Appraisals in Italy
Identity, contents, prospects

Giovanna Acampa*, Salvatore Giaffrida**, Grazia Napoli ***

key words: appraisal and evaluation, identity, teaching, training, profession

Abstract

The paper presents the results of a wide field research concerning the teaching of appraisal studies in the courses of Architecture and Engineering in Italian universities.

This general report, including critical observations and interpretations, provides the basis for strategies to increase the presence and impact of appraisal studies. The aim is to spread the personal and professional awareness that the estimative sensibility is a key element for the knowledge and planning of the city and the territory.

The paper is divided into three coalescing parts.

The first highlights the presence of appraisal teaching in different universities and courses of study, and answers the questions: from whom, where and how much is it taught?

The second describes the form and the geography of contents of the appraisal studies, as well as their adaptation and influence to the training needs of the different courses of studies, and answers the question: what is taught?

The third, relying on a cross reading of the course programs, highlights further aspects of the educational offer and tries to answer the question: how do you teach?

The paper is supported by graphs and maps that integrate the presentation of the contents, aiming to invite him to collaborate in multiplying the information produced up to now.

In fact, the whole set of information is set as an information system that can be queried. The authors are going to implement a remotely upgradeable platform.

The paper does not reach conclusions except partial ones. It is rather meant to stimulate the interest and participation of teachers, at all levels, of researchers, and – why not? – also of scholars, of enthusiasts, and of students who care about the future of the discipline that assumes territory as its institutional dimension and city as its symbolic shape.

The information system is centered around a database populated with materials found on the websites of the various Italian Universities and related teaching programs. Consequently, the paper also invites the colleagues to participate in updating and enlarging the database and to propose new ideas regarding the knowledge of the contents proposed here. Feedbacks could focus on the strategies strengthen quantitatively and qualitatively the studies – considered especially the continuous update of the training goals – as well as the coordination of the teaching content and the ways of integrating with other disciplines to develop useful and significant subjects on the issues of value and assessments.

1 The data were collected by Claudia Parisi and Mariolina Grasso, PhD students in “Civil Infrastructures for the Territory” at the Kore University of Enna, coordinated by Giovanna Acampa.
2 The authors thank the colleagues and friends Ivan Blecic, Marta Berni, Marta Bottero, Sebastiano Carbonara, Chiara D’Alpaos, Lucia Della Spina, Laura Gabrielli, Maria Rosaria Guarini, Benedetto Manganelli, Antonio Nesticò, Alessandra Oppio, Paolo Rosasco, Carmelo Torre, for their effort and help to integrate information not yet uploaded in the websites of the Universities.

1. INTRODUCTION

The scientific teaching content of Real Estate Appraisal (ICAR/22) “relates to theoretical assumptions and methodologies (...) aiming at issuing judgments on value

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and economic convenience in the civil, territorial and industrial sectors."³

In the last few years, in the civil sector, legislation on the contents and on the methods to be adopted for drafting and presenting projects evolved, pushed by the continuous technological progress, and imposes a new way of designing and managing the construction process, through the application of project-management models that allow to optimize the productivity of the building site, reducing costs and reducing production times. At the same time, as regards to the territory, the concept of sustainability is no longer solely linked to the respect for environmental factors, but also includes social aspects, as showed by the growing application of participatory models within planning processes.

These elements are decisive for the future of Real Estate Appraisal.

In fact, in order for its role not to be debased or absorbed in other disciplinary sectors, it is necessary to outline a new profile defining which of the future thematic areas should impact on teaching. This paper intends to provide a framework on the structure, trends and critical issues in appraisal.

The teachers of appraisal are called to introduce their students to rigorous methods of evaluation so as to train future designers to supervise the design process at any scale, educating them to be sensible and careful to space and guiding them to achieve sustainable results.

Following this path, we monitored in detail what is happening in our Universities, and we pointed out at the framework in which the Teaching in the Schools of Engineering and Architecture is carried out. The results of this research were discussed in the conference held last 10 November at the Faculty of Engineering and Architecture of the "Kore" University of Enna.

