoudi & Ellison, 2006; Geppert & Cotella, 2010; Scholl, 2012; ECTP-CEU, 2013; Hedgcock & Pidalà, 2014; Kunzmann & Koll-Schretzenmayr, 2015). Because of the difficulty in defining the field of expertise, even at the national level there has been relatively little evidence published on the size and makeup of planning education and profession. Besides the many individual efforts of Italian scholars and practitioners, some of which have been cited here, a mention is due to the regular column edited by the National Association of Town, Spatial and Environmental Planners (ASSURB) on one of the journals by the National Institute for Urban Planning (INU) (De Luca & Rallo, 2018).

This paper is organized in three main sections, preceded by a methodological introduction. It starts with presenting and discussing the results about planning (i) education and (ii) profession in Italy, analyzing data and trends over a 20-years period, to then move to the ongoing process of (iii) internationalization of both studies and the job market. Conclusions summarize and frame findings within the never-ending and ubiquitous debate over the planner and the practice of planning.

With no claim of being exhaustive, this study aims to contribute to the debate by answering to the following research questions: How many planning graduates are there in Italy? How are they trained and what are they expected to do? If and how is planning practice regulated? How many planning practitioners are there? What impact, if any, does internationalization have on education and employment? What are the perspectives with regard to Italian planners and their claims to disciplinary and professional status?

Materials and methods

This study is mostly based on primary and secondary analysis of existing and publicly accessible data (administrative records, surveys results, etc.), enriched by first-hand information and insights drawn from the Authors' own experience. It builds on an original dataset that combines and makes use of different sets of data, collated from a variety of sources (see **Table 1**), including: the MIUR Database on the Educational Offer (OFF.F) (MIUR, 2021b) and the MIUR University portal (MIUR, 2021d), the MIUR National Students Register (ANS) (MIUR, 2021a), the MIUR Higher Education Data Portal (USTAT) (MIUR, 2021c), the AlmaLaurea Surveys on Graduates' Employment Status (AlmaLaurea, 2020a) and Profile (AlmaLaurea, 2020b), the European Commission's Regulated Professions Database (EC, 2021), and the CNAPPC National Register (CNAPPC, 2021).

To allow the information to be mapped and compared over time, all data have been computed at the university and/or province level, on a yearly or academic year basis. The time span of the study covers the period 2001/2002-2019/2020. The academic year 2020/2021 has been excluded intentionally, due to some effects of the Covid-19 pandemic on (international) student enrolment trends, licensing exam operations and job placement of graduates.

The combination of different sources ensured consistent and accurate data collection, thereby avoiding breaks in the time series and guaranteeing the reliability of the results. Nevertheless, there are some data limitations that are worth noting, especially with regard to the AlmaLaurea surveys. AlmaLaurea is an interuniversity consortium that currently counts 76 universities and represents about 90% of Italian graduates. Its surveys 1, 3 and 5 years after graduation are among the most systematic and reputable. Yet the results of the questionnaires are affected by coverage errors both in terms of response rate (i.e., varying percentage of respondents, usually declining as time passes since graduation), and population subset (i.e., not all universities offering degrees in planning joined the consortium). In particular, among the universities not included in these surveys are Politecnico di Milano and Università degli Studi Guglielmo Marconi, which together correspond to about a third of planning graduates.

At present, these are limitations that cannot be easily overcome. To (partially) address these errors and get further background information, some complementary sources have been used: the CNAPPC periodic reports (CNAPPC-CRESME, 2016), and a recent study on the role of professions in the Italian university system by the National Agency for the Evaluation of Universities and Research Institutes (ANVUR, 2017). Unfortunately, the statistics included in these publications do not provide a clear distinction between planners and other cognate professionals, as they mainly present aggregated data.

The Authors discussed the interpretation of the results in formal and informal meetings with several stakeholders, both from academia and professional associations. In particular, valuable feedback was collected from representatives of the ASSURB (President), INU (EB Member), OAPPC, National Union of Urban Planners (SINURB), and the Permanent Conference of Heads of Planning Schools. Further comments were

received during the annual meetings of the Advisory Board of the Politecnico di Torino School of Planning and Design, which includes public officials and members of different organizations in the field.

Genesis and evolution of planning education in Italy

The first academic degree program in *Urbanistica* [Urban Planning] in Italy was established in 1970 at the Università Iuav di Venezia, under the coordination of Professor Giovanni Astengo (Astengo et al., 1970; Marson, 2021). It was a 5-year degree comprising 24 subjects, many of which were completely new to the core curriculum in architecture education. The program at Iuav was followed over the next decades by a few more: the Università degli Studi Mediterranea di Reggio Calabria in 1974, the Politecnico di Milano in 1995, and the Università degli Studi di Palermo in 1999 (Fregolent, 2016).

It was not before the national reforms of regulated professions (D.P.R. 328/2001) and university system (D.M. 509/1999) that education in the field of planning reached its momentum through the introduction of two new degree classes, distinct and independent from those in the architecture field: *Urbanistica e scienze della pianificazione territoriale e ambientale* [Town, regional and environmental planning], corresponding to the bachelor's degree class 7 (now class L-21), and *Pianificazione territoriale, urbanistica e ambientale* [Regional, urban and environmental planning], corresponding to the master's degree class 54/S (now class LM-48). In accordance with the education system outlined by the Bologna process, the previous single cycle degree programs were thus replaced by first cycle (180 ECTS credits, 3 years full-time) and second cycle degrees (120 ECTS credits, 2 years full-time).

As of academic year 2005/2006, 19 Italian universities were offering a degree in planning, for a total of 23 bachelor's programs and 12 master's programs. First-year

enrolments increased steadily throughout these early days, partly bolstered by experts and practitioners of the field who were looking for professional qualification and career development, and by previous unmet demand.

Following the coming into force of the Italian higher education reform (L. 240/2010), the stricter requirements for the accreditation of curricula led to the gradual closure of degree programs across all disciplines. With regard to planning, the all-time low was reached in the academic year 2014/2015. By then, there were only 9 bachelor's programs and 7 master's programs running in 9 universities. Enrolments also registered a strong slow down, with entrants reduced to one fourth compared to peak time (from over 2 thousand to less than 5 hundred). Similar, albeit less drastic, trends were registered for neighboring disciplines as well. Partly due to the crisis in the construction sector, over the period 2010/2011 to 2018/2019 the architecture/civil engineering degrees group (which includes planning) saw the number of bachelor enrolments reduced to less than half (MIUR, 2021c).

Today, the improvements in terms of academic offer – 13 universities³ delivering 12 bachelor's programs and 8 master's programs – have not yet translated into a surge in student entries. After an initial increase, largely boosted by online/distance learning universities and incentives for the recognition of prior professional career experience, the progressive decline in enrolments has led to the fluctuation of first-year student numbers between 400-550 for undergraduate degrees and between 250-350 for graduate degrees. Also, the average classes size has fallen from 90 first year BSc students per class in the academic year 2005/2006 to 40 in 2018/2019, and from 37 first year MSc students per class in 2009/2010 to 33 in 2018/2019. These are class sizes comparatively smaller than other degree programs in

the Italian context, which result in student-faculty ratios that are generally favorable to students but economically challenging for institutions.