We followed a process of progressive refinement and deepening of our research in order to provide both a general view of the current situation and a key to understand the causes that originated it. For this reason it was necessary to break down and recompose the data available, and to analyze in depth the contents of the Real Estate Appraisal course programs and their training value. This has revealed a general picture of the role that is recognized to appraisal and the training guidelines followed by the teachers.

The steps of this critical analysis path are as follows:

- Teaching Real Estate Appraisal by teachers of the disciplinary sector ICAR/22 and other disciplinary sectors.
- Mapping the courses in the geography of Italian Universities.
- Overall contribution of the training in relation to the number of training credits to which it is entitled.
- Name and main teaching themes of the courses.
- Teaching outline of the course based on the contents and objectives of the course programs.

2. HOW, WHERE, AND WHO?

2.1 Discipline and teaching staff

Our opening point in the investigation was the information published on the Universities’ websites, crosschecking it with what was published on the Italian Ministry of Education, Universities and Research website. Thus we have mapped, on the national territory, the distribution of teachers belonging to the disciplinary sector ICAR/22.

According to our overview, which is very heterogeneous, the regions in northern Italy have a much higher number of teachers than the other regions. This outcome was predictable, especially for Lombardy and Piedmont, given that the students registered at the Milan and Turin Polytechnic schools are by far more numerous than those enrolled in other universities (Table 1). However, the interesting point emerges from the subdivision of the numerical data to verify the distribution of the teachers according to their roles.

In Piedmont the distribution is optimal, as all the roles are covered, by the research assignees to full professors, and the number of teachers is sufficient for all the teachings. This situation is the necessary prerequisite to guarantee a continuity in teaching and the possibility of building and maintaining a solid identity of the discipline in relation to others and to the students’ learning path (Figure 1).

In Lombardy, on the other hand, with the highest number of registered students, universities often rely on external personnel with special contracts, and very often subjects pertaining to Appraisal is taught by experts of other disciplinary sectors (Figure 2).

The survey then shifted from the teachers to the subjects.

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³ The academic discipline content of Real Estate Appraisal relates to “theoretical assumptions and methodologies for estimating costs, prices, rates of return on real estate, investments, plants, companies, as well as for determination of indemnities, fees, tariffs, aiming at issuing judgments on value and economic convenience in the civil, territorial and industrial sectors. The discipline extends, at high level, to environmental economics and, referring more specifically to the methodological issues, to the feasibility of projects and plans and to the evaluation of their economic and extra-economic effects through monetary or qualitative-qualitative approaches.” - MIUR http://sito.cineca.it/php5/settori/elenco.php?gruppo=ICAR#!/ICAR22 (last viewed 04-02-2018).
taught and pointed out at the holders of courses of Real Estate Appraisal or similar disciplines whose programs include topics related to Appraisal. It emerged that, if the subject is not taught by teachers belonging to the ICAR/22 sector, the scientific-disciplinary sectors to which it is assigned are substantially three:

### Table 1 - Registration to Appraisal studies

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*Politecnico Torino: 12,000 partecipants to admission tests (2017)  
**Politecnico Milano: 19,800 partecipants to admission tests (2017)

### Figure 1 - Distribution of Real Estate Appraisal Teachers “Icar/22” and other academic disciplines*

*Other disciplines: ING-IND/35; AGR/01; SECS-P/06.

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2.2 The discipline in the degree courses

We have then carried out an analytical investigation on each Degree Course in which Real Estate Appraisal is taught or could be taught, to point out at the reasons underlying the gradual weakening of the discipline. For the sake of simplicity, we have grouped into four macro-areas the courses of studies in which Appraisal, in whatever way it may be called, might be taught: Architecture, Engineering, Planning and Design.

We find the most stable situation (Figure 3) in the degree programs belonging to the Architecture area (LM35, LM24, LM23, L23, L7, LM4 c.u.). Appraisal is taught mostly by teachers belonging to the disciplinary sector ICAR/22 and only in a few cases teaching is entrusted to other sectors. This is probably due to the central role that was attributed to Real Estate Appraisal in the faculties of Architecture under the old regulation.