Figure 1 depicts how planning education unfolded over time in Italy. The chart represents trends in enrolments and graduations for bachelor's and master's programs, whereas the maps show the geographical distribution of Italian planning schools and programs in three representative years. Planning degree programs are located throughout the peninsula and islands, either in universities or polytechnics, but while first-cycle programs are fairly well distributed, second-cycle programs are more concentrated and virtually absent in central Italy. Nonetheless, master's degrees proved to be more resilient to enrolment fluctuations and student dropouts, also thanks to entries from different study backgrounds (i.e., bachelor's degree in a degree class other than planning) and a more international outlook.

In the Italian higher education system, 'degree classes' are groupings of degree programs that share the same key learning outcomes and activities, whatever the title they have been given by the individual university. When the degree classes were created, the term *Pianificazione territoriale* was preferred to *Urbanistica* as a way to distinguish (and distance) from the architecture tradition (echoing an international trend, see Krieger, 2000; Manley & Parnaby, 2000) and to foster a sense of identity against neighbouring disciplines, while embracing a more interdisciplinary approach inspired by the British planning culture (De Luca, 2008; Musco & Tedesco, 2021). An effort that is still evident in the titles of the planning degree programs available today, which are often similar if not identical to the title of the respective degree class.

Interdisciplinarity characterizes the training of the Italian planner since its very conception, also because of an understanding of the planning professional as a coordinator of processes that involve different specialists (Astengo et al., 1970;

Cassatella & Gambino, 2005). This becomes apparent when looking at the list of the subjects that fulfil the learning requirements of each degree class (see **Textbox 1** and **Textbox 2**): about 50 academic disciplines for the bachelor's, and 30 for the master's from over 10 (out of a total of 14) different disciplinary areas, ranging from the hard natural sciences and engineering to law, the humanities and social sciences. For the sake of comparison, in the case of the master's in Architecture (degree class LM-4) the characterizing academic disciplines are 20 from just 6 disciplinary areas.

The autonomy in the definition of the curricula provided by the degree class system allowed university institutions to design planning programs with quite different thematic focuses, selecting disciplines from the above-mentioned range and tailoring the programs according to the department in which they were embedded (Rallo, 2007). In fact, in the Italian university panorama, planning departments are still the exception, not the rule. Thus, it has become increasingly common to see degrees in planning that are hybrid, interclass and not characterized by the traditional relationship with the schools of architecture (or engineering), but rather with schools of social (e.g., geography), applied (e.g., geology) and agricultural sciences. In particular, 'rural' or 'countryside' planning and 'landscape' planning are pursued by some Italian planning schools.

As a result of this disciplinary cross-fertilization, also the expected career prospects of planning graduates are diverse. According to the Italian National Institute of Statistics (ISTAT) Classification of professions (ISTAT, 2011), the reference classes for planning graduates are *Tecnici delle costruzioni civili e professioni assimilate* [Civil construction technicians and similar professions], among the technical professions, and *Pianificatori, paesaggisti e specialisti del recupero e della conservazione del territorio* [Planners, landscape architects and experts in the recovery and conservation of the territory], among the intellectual professions. Nevertheless, reviewing the job prospects

officially listed by each degree program reveals that these professions are often followed by other more or less expected classes such as ‘Agronomists and foresters’, ‘System analysts’, ‘Cartographers and photogrammetrists’, ‘Geographers’, ‘Technical reports editors’, ‘Environmental control technicians’, ‘Geologists and mining technicians’, etc. The respective professional profiles that the programs claim to train are also varied: from traditional and generalist job profiles (technician, technical officer, assistant, person in charge of technical administrative procedures, etc.), to others that are less conventional (policy maker, geo-urbanist, territorial analyst, facilitator, urban manager, etc.).

The development of the planning profession in Italy

Planning graduates exist since 1975, but they initially experienced significant difficulties in practicing their profession as they were not eligible to enrol in the professional order of Architects or of Engineers. It was 1977 when the National Association of Town, Spatial and Environmental Planners (ASSURB) was founded with the purpose of promoting the recognition of the planner’s profession and activity. The situation changed following the enactment of D.P.R. 328/2001, which deeply reformed the Professional Register of the Order of Architects – since then renamed as Order of Architects, Planners, Landscape Architects and Conservationists [*Ordine degli Architetti, Pianificatori, Paesaggisti e Conservatori*] – introducing new professional titles and specifying their respective fields of expertise. At that stage, the Italian primary legislation in urban planning (L. 1150/1942) had been in existence for over five decades.

As established by the aforementioned decree, Italian planners are divided into professionals who hold a bachelor’s degree and those who hold a master’s degree, with the former being referred to as Junior Planners, and the latter being Territorial Planners.

In order to use the professional title and practice the liberal profession, graduates must pass the state licensing examination and register with one of the 105 provincial orders. The areas of activity in which they are entitled to carry out professional services vary depending on the level of training received and the title obtained (see **Textbox 3**). However, none of these activities are listed as reserved activities, but are shared also with other professionals, namely architects, engineers, and agronomists. In particular, based on the D.P.R. 328/2001, the architect's competencies encompass those of all other professional figures belonging to the same order (i.e., planners, landscape architects and conservationists), reflecting a latent but enduring primacy of the generalist over the specialist profiles.

According to CNAPPC data, by 2020 there were about 1,8 thousand registered planners in Italy. Almost 1,5 thousand of them were Territorial Planners, and just over 3 hundred were Junior Planners. Compared to the approximately 150 thousand practitioners registered in the CNAPPC National Register, that of the planner is therefore a 'professional niche' in the overall professional landscape, with consequent concerns regarding political representation and recognition that are relevant to the current debate.

From the point of view of their geographical distribution (see **Figure 2**), the highest numbers of registered planners are found in the regions where there are or have been universities delivering planning degrees i.e., Lombardy (322) and Veneto (213), Lazio (114), and several regions of southern Italy such as Campania (138), Calabria (111) and Sicily (188). Of the remaining regions, only Piedmont (72) and Tuscany (56) exceed 50 registered planners. Also the number of planners per municipality is uneven, with some of the provinces that have more overall planners having the lowest number of planners per municipality, and vice versa. This is true especially for northern Italy (e.g.,

Turin, Bergamo and Brescia provinces) where municipalities are typically small and numerous, and central Italy (e.g., Grosseto and Siena provinces) where municipalities tend to be larger.

The time series of licensed planners provide some further insights. Despite an initial sharp drop, the number of master's graduates who pass the state licensing examination every year to become a Territorial Planner shows a stable trend (around 120-160). Newly licensed Junior Planners, on the other hand, have been declining for a decade (well below 50), in line with the fall of licensed Junior Architects (ANVUR, 2017), revealing the apparent failure of the 'junior' profiles.