In the Engineering degree programs (LM35, LM24, LM23, L23, L7, LM4 c.u) the situation appears very different (Figure 4). In this macro-sector the blank spaces are many, and they are often filled by teachers from other disciplinary sectors. More often it is the economic-managerial engineers (ING-IND/35) that take charge of the matter, but also agronomists of Agricultural Economics and Rural Appraisal (AGR/01) and economists (SECS-P/06).

As for the Planning course of studies, (L21; LM48), we point out that the teaching of our discipline is entrusted both to teachers of ICAR/22 and to teachers of agriculture and economy. This is due to the fact that their studies focus on land used for agricultural purposes and that planning is based there also on political evaluations considered as economic aspects applied to the territory (Figure 5). Moreover, given that, by express regulatory provision, Appraisal is inherent in the process of preparing the plan, it often happens that urban planning teachers themselves (ICAR/21) consider it an integral part of their programs.

Regarding the Degree Courses grouped under Design...
In Appraisals in Italy, the demand of students for these courses is growing. Currently in Appraisal courses, professors belonging to the ICAR/22 sector and teachers belonging to the ING-IND/35 sector are engaged almost in equal proportion. However, the most disruptive element that appears is the predominant “presence of absence” of the teaching within the curriculum (Figure 6).
It therefore emerges that in some Degree Courses, Real Estate Appraisal is not foreseen as part of the study plan. These “blank spaces”, combined with the fact that the number of full professors is small and decreasing (many of these are close to retirement), is a first sign of a gradual marginalization of the teaching of our subject, increasingly entrusted to professors coming from other academic discipline or even removed from the students’ training path.
Where there are “blank spaces”, it is doubtful whether appraisal and evaluation was not absorbed into other teachings and considered only a mere quantification of the costs for the realization of an intervention, debasing its independence and consistency. It would represent a gradual assimilation of our figure with the Anglo-Saxon “quantity surveyor”, thus “betraying” the Italian tradition that recognized Appraisal as an independent science of evaluation.

2.3 Rule and credit system

A further element taken into consideration to verify the weight and importance now attached to our discipline, has been the number of Training Credits (CFU) assigned to it (Figure 7). In average 6 CFU are assigned, but in Architecture the situation is the most complex, also due to the fact the assessment is very often carried out as a section of multidisciplinary laboratories; this justifies the average number of 4 credits assigned, and teachers of ICAR/22 may be teaching there just our discipline or also other didactic modules. In Engineering, they tend to attribute greater weight to appraisal, as showed by a fair number of courses having 9 and 12 CFU. This hints to the wide margins existing to develop our sector, given that currently there is a significant demand for teaching our discipline in the different Study Courses. In order to draw some conclusions from the data collected, it is not enough to get a picture of the current situation by itself; it is more effective to compare it with previous data to point at possible negative trends. Unfortunately, the only data available for comparison can be sorted from a research carried out by Prof. Sebastiano Carbonara and presented in 2011 at the Seminar “Estimates and Economic Evaluation of Projects in the Changing University”, held at the SITI in Turin. Given that in 2011 the analysis was carried out only on few Courses, the comparison is possible only for the sectors for which the previous data is available (Tables 2 and 3). However looking at the sum of annual CFUs assigned to the teaching of appraisal at national level, we can point out that the total number of credits attributed to the discipline decreased overall, with a total reduction of 182 credits. If only ICAR/22 teachers are considered, this figure is even more negative as, compared to 2011, 42 more credits are now attributed to teachers of other disciplinary sectors. In this sense, particularly strong indications come from the Study courses of Construction Engineering and the Design studied in 3 years, where the ING-IND/35 sector took over,
3 WHAT?

3.1 Contents and goals

For describing what is studied in the degree programs, it is necessary to define a key to interpretation of the figurative and physical geography of the discipline topics. Some preliminary considerations can be expressed on the great variety of the titles of the courses: 78 different titles were found such as appraisal, evaluation, economy, valorisation, feasibility, management, accounting, etc. The field of application of the discipline is also various and includes projects, plans, programs, construction sites, tenders, urban transformations, investments, products, environment, innovation, decision-making processes, companies, etc. (Figures 8 and 9).