These are rather small numbers, not only in absolute terms – every year a total of about 4,000 architects and 40,000 professionals are licensed (MIUR, 2021b) – but also in relative terms. **Table 2** compares the number of registered and licensed planners against the number of planning graduates: just 1 in 25 BSc graduates and 1 in 2.5 MSc graduates enrolls in a provincial Order. Although roughly estimated, and with significant geographical and gender differences, this means that only 1 in 10 of those who have enrolled in a bachelor's degree program over the past 20 years has so far undertaken a career as 'practicing' Territorial Planner.

There are several reasons that can explain this low tendency to undertake professional practice. First of all, there is the possibility of working in the field without a license, for example as a consultant or assistant in an architecture/engineering firm (under the responsibility of a senior professional), as a civil servant in a public administration, as an employee in a private company, as paid staff in a non-profit organization, or abroad. The difficulty of passing the state licensing examination (overall success rate around 60% according to MIUR (2021c) data) and the apparent limited benefit of being a licensed planner (protection of the title but no reserved

activities) also play a role. To a less extent, BSc and MSc degrees in planning also provide for the possibility to sit the state exam and register in other professional orders. It cannot be excluded that some of the graduates in the more interdisciplinary courses decide to pursue different careers (e.g., junior agronomists and foresters, doctors of agronomy and forestry, graduate surveyors, graduate agrotechnicians).

Since professional practice is marginal, what do planners actually do remains a question that is not easy to answer. With regard to recent graduates employment, some empirical – and partial (see Materials and Methods section for details) – evidence can be drawn from the AlmaLaurea (2020a) surveys. In 2019, the average employment rate of MSc graduates in planning was 65.8% one year after graduation, 80.4% three years after graduation, and 90.1% five years after graduation. The 65-80% of them was working in the private sector (mainly in consultancy and construction services), while only the 10-20% was employed by a public body. The low rate of public employment is puzzling because, since the establishment of the first degree in *Urbanistica*, training civil servants has been one of the main stated missions of planning schools. A reasonable explanation is the long-lasting turnover freeze of the public administration employment, which was enacted in 2008 as a response to Italy's public finance issues. The same financial issues that also slowed down the demand for planning services. It should also be noted that many calls for recruitment in the public sector still seek graduates in the architecture or engineering field, for the simple reason that planning as a degree and career option is not yet widely perceived.

The average net monthly income of planning graduates ranged from €1,164 one year after graduation to €1,457 five years after graduation, steadily above architects but below civil and environmental engineers. Beyond the specifics, those who hold a MSc degree in planning are likely to have a competitive advantage over those holding only a

BSc degree. In fact, one year after graduation, master's graduates are better paid, perform more qualified tasks, and make wider use of the knowledge gained through the educational pathway. Although it takes them longer to find their first job, the area in which they find employment is often related to their studies and their employment is less precarious.

The internationalization of studies and the job market

In a globalizing and rapidly changing world, the question is whether planners currently trained in Italy have the necessary tools to face the changes and navigate the international employment waters outlined above, qualifying as true ‘world professionals’. In the last few years, new indicators have been added to the MIUR datasets and AlmaLaurea surveys to assess some of the various forms that internationalization can take both in studies and the job market.

A first set of indicators relates directly to the student’s profiles and their academic paths. The proportion of international enrolments (i.e., residents without Italian citizenship, and non-Italian citizens with a foreign high school diploma) is stable or slightly increasing, but significant only for the major universities in northern and central Italy. Outbound student mobility flows are also positive. In academic year 2018/2019, about 9% of the students enrolled in a first-cycle program and 25% of those enrolled in a second-cycle program did a period of study abroad (e.g., to attend courses and exams, or to work on the final thesis). In addition to the Erasmus+ program, other forms of economic support have been introduced by some individual universities, demonstrating the importance given to international learning opportunities.

A second set of indicators concerns the study programs. According to the MIUR University portal, in academic year 2020/2021, one out of 12 bachelor’s programs (Politecnico di Torino) and 5 out of 8 master’s programs (Università degli Studi di

Firenze, Politecnico di Milano, Università degli Studi di Sassari, Politecnico di Torino and Università Iuav di Venezia) were ‘with an international scope’. Although this term is unclear, some features of the courses may shed some light as to what is meant. Of the master’s degrees, one is taught entirely in English (Politecnico di Milano), one is bilingual (Politecnico di Torino), and another one delivers an increasing number of English-taught courses (Università Iuav di Venezia). Moreover, all of these universities offer the possibility of obtaining double- or joint-degrees with foreign universities in Europe (France, Germany, Portugal, Spain, Sweden) and elsewhere (China, Tunisia), and to participate in mobility projects within the framework of inter-university cooperation agreements.

By contrast, no clues are available regarding the internationalization – sometimes also referred to as globalization (Amirahmadi, 1993; ACSP, 2019) – of planning curricula and pedagogical methodologies. With the UN-Habitat calling for a ‘one-world’ approach to planning education (Stiftel et al., 2009), that is curricula providing internationally relevant training regardless of the future location of the student’s practice, a way of interpreting internationalization that goes well beyond student recruitment, academic mobility partnerships, and English as a medium of instruction is gaining ground. A detailed analysis of course syllabi would be needed to understand how and to what extent this applies to Italy. The only course that seems straightforwardly international in its scope is the ‘Planning for the Global Urban Agenda’ track launched in academic year 2016/2017 at the Politecnico di Torino.

Internationalization manifests itself through some job market indicators as well. Based on the AlmaLaurea 2020 surveys, one year after graduation about 4.5% of BSc graduates and 9% of MSc graduates work abroad, up from 1.5-2% in 2015. Willingness to work abroad has always been quite high, with about 40-50% interested in working

European countries and 30-40% in non-European countries. In spite of this, the applications for the recognition of professional qualifications for temporary or permanent establishment of planners in a foreign country are occasional (hardly any since 1997 according to the EU Regulated Professions Database), but in line with a very limited circulation of planning professionals among all the member states (EC, 2021), as opposed to architects, who instead rank among the most mobile professionals (ANVUR, 2017). The need for knowledge of national and local legislation/regulation, and the barriers for mutual recognition of degrees and professional qualifications (Frank et al., 2014) can at least partially explain this phenomenon.

Conclusions

This paper contributes to fill a gap in the existing international literature by providing insights on the figure of the Italian planner. It analyses and presents previously unpublished data, combining multiple data sources on different and complementary issues to offer a broader picture of the Italian planning education and profession in the past 20 years, discussing the linkages and mismatches between them. Thereby, it provides new elements for the ongoing debate about the state and outlook of the planning field.

Despite its societal mandate, the current status of Italian planning as discipline and practice is fragile compared to other regulated professions. The basic conditions for the development of professionalism (i.e., teaching at the university level, and legal protection of the professional title through statutory registration) do exist in the country. However, critics might argue with some reason that planning in Italy still has a long way to go before evolving from a ‘minor’ to a ‘major’ profession (Glazer, 1974; Schön, 1983).