The variety of titles (and of the corresponding topics) shows that the appraisal discipline has a good ex-aptation capacity – as it has developed the “traditional” appraisal procedures and techniques to apply them to new evaluation issues – as well as an ad-aptation capacity, which has led to a change in the discipline boundaries to satisfy the specific training objectives of each degree program. Furthermore, in each course, the topics are calibrated according to the CFUs (credits) and to the degree programme table. The selection of topics depends whether each appraisal course belong to a horizontal and synchronic training pathway – when the course synergistically interacts with different disciplines in the integrated courses and laboratories - or to a vertical and diachronic one, which is oriented to the stratification of increasingly specialized economic and appraisal skills.
It would be advisable, however, to ask whether a great variability of the signifiers could imply the risk of a loss of recognisability of the discipline at national level, especially in comparison with other branches of knowledge.

We have analysed the multiplicity and complexity of the contents of the courses from the perspective of the following five main thematic areas:

- **Economics Principles**;
- **Appraisal Procedures**;
- **Economic and Financial Evaluations**;
- **Multicriteria Analysis and Environmental Assessments**;
- **Profession Practice**.

**Economics Principles** provides a foundation in economics, especially related to consumer and produce theory. **Appraisal Procedures** provides the procedures to express a judgment of value by applying direct or indirect comparison (ascribed to Serpieri's paradigm). **Economic and Financial Evaluations** provide the basis for the evaluation of public and private investments in monetary terms (e.g. Feasibility Study, Cost/Revenue Analysis, Cost/Benefit Analysis, etc.). **Multicriteria Analysis and Environmental Assessments** consist of not monetary evaluations that support decision-making process and of those assessments focused specifically on the environment, such as Environmental Impact Assessment and Strategic Environmental Assessment. The **Profession Practice** is related to the practice of architects and engineers (e.g. public tender, project management, etc.).

The database is an open system that can be expanded by adding some new elements and can be improved by integrating the missing data (or correcting the existing data). Different information types can be obtained from the database, by interrogating it with different filters each time. In order to know whether the five thematic areas previously defined are included in the graduation programs, which are sorted by degree type, two different elaborations are carried out by aggregating the data:
• at a national level, in order to obtain the *shape* of the contents;
• at a regional level, in order to obtain the *geography* of the contents.

An additional analysis concerns the courses in English. The course guides, which are available on the websites of the Italian Universities, are the basis of the analysis so that there might be a few inaccuracies and gaps in the study. But, regardless, the aggregated data provide an overview of the contents of the discipline at a national level. 

### 3.2 The shape of the contents

The *shape* of the contents at a national level is analysed and graphically represented by degree type: Bachelor or Degree course (three-years programme), Master's degree (two-years programme), and Five-years degree. In the Degree courses, the shape is not balanced (Figure 10, left) and shows that the *Economics Principles* and the *Economic and Financial Evaluations* are prevalent on other topics and constitute the core knowledge of most of the courses (76-77%). Nevertheless, the *Appraisal Procedures* are taught only in 43% of the courses, and it depends mainly on their absence in all of the degrees in Design and in Civil, Construction or Environmental Engineering, where there is a greater rooting of management economics topics. The *Multicriteria Analysis and Environmental Assessments* are included in 31% of the courses, and their presence (or absence) is transversal to the different degree types. The *Profession Practice* is taught only in a quarter of the courses.

The shape of the contents in the course guides of Master's degrees corresponds to a smaller area than the former one (Figure 10, centre) because the low percentage of the *Economics Principles* and the *Appraisal Procedures* is caused by their learning in Degree courses. Also in this case, the *Economic and Financial Evaluations* have a central role and characterize the course so much that their presence reaches 86%. *Multicriteria Analysis and Environmental Assessments*, on the other hand, are less relevant, even if the percentage (42%) is greater than the Degree course ones. The presence of *Profession Practice* is extremely limited and covers only 15% of the courses.