Findings confirm a situation of lights and shadows. The academic offer underwent several adjustments over the period. Currently, it provides a limited but balanced number of degree programs, which feature small size classes and interdisciplinary courses, and that envisage varied career prospects. Professional practice has a low appeal. Whereas licensed Territorial Planners are stable and fairly well distributed, licensed Junior Planners per year are declining. Yet graduate employment is comparable to that of cognate professionals in terms of rate and income. Internationalization is taking place at multiple levels but is still in its infancy. Breakdowns by geographic area and university show wide differences for all of the above.

In Italy, professional recognition and regulation of planners has long been overdue and carried the expectation of providing identity to an entire community of practitioners. Nonetheless data show that today most of Italian planners pursue their activities outside of the professional order, in fields that are hard to investigate. Although planning theory defines certain ideal roles for planners (i.e., technician, bureaucrat, decision maker, facilitator, etc.), there is a general consensus that the jobs of Italian planners have diversified (e.g., among Italian scholars Balducci, 1998; Janin Rivolin, 1998; La Greca, 2012; Zanon, 2014; De Leo & Forester, 2018) making it even more difficult to define the knowledge and practice domain of planning. On the one hand, the diversity of curricula and career prospects is a strength, since it ensures the flexibility needed to meet the demands of today's complex and dynamic work environments. On the other hand, the ever-changing planning education and employment landscape poses challenges in identifying a core of distinctive skills and competencies that can be asserted and defended, be it to mark the boundaries against

competing and better established professions (Abbott, 1988), or to raise awareness and attract prospective students.

The debate on how to move forward and face the challenges confronting the sector is not over and is still characterized by conflicting voices and interests. The view of the SINURB (personal communication) is that only defining an agreed-on core of competencies will allow planners to lobby for reserved activities. Others strive for a general reform to abolish professional orders and reserves. In this scenario, setting education standards and implementing systems of quality assurance might be even more important than before.

The recent reform on qualifying degrees – which provides the possibility for merging graduation and licence to practice by introducing a mandatory professional traineeship, and including professional order representatives in the final jury – is meant to speed up the access of graduates to the job market. Academics engaged in planners' education have different opinions on its implications (discussed in the Permanent Conference of Heads of Planning Schools). On the one hand, it could be an opportunity to attract prospective students and facilitate their career. On the other hand, it is likely to entail the need to refine and narrow the scope of planning education to professionalism and local contexts of practice, which would be in contrast with the current processes of internationalisation. At the moment, the rich and diverse planning education panorama opens to a wide range of career paths and ensures a good employment rate, while licensed practice is still marginal.

So, does this shifting role of planners justify the return to a single professional figure embodied by the architect, as the CNAPPC reform proposal aims? Some international comparisons might be helpful to benchmark Italian planning education and profession against other countries.

At a time when the United Nations recognize the need of planner's skills to meet the challenges of global urbanization (UN-Habitat, 2016a; Stiftel, 2021), the number of Italian urban and regional planners remains very low. In 2015, there were as many as 250 architects for every 100 thousand population in Italy (CNAPPC-CRESME, 2016). To date there are only 3 registered planners for every 100 thousand population, that is to say one planner for every 4 municipalities. As a measure of comparison, in the United Kingdom there are about 38 accredited planners per 100 thousand population – and 57 architects (CNAPPC-CRESME, 2016) – in Australia 23, in the United States 13. In a hypothetical ranking of planning capacity, Italy equals South Africa (UN-Habitat, 2016b).

A single professional figure – by cancelling Planners, as well as Landscape Architects and Conservationists – would take Italy back to the notion of 'integral architect' as theorized by Gustavo Giovannoni at the beginning of the 20th century, in line with a short-sighted and inward-looking approach, indifferent to what happens in the rest of the world. At the same time, the development of its own professional identity remains imperative to the planning profession in order to gain enough social recognition and political influence. Although the role of planners is becoming more critical, its manifold origins and focuses make planning appear diffuse and elusive. Since competition among professions (and therefore among education programs) is natural, the Italian planner should work on its professional confidence, reconciling tensions between professionalism (mainly locally driven) and internationalization (by definition globally oriented), and making planning contributions to society more explicit to ensure future relevancy for the field.

Acknowledgements

The authors would like to thank the Consiglio Nazionale degli Architetti, Pianificatori, Paesaggisti e Conservatori which provided data for the research.

Funding

This work was supported by the Interuniversity Department of Regional and Urban Studies and Planning (DIST) of the Politecnico di Torino through the MUR Department of Excellence 2018–2022 grant.

Notes

1. The Bologna Process was launched in 1999 as an intergovernmental cooperation agreement for the implementation of a common European Higher Education Area (EHEA). It is under the Bologna agreement that nearly all EU countries agreed to convey their national systems to a three-cycle higher education system (bachelor's, master's and doctoral studies), with the aim of strengthening quality assurance and recognition of degrees across the continent.
2. This process started in 2018 and still has not come to an end. Our assumptions are based on draft resolutions.
3. The Italian universities currently offering bachelor's and/or master's degree courses in planning are: Università degli Studi della Basilicata (UniBas), Università degli Studi di Bergamo (UniBg), Università degli Studi di Catania (UniCt), Università degli Studi di Firenze (UniFi), Politecnico di Milano (PoliMi), Università degli Studi di Napoli 'Federico II' (UniNa), Università degli Studi di Palermo (UniPa), Università degli Studi di Padova (UniPd), Università degli Studi di Roma 'La Sapienza' (UniRoma1), Università degli Studi di Sassari (UniSs), Politecnico di Torino (PoliTo), Università degli Studi della Toscana (UniTus), Università degli Studi di Urbino 'Carlo Bo' (UniUrb), Università Iuav di Venezia (Iuav). Over the years degrees in planning have also been offered by: Università degli Studi di Bologna (UniBo), Università della Calabria (UniCal), Università degli Studi di Camerino (UniCam), Università degli Studi Gabriele d'Annunzio (UniCh), Università degli Studi di Genova (UniGe), Università degli Studi Guglielmo Marconi (UniMarconi), Università degli Studi Mediterranea di Reggio Calabria (UniRc), Università degli Studi di Trieste (UniTs).

References

- Abbott, A. (1988) *The System of Professions. An Essay on the Division of Expert Labor* (Chicago and London: The University of Chicago Press).
- ACSP (2019) *Building Global Perspectives on Planning Education*. Available at: https://cdn.ymaws.com/www.acsp.org/resource/collection/0F33A74D-FC0F-4400-B5D4-B17FC1FFA493/ACSP_GPETF_Task_Force_report_formatted.pdf (accessed 30 September 2021).
- Alexander, E. R. (2016) There is no planning – only planning practices: Notes for spatial planning theories, *Planning Theory*, 15(1), pp. 91–103.
- AlmaLaurea (2020a) *XXII Indagine 2020: Condizione occupazionale dei laureati*. Available at <https://www.almaurea.it/universita/occupazione/occupazione18> (accessed 22 April 2021).
- AlmaLaurea (2020b) *XXII Indagine 2020: Profilo dei laureati*. Available at <https://www.almaurea.it/universita/profilo/profilo2019> (accessed 22 April 2021).
- Amirahmadi, H. (1993) Globalization and planning education, *Environment and Planning B: Planning and Design*, 20, pp. 537–555.
- ANVUR (2017) *Le professioni nell'università. Un primo studio sulla presenza e sul ruolo delle libere professioni in ambito accademico* (Roma: ANVUR).
- Astengo, G., Ceccarelli, P., Gabrielli, B., & Romano, M. (1970) *Per l'istituzione di un corso di laurea in urbanistica*. Available at <http://circe.iuav.it/astengo/dati/B70c.pdf#nameddest=1> (accessed 22 September 2021).
- Balducci, A. (Ed.) (1998) Come cambiano i mestieri dell'urbanista in Italia, *Territorio*, 7, pp. 7–11.
- Cassatella, C., & Gambino, R. (2005) Premessa, in: C. Cassatella & R. Gambino (Eds) *Il territorio: conoscenza e rappresentazione*, pp. 5–6 (Torino: Celid).
- CNAPPC (2020) *Riforma dell'ordinamento professionale*. Draft, 29 February 2020.
- CNAPPC (2021) *Albo unico nazionale*. Accessible at <http://www.albounico.awn.it/> - <http://www.cnappc.it/default.aspx> (accessed 8 February 2021).
- CNAPPC-CRESME (2016) *Osservatorio Professione Architetto - Quinta indagine congiunturale sullo stato della professione in Italia* (Roma).

- Davoudi, S., & Ellison, P. (2006) *Implications of the Bologna Process for Planning Education in Europe, Results of the 2006 survey* (Oxford Brookes University – Department of Planning, on behalf of AESOP).
- Davoudi, S., & Pendlebury, J. (2010) Centenary paper: The evolution of planning as an academic discipline, *Town Planning Review*, 81(6), pp. 613–646.
- De Leo, D., & Forester, J. (2018) *Reimagining Planning. How Italian urban planners are changing planning practices* (Roma: INU Edizioni).
- De Luca, G. (2008) La professione del pianificatore è costituzionalmente rilevante. Serve un percorso di studi autonomo, *Urbanistica Informazioni*, 221/222, pp. 129–131.
- De Luca, G., & Rallo, D. (2018) *Cosa pensano gli urbanisti 2006-2016* (Roma: INU Edizioni).
- D.M. 509/1999, Italian Republic Ministerial Decree of 3 November 1999, no. 509 ‘Regolamento recante norme concernenti l'autonomia didattica degli atenei’ [Regulations on the teaching autonomy of universities].
- D.M. 270/2004, Italian Republic Ministerial Decree of 22 October 2004, no. 270 ‘Modifiche al regolamento recante norme concernenti l'autonomia didattica degli atenei, approvato con decreto del Ministro dell'università e della ricerca scientifica e tecnologica 3 novembre 1999, n. 509’ [Amendments to the regulations on the teaching autonomy of universities].
- D.P.R. 328/2001, Italian Republic Presidential Decree of 5 June 2001, no. 328 ‘Modifiche ed integrazioni della disciplina dei requisiti per l'ammissione all'esame di Stato e delle relative prove per l'esercizio di talune professioni, nonché della disciplina dei relativi ordinamenti’ [Amendments and additions to the regulations on state licensing examination for some professions].
- EC (2021) *Regulated Professions Database*. Available at <https://ec.europa.eu/growth/tools-databases/regprof/> (accessed 20 July 2021).
- ECTP-CEU (2013) *Study on the Recognition of Planning Qualifications in Europe*. Available at: <https://archive.ectp-ceu.eu/ectp-ceu.eu/index.php/en/publications-8/recognition.html> (accessed 20 July 2021).
- Frank, A. I. (2006) Three decades of thought on planning education, *Journal of Planning Literature*, 21(1), pp. 15–67.

- Frank, A. I., Mironowicz, I., Lourenco, J., Franchini, T., Ache, P., Finka, M., Scholl, B., & Grams, A. (2014) Educating planners in Europe: a review of 21st century study programmes, *Progress in Planning*, 91, pp. 30–94.
- Frank, A. I., & Silver, C. (Eds) (2018) *Urban Planning Education: Beginnings, Global Movement and Future Prospects* (Heidelberg: Springer).
- Fregolent, L. (2016) Prospettive per l'insegnamento dell'urbanistica negli atenei italiani, in: S. Munarin & L. Velo (Eds) *Italia 1945-2045. Urbanistica prima e dopo*, pp. 227–234 (Roma: Donzelli Editore).
- Fubini, A. (Ed) (2004) *Improving Planning Education in Europe* (Milano: Franco Angeli).
- Geppert, A., & Cotella, G. (2010) *Planning Education no. 2. Quality issues in a consolidating European higher education area* (Leuven: AESOP).
- Glazer, N. (1974) The Schools of the Minor Professions, *Minerva*, 12(3), pp. 346–364.
- Green Leigh, N., French, S. P., Guhathakurta, S., & Stiftel, B. (Eds) (2020) *The Routledge Handbook of International Planning Education* (New York: Routledge).
- Hedgcock, D., & Pidalà, A. M. (2014) Education, practice and professionalism: a comparative history of the development of urban and regional planning in Italy and Australia, *Planning Perspectives*, 29(4), 527–542.
- ISTAT (2011) *Nomenclatura e classificazione delle Unità Professionali*. Available at <http://professioni.istat.it/sistemainformativoprofessionioni/cp2011/> (accessed 20 July 2021).
- Jammal, I. M. (1993) Country profiles of International Planning Education in Europe, *Environment and Planning B*, 20(5), pp. 585–605.
- Janin Rivolin, U. (1998) Nuove figure e competenze professionali, *Territorio*, 7, pp. 65–71.
- Krieger, A. (2000) The Planner as Urban Designer: Reforming Planning Education in the New Millennium, in: L. Rodwin & B. Sanyal (Eds) *The Profession of City Planning: Changes, Successes, Failures and Challenges (1959-2000)* (New York: Routledge).
- Kunzmann, K. R., & Koll-Schretzenmayr, M. (Eds) (2015) The State of the Art of Planning in Europe, *disP – The Planning Review*, 51(4), pp. 16–95.
- L. 1150/1942, Italian Republic Law 17 August 1942, no. 1150 'Legge urbanistica' [Urban Planning Law].