The shape of the contents is more balanced in the Five-years degrees, which coincide with those in Architecture and in Engineering-Architecture degree (Figure 10, right). This probably depends on the fact that both the architect and the engineer need a “generalist” scientific knowledge “from the spoon to the town” (or to the environment). Furthermore, in such degree program, there is usually only one course that has to cover all of the thematic areas of the discipline. The *Economics Principles*, the *Economic and Financial Evaluations*, and the *Appraisal Procedures*, in fact, are all topics that are present in the course guides with high percentages (75-81%). The *Profession Practice* and/or the *Multicriteria Analysis and Environmental Assessment* are taught in almost half of the courses. This can be indicative of a twofold tendency: on the one hand the persistence (resistance) of scientific contents that are closely linked to the “traditional” architect and engineer; on the other hand, the inclusion (resilience) of new issues and innovative evaluation procedures resulting from the widening of the discipline boundaries.

### 3.3 The geography of the contents

The geography of the thematic areas contains the analysis of the qualitative and quantitative dimensions, expressed by degree type (colour of the circles) the former, by number of courses (size of the circles) the latter. The graph on the courses in English is instead referred to the number of CFUs.

For each thematic area, it is possible to make a comparison between the Italian regions even if, obviously, it must be taken into account how many Degree courses belong to the various universities, because they are not uniformly distributed. The Lombardy region is a particular

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7 178 out of 226 course guides were examined.
case, for example, as the high number of degrees in Design generates, in correspondence, a great concentration of economic and appraisal courses. These aspects are readable through the graphs in which the percentages of each theme on a regional basis are represented.

In analogy with what happens on a national scale, from the point of view of the regional distribution and the percentage of courses, the Economics Principles and the Economic and Financial Evaluations are taught in high percentages in all degree types. The need for providing the knowledge to express judgments of economic feasibility even in very different fields (from the industrial product to the planning) is evidently strongly felt in all the regions (Figures 11 and 12). The thematic Economics Principles presents a geographical distribution similar to the previous one even if the percentages are lower. By contrast, the geographical distribution of the Profession Practice is extremely heterogeneous according to the regional percentages, while it is more uniform for the degree type (Figure 13).

The Multicriteria Analysis and Environmental Assessments are present in each degree type and in each region with similar percentages (Figure 14 left). The highest concentration in Lombardy (Figure 14 right) depends more on the high number of degree courses than on the percentage, that is lower than the ones in other regions.

Despite the small presence in the courses, the Profession Practice maintains a quite diffusion in almost all the regions, especially in those where there are Five-years degrees. His absence is evident in all the Master’s degrees in Piedmont and Lombardy (Figure 15 left).

The courses in English are exclusively taught in Piedmont and Lombardy, with only one other course in Campania (Figure 16). The geographical differences inevitably derive from the local university policy geared to attract foreign students or those Italian students who are intended to work abroad (or in partnership with foreign countries). These policies have been the core of heated debates both at the local level (for example, Milan Polytechnic) and at national level (e.g. Judgement Italian Council of State of 30 January 2018).

4. HOW? APPRAISALS AND EDUCATION

4.1 General issues

The issues addressed in the last part of this survey could seem “weaker” compared to the observation carried out so far.

The following remarks focus on the conception of appraisal as it can be recognized in the perspective of professors at the scientific level, and of Departments at the level of the overall educational policy.
Figure 12 - Geography of the theme Economic and Financial Evaluations. Number of courses for regions and for degree type (left) and percentage of frequency for region (right).

Figure 13 - Geography of the theme Appraisal Procedures. Number of courses for regions and for degree type (left) and percentage of frequency for region (right).
**Figure 14** - Geography of the theme Multicriteria Analysis and Environmental Assessments. Number of courses for regions and for degree type (left) and percentage of frequency for region (right).

**Figure 15** - Geography of the theme Profession practice. Number of courses for regions and for degree type (left) and percentage of frequency for region (right).
Therefore, the last point is the role played by the appraisal awareness and skill over the education of architects and engineers, as “emerging subjects” specifically responsible for the results and consequences of the living space transformation.