- L. 240/2010, Italian Republic Law 30 December 2010, no. 240 ‘Norme in materia di organizzazione delle università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l’efficienza del sistema universitario’ [Law on Universities organization, academic staff and recruitment].
- L. 163/2021, Italian Republic Law 8 November 2021, no. 163 “Disposizioni in materia di titoli universitari abilitanti” [Provisions on qualifying degrees].
- La Greca, P. (2012) From Urban Design to Regional Policies: a New Role for Planners in Italy, in: B. Scholl (Ed.) *HESP Higher Education in Spatial Planning: Positions and Reflections* (Zürich: vdf Hochschulverlag AG, ETH Zürich), pp. 166–175.
- Manley, S., & Parnaby, R. (2020) The Return of the Architect-Planner?, *Planning Practice & Research*, 15(3), pp. 269–277.
- Marson, A. (2021) Riflessioni intorno a cinquant’anni di esperienza nella formazione di urbanisti, *Urbanistica Informazioni*, 292, pp. 38–39.
- MIUR (2021a) *Anagrafe Nazionale degli Studenti*. Available at <https://anagrafe.miur.it/> (accessed 15 September 2021).
- MIUR (2021b) *Banca dati offerta formativa*. Available at <https://offf.miur.it/> (accessed 15 September 2021).
- MIUR (2021c) *Portale dei dati dell’istruzione superiore*. Available at <http://ustat.miur.it/> (accessed 15 September 2021).
- MIUR (2021d) *University*. Available at <https://www.university.it/> (accessed 15 September 2021).
- Musco, F., & Tedesco, C. (Eds) (2021) 50 anni dall’istituzione del primo corso di laurea in urbanistica in Italia, *Urbanistica Informazioni*, 292, pp. 36–44.
- Rallo, D. (2007) L’offerta formativa universitaria in pianificazione territoriale e urbanistica, *Urbanistica Informazioni*, 213, pp. 89–92.
- Scholl, B. (Ed.) (2012) *HESP Higher Education in Spatial Planning: Positions and Reflections* (Zürich: vdf Hochschulverlag AG, ETH Zürich).
- Schön, D. A. (1983) *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books).
- Stiftel, B., Demerutis, J., Frank, A.I., Harper, T., Kweku Baah Inkoom, D., Lee, L-M., Lima, J.J., Memon, A., Milstead, T., Mironowicz, I., Nnkya, T., Paris, D., Silver, C., & Sipe, N.G. (2009) Chapter 10: Planning Education, in: UN-Habitat,

- Planning Sustainable Cities: Global Report on Human Settlements 2009*
(London: Earthscan), pp. 185–198.
- Stiftel, B. (2021) Planners and the New Urban Agenda: will we lead the Agenda, or will the Agenda lead us?, *Town Planning Review*, 92(4), pp. 421–441.
- UN-Habitat (2016a) *Habitat III - New Urban Agenda. Quito Declaration on Sustainable Cities and Human Settlements for All* (Quito: UN-Habitat).
- UN-Habitat (2016b) A cities that plans: reinventing urban planning, in: *World Cities Report 2016: urbanization and development. Emerging futures* (Nairobi: UN-Habitat), pp. 121–138.
- Wildavsky, A. (1973) If planning is everything, maybe it's nothing, *Policy Sciences*, 4, pp. 127–153.
- Zanon, B. (2014) Planners' Technical Expertise: Changing Paradigms and Practices in the Italian Experience, *Planning Practice and Research*, 29(1), pp. 75–95.

Figure 1. The size and makeup of planning education in Italy: planning students and schools.

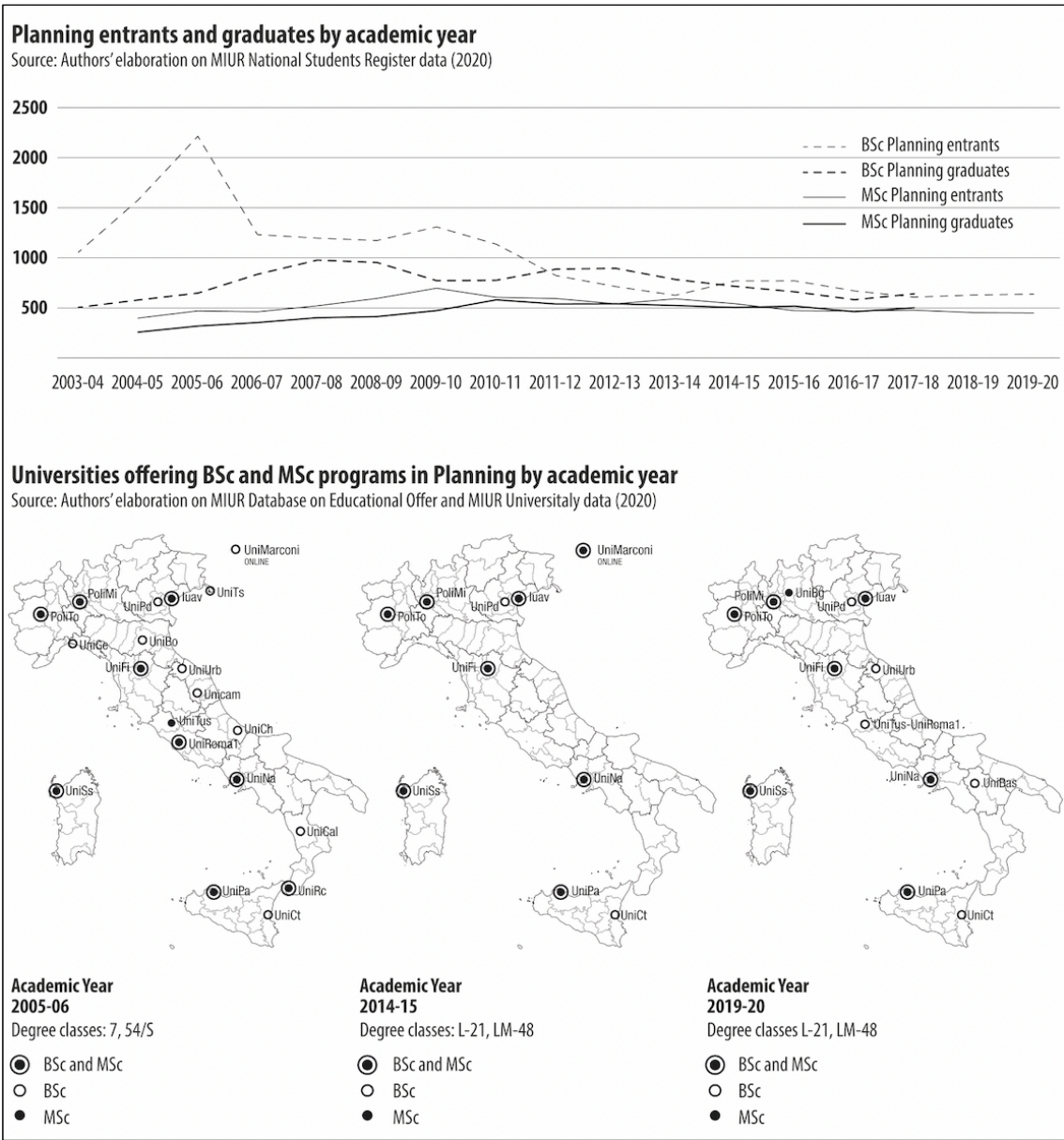


Figure 2. The size and makeup of planning practice in Italy: licensed and registered planners.

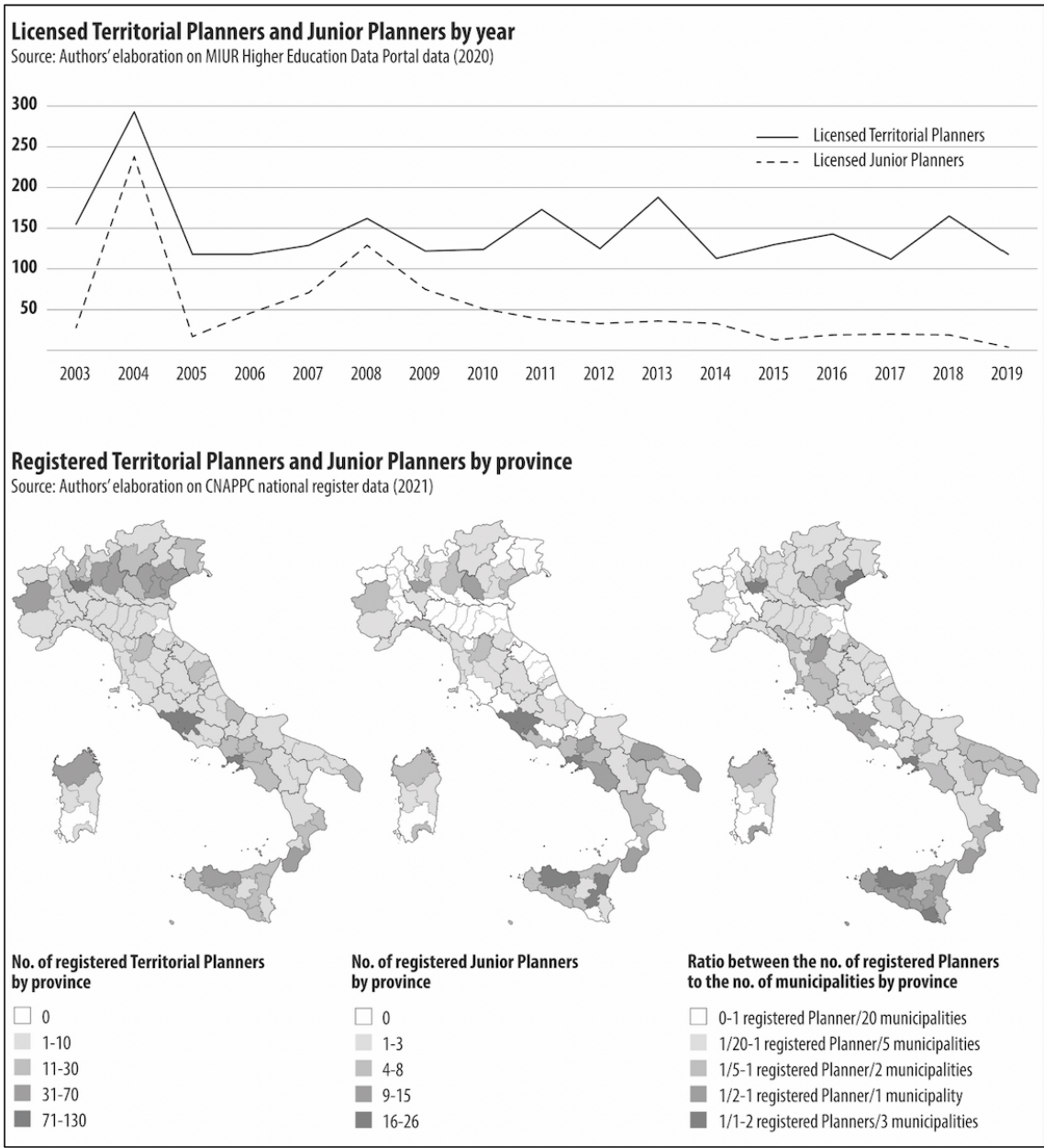


Table 1. Data sources.

Data	Data source	Data owner	Data period
Available degree programs by degree class and institution	Database on the Educational Offer (OFF.F)	MIUR-CINECA	2001/02–2012/13 by academic year
Available degree programs by degree class and institution	Universitaly	MIUR-CINECA	2013/14–2020/21 by academic year
Entrants, enrolments and graduates by degree class and institution	National Students Register (ANS)	MIUR-CINECA	2003/04–2019/20 by academic year
Graduates' profile by degree class and institution	Survey on Graduates' Profile	AlmaLaurea	2004–2020 by year of graduation
Graduates' employment status 1, 3 and 5 years after graduation by degree class and institution	Survey on Graduates' Employment Status	AlmaLaurea	1998–2020 by year of graduation
Licensed professionals by professional title and institution	Higher Education Data Portal (USTAT)	MIUR-CINECA	2003–2019 by year
Registered professionals by professional title and province	National Register	CNAPPC	as of July 2020
Professional titles and competent authorities by generic name of professions and country	EU Regulated Professions Database	EC	-

Table 2. Summary of planning graduates, licensed planners, and registered planners in Italy. Source: Authors' elaboration on MIUR National Students Register, MIUR Higher Education Data Portal and CNAPPC National Register data.

BSc graduates	Licensed Junior Planners 2003-2019	Registered Junior Planners as of July 2020	MSc graduates	Licensed Territorial Planners 2003-2019	Registered Territorial Planners as of July 2020
8,377	870	331	3,743	2,488	1,492

Textbox 1. Key learning outcomes and compulsory learning activities for bachelor's degrees in Town, regional and environmental planning (degree class L-21), as per D.M. 270/2004 [authors' translation].

KEY LEARNING OUTCOMES

Students graduating from a degree program in this class must:

- possess the basic knowledge (theoretical, methodological and technical) for the analysis of the transformation processes of cities, territories, landscapes and the environment;
- develop an appropriate ability to interpret settlement, landscape and environmental structures in their evolutionary processes, under the economic, social and physical aspects;
- possess the basic knowledge of urban, territorial, landscape and environmental planning and design, and of territorial government policies;
- be able to analyze the formation process of complex policies, programs and projects;
- possess the basic knowledge to assess the consequences of territorial government actions under the settlement, environmental, landscape, social and economic point of view;
- acquire the ability to process territorial and environmental information using new information technologies;
- be able to communicate effectively, both in written and oral form, in at least one language of the European Union, other than Italian.

Graduates in this class will receive an adequate training from the theoretical, critical interpretive and methodological point of view necessary to access the master's degrees, meaning the acquisition of basic knowledge in the areas of urban, territorial, landscape and environmental analysis and planning, and the construction and implementation of programs and policies, and their assessment.