This is the premise of a more general issue, the importance of assessments in the common life whose state and transformations Appraisals reflects over the whole range of its theoretical and methodological arrangement.

Now, despite the evidences about the fair connection between Appraisals and the land-urban policy, some asymmetries need to be remarked, in particular between:

1. education demand and supply;
2. research and education;
3. demand of valuation and need of land-urban enhancement

1. Education demand and supply

A relevant point of the first asymmetry is the awareness of the relationship between technical components, the related performances and the monetary measurements that can be attributed to them over the project management process.

The empowerment of the spatial and mathematical modelling tools requests an increasing commitment in conceptualization aimed at coping with the prevailing of the tools (appraisal technologies) over the ends (the improvement of the “assessment feeling” of professionals).

In Appraisals, the technical skill is a necessary, but non-sufficient, condition for the aware and responsible value judgement practice, because of the intrinsic insufficiency of observation and measurement compared to interpretation and valuation.

2. Research and education

The asymmetry between the theoretical-heuristic potential of research, and the possibility of comprising the related results in the educational paths, concerns specifically two circumstances.

The first is the huge increase of information – the big data – i.e. the extension and availability of data banks, and the empowerment of the tools for data analysis and findings interpretation. Such a revolution has been involving also the public administration committed in the standardisation of the data storage and transmission protocols.

Such a new approach to information has been definitely influencing, in Appraisals, the way to represent the space of values that rules the human relationships, arising new possibilities to integrate the economic calculation in the creative process.

Compared to such a wide range of possibilities, the limited space available for Appraisals in the high educational programs and laboratory experimentation allows Appraisals to address just the doctrinaire cornerstones and the few related applications.

The second circumstance is the internationalisation of research, which extended the opportunities to look at other scientific contexts in order to cope with the new issues of appraisal and assessment.

In such a challenge, Appraisals – as to its intrinsic commitment in the fairness of the territorial wealth allocation pattern – takes over the task of giving unity and identity to the multiplicity of the appraisal questions both traditional and contemporary.

Now, despite the remarkable efforts of our intellectual and cultural resources, a scientific sector specifically devoted to valuation hasn’t yet arisen on the research international stage.

As a consequence our scientific products are recognised according to the related scope of application – concerning environment, property management, operational research and so on – making hard to place Appraisal and assessment within the ERC and JEL (sub-)sectors, so that our science ends up lurching from finance to social science, paradoxically.

The scarcity of space for theoretical investigation in the high rated international journals reduces the research in assessment to application and modelling, by-passing the theoretical premises and the adequacy of the results to the overarching issue of distributive justice.
3. Demand of valuation and need for land-urban enhancement

This third asymmetry involves the assessment items devoted to the fair relationship between the unit “territory-environment” and the local communities, according to the different declination of equity in the land-urban policies.

The science of value judgement stands between the weak and spread bottom-up forces coming from human environment, and the top-down ones coming from the political administrative system, committed in a hard mediation of welfare and economic efficiency.

In such a role, the practice of value judgement differs from business, financial economics and operational research practices due to the constant research of the relation to the truth of value and valuations in Appraisals.

Such a relation to truth involves:
- the recognition and clearness of the truth conditions of the valuation statement;
- the responsibility for the normative function of appraisal and assessment;
- the relation to actual or potential market;
- the trade-off between inter/intra-generational solidarity.

In response to this last asymmetry the assessment educational contents in Italy range privileging sometimes tool, sometimes ends.

4.2 Appraisals: across disciplines and categories. An ancillary discipline? Personality education and professional training

In the debate about the role of Appraisals in the common life, some key issues arise.

Does Appraisals typically cross disciplines or categories?

What place does Appraisal occupy in the hierarchy of disciplines which it deals with?

Is Appraisals mostly devoted to personality education or professional training?

1. Appraisals: across disciplines and categories

Appraisal typically helps in complex contexts involving two opposite heuristic functions, observation and interpretation.

The first needs an adequate stock of technical knowledge in each of the specific application fields. For this reason we consider Appraisal typically crosses a multiplicity of disciplines.

The second involves the awareness that an economic good and a monetary amount belong to different and incomparable ontological categories.

Such a consciousness doesn’t involve expertise in a specific type of goods, but rather the awareness of the relation between economic, monetary and not monetary, categories that are relevant for the value judgement.

The relationship between the two variables, value and price, the former concrete, the latter abstract, has ever arisen some fundamental and constitutive uncertainties, making them sometime – somehow – independent.

The relation to market has been assumed as the sole guarantee of truth and legitimacy of the monetary measure of value, also in case of no market goods.

But such a habit, on the one hand reduced the doubt about the coherence between economic fairness and speculative market, on the other hand assumed price as implicit, encouraging the techniques of observation rather than the reasons of interpretation in the ground of decisions. Decision is the subject which Appraisals more or less directly deals with. Every transaction, real estate taxation measure, legal action, design gesture, comes from a decision.

Now, whereas observation is a tool for a further and overarching interpretation, the latter is instead inherent to the decision process.

Then, whereas observations establish “implication links” crossing disciplines, interpretation establishes linkages between valuation statements and the real world, crossing heterogeneous categories, indeed.

Then the appraiser expertise is not in sectorial skill, but in the ability to hone the relationship between the layer of the abstract values (price is one of them) and the real world whose transformations we try to represent by means of value judgements.

In such an activity the cross-disciplinar bent empowers technical expertise, whereas the cross-categorial awareness supposes we assume an epistemological perspective highlighting the criticality of the relationship between statement and reality. This relationship is a condition for empowering the certainty of the value judgement whose coherence is on its truth conditions: valuations are representations of the part of reality that counts.

Therefore, the above mentioned oppositions, as well as the one between observation and interpretation, definitely fail if we assume the reality of value as the only possible and significant one and valuation the way we represent it, and as a consequence one of the possible ways of acting on it.

2. An “ancillary discipline”? 

The distinction between cross-disciplinar and cross-categorial spirit of Appraisals is connected to the role it plays over the decisional processes.

As cross-disciplinar, Appraisals supports project, as cross-categorial, Appraisals needs a project-oriented vision.

One of the most significant points of convergence between the spheres of valuation and project is
maximizing an objective function that needs to be defined in the value area and pursued in the perspective of project.

As a consequence, the design process runs starting from an original shape able to generate a consistent set of alternative arrangements.

In the current practice, the autonomy of the design culture comes down to the formal consistency, whereas the autonomy of the value and valuation culture comes down to the consistency between the different ways of being worth we can recognize in the same good.

The convergence of these two autonomies, making heteronomous the conception process, extends the concept of shape including within it the reasons by which shape can be shared; basically, such a convergence turns a “being” into a “being-in-the-world”.

Appraisals research ranges within this two opposite edges looking for a precise role in the living space organization processes.

In substance, we propose one premise and one conclusion.

The premise:

• in a servant condition, Appraisals takes from projects science the bundle of preferences that are relevant for assessment, and combines them by implementing the most appropriate technique;
• as an autonomous and overarching science, Appraisals places value on the top of the “ends-means chain”, assuming project as the heuristic stage for creating value, not valuation as a tool for justifying project.

The conclusion:

• the issue of the relation between project’s pretentions and value expectations should be addressed establishing where and when assessment can define and propose the conditions by which project is worth, i.e. it increases the current value of a place, knowing full well that ethic (Appraisals) and aesthetic (Architecture) values not necessarily converge;
• science of value and valuation, in fact “learns” from science of project turning its specific expectancies into a general and overarching “value substance” ethically founded.

3. Personal education and professional training

“... You must teach them a craft!” is the conclusion with which also influential exponents of our discipline rout out any incursions – in the programs of Appraisals classes – of educational perspectives aimed at awareness, as well as competence, and aimed at preventing future technicians “from riding the evaluations bypassing the values”.