The main career opportunities for the degree programs in this class are:

- activities of urban, territorial and environmental structures analysis, even with the use of new technologies, contributing and collaborating to the preparation of planning, programming, management and assessment documents, contributing to the definition of strategies for administrations, institutions and companies with reference to the with regard to the rehabilitation, enhancement and transformation of cities, territories and the environment.

The fields of activity could be the freelance professional practice as well as institutions, public and private bodies operating for the transformation and government of the city, territory, and environment.

COMPULSORY LEARNING ACTIVITIES

Learning activities	Disciplinary area	Scientific-disciplinary fields
Basic (30 ECTS)	Mathematics, informatics, statistics	FIS/07 - Applied physics
		INF/01 - Informatics
		ING-INF/03 - Telecommunications
		ING-INF/05 - Information processing systems
		MAT/03 - Geometry
		MAT/05 - Mathematical analysis
		MAT/06 - Probability and statistics
		MAT/08 - Numerical analysis
		MAT/09 - Operational research
		SECS-S/01 - Statistics
		SECS-S/03 - Economic statistics
		SECS-S/05 - Social statistics
	Ecology, geography, geology	AGR/02 - Agronomy and field crops
		AGR/03 - Arboriculture and fruitculture
		AGR/07 - Agricultural genetics
		AGR/10 - Rural buildings and agro-forest land planning
		AGR/14 - Pedology
		AGR/17 - Livestock systems, animal breeding and genetics
		BIO/03 - Environmental and applied botany
		BIO/07 - Ecology
		GEO/02 - Stratigraphic and sedimentary geology
		GEO/04 - Physical geography and geomorphology
	Representation	M-DEA/01 - Demology, ethnology and anthropology
		M-GGR/01 - Geography
		M-GGR/02 - Economic and political geography
Characterizing (50 ECTS)	Architecture and engineering	ICAR/06 - Topography and cartography
		ICAR/17 - Drawing
		AGR/05 - Forest management and silviculture
		AGR/08 - Agricultural hydraulics and watershed protection
		AGR/10 - Rural buildings and agro-forest land planning
		GEO/05 - Applied geology

Law, economy and sociology	ICAR/02 - Hydraulic and marine constructions and hydrology
	ICAR/03 - Sanitary and environmental engineering
	ICAR/04 - Highways, railways and airports
	ICAR/05 - Transportation
	ICAR/14 - Architectural and urban design
	ICAR/15 - Landscape architecture
	ICAR/18 - Architectural history
	ICAR/19 - Architectural restoration
	ICAR/20 - Urban and regional planning
	ICAR/21 - Urban and landscape planning
	ICAR/22 - Real estate appraisal
	AGR/01 - Agricultural economics and rural appraisal
	IUS/01 - Private law
	IUS/09 - Public law
	IUS/10 - Administrative law
	IUS/14 - European union law
	M-PSI/05 - Social psychology
	SECS-P/01 - Economics
	SECS-P/02 - Economic policy
	SECS-P/03 - Public economics
	SECS-P/06 - Applied economics
	SPS/04 - Political science
	SPS/07 - General sociology
	SPS/10 - Urban and environmental sociology

Textbox 2. Key learning outcomes and compulsory learning activities for master's degrees in Regional, urban and environmental planning (degree class LM-48), as per D.M. 270/2004 [authors' translation].

KEY LEARNING OUTCOMES

Students graduating from a degree program in this class must have:

- the ability to understand trends and outcomes of the transformation of cities and territories, also in relation to socio-economic dynamics and morphologies;
- the knowledge and tools for the historical interpretation of urban and territorial layering processes;
- the ability to apply theories, methods and techniques to planning and design acts;
- the specific knowledge of methods and techniques to build plans and projects for cities, territories, landscapes and the environment;
- the ability to define strategies for administrations, institutions, and companies with regard to the redevelopment, enhancement and transformation of cities, territories, landscapes and the environment.

Moreover, graduates in this class must be able to fluently use, both in written and oral form, at least English or another language of the European Union, other than Italian, also with regard to national and international disciplinary vocabularies.

The main career opportunities for the degree programs in this class are:

- activities in which graduates will be able to develop/build and manage territorial government tools with particular reference to: a) the design, planning and policing related to the transformation and redevelopment of cities, territories and the environment (projects, programs, plans and policies at different scales, sector plans and policies, rules and norms; b) the coordination and management of assessment activities related to urban, territorial and environmental projects, programs, plans and policies; c) the management of the construction processes of government actions and related forms of communication.

The typical fields of activity are represented by professional freelance practice and, among others, functions of high responsibility in institutions, as well as in public, private and third-sector bodies operating for the transformation and government of cities, territories, and the environment.

The university institutions organize, in agreement with public, private and third-sector bodies, internships and traineeships with appropriate tutoring assistance.

COMPULSORY LEARNING ACTIVITIES

Learning activities	Disciplinary area	Scientific-disciplinary fields
Characterizing (48 ECTS)	Urban and regional planning	ICAR/15 - Landscape architecture
		ICAR/18 - Architectural history
		ICAR/19 - Architectural restoration
		ICAR/20 - Urban and regional planning
		ICAR/21 - Urban and landscape planning
	Engineering and science of the territory	GEO/05 - Applied geology
		ICAR/04 - Highways, railways and airports
		ICAR/05 - Transportation
		ICAR/06 - Topography and cartography
		INF/01 - Informatics
		ING-INF/05 - Information processing systems
	Economics, politics and sociology	AGR/01 - Agricultural economics and rural appraisal
		ICAR/22 - Real estate appraisal
		IUS/10 - Administrative law
		M-DEA/01 - Demology, ethnology and anthropology
		M-GGR/01 - Geography
		SECS-P/02 - Economic policy
		SECS-P/03 - Public economics
		SECS-P/06 - Applied economics
	Environment	SPS/04 - Political science
		SPS/10 - Urban and environmental sociology
		AGR/02 - Agronomy and field crops
		AGR/05 - Forest management and silviculture
		AGR/07 - Agricultural genetics
		AGR/08 - Agricultural hydraulics and watershed protection
		AGR/14 - Pedology
		AGR/19 - Animal science
		BIO/03 - Environmental and applied botany
		BIO/07 - Ecology

Textbox 3. Key areas of professional practice for registered Territorial Planners and Junior Planners, as per D.P.R. 328/2001 [authors' translation].

TERRITORIAL PLANNER

- Territorial, landscape, environmental and urban planning;
- the delivery and coordination of complex and specialized analyses of urban, territorial, landscape and environmental structures, the coordination and management of environmental assessment activities and urban and territorial plans and projects feasibility;
- strategies, policies, and projects of urban and territorial transformation.

JUNIOR PLANNER

- Contribution to and collaboration in planning activities through the application of scientific knowledge;
 - the implementation and operation of information systems for urban and territorial analysis and management;
 - territorial and environmental analysis, monitoring and assessment;
 - management and assessment procedures of territorial planning acts and related complex programs.
-