Now, the “personal/professional education” dilemma concerns Appraisals differently from the other applied disciplines since the attention to the formation of the person is not, in our field, optional or of completion, nor a pedagogical accessory of the most sensitive teachers, or still a rhetorical device used by the most experienced ones.

Judgment is a linguistic category, value is an ethical category. The contents of Appraisals spread out along the normative branch of economics; therefore “the content of the value judgment” is a statement about the status of the values that shape the world we would like.

The resulting responsibility mostly involve architect and engineer, than appraiser, not as professionals but as persons acting to the best knowledge and belief for the transformation of the space we share.

Person is by definition an emerging subject, “novelty bearer” able to take a position, make a commitment, take responsibility.

4.3 Observations and interpretations

This second premise introduces some considerations that have been deduced by further queries form the database, and in particular from the Appraisals syllabuses available on the websites of the different Universities Degree Courses in Architecture and Engineering.

By comparing the credits devoted to the different areas of interest and contents we tried and outline the profile of the educational supply, according to the way the professors combine the institutional task of the classes as titled, and its personal educational perspectives.

Basically, we tried to distinguish how and in which extent the contents focus on:

• personality education: we valued the interest about the conceptual fundamentals of judge and value and the subsequent issues concerning distributive justice, such as solidarity, real estate ethics, equalization, internalization of externalities and so on;
• professional know-how: we valued the operational estimate contents, such as the role of appraiser in legal disputes, the international valuation standards;
• managerial know-how: we valued the contents devoted to project management and business management;
• horizontal connections: we valued the integration of micro and macroeconomics contents, the land/urban-oriented scopes, a general holistic perspective including complex and qualitative assessments, in the multidisciplinary workshops as well;
• vertical deepening: we valued the deepening of the techniques and procedures, usually prevailing in the real estate appraisals;
• goods (objects): we valued the prevalence of micro-estimates in real estate Appraisals and the focus on products in the Design Degree Courses;
• processes (projects): we valued the prevalence of items involving investment and projects assessments at the different scales;
• innovation: we valued the new appraisal techniques as
well as contents involving contemporary and innovative economics, such as information economics, land-environment management and marketing;

- sustainability; we valued the background and the contents oriented to environmental and land protection, impact evaluation approaches and so on.

Such an investigation provided us additional information we scored to outline and compare the different profiles of Appraisals in each single class as first and later, by aggregating the early results, over the Italian Universities, in quantitative and qualitative terms (Fig. 17) and in only qualitative terms (Fig. 18), and, at last, for each educational grouping – Architecture, Engineering, Land Planning Design – in quantitative and qualitative terms (Fig. 19) and only in qualitative terms (Fig. 20), as well.

The first (quali-quantitative) comparison highlights the prevalence of Appraisals in Architecture and Engineering and its remarkable presence in Design than Land Planning, mostly due to the widespread of Design at the Milan Polytechnic.

As for educational profile, according to the second (just qualitative) comparison, we noticed:

- the generalized indifference about personality education due to the prevailing focus on expertise, mostly in Architecture and Engineering;
- the presence of management and business classes in Engineering and Design, whereas this profile is missing in Architecture and Land Planning, where such an approach could be helpful for project management and project financing;
- the trade-off between horizontal connections and vertical deepening is coherent with the type of educational profile of the four groupings, but we'd expect a more holistic educational profile in Architecture as well;
- a similar trade-off between the focuses on goods (objects) and on processes (projects) between Design and Land Planning as well; in reality, a new awareness about the contribution that Appraisals can provide to the inter-scale integration arises in the perspective of land identity; in this field, marketing and communication are complementary to the issue of sustainable development of city and territory, involving aware consensus and symbolic values, rather then personal wellness and environmental safety, so playing an increasing role in the production, consumption and dwelling choices;
- the narrow space devoted to Appraisals in the Departments’ educational programs is reflected in the modest innovation and sustainability marks reported in the syllabuses. The need of addressing the Appraisals fundamentals, especially in the degree courses with only one class in this discipline, reduces the real and more topical aims of Appraisals as discipline and educational perspective; as a consequence, innovation and sustainability are present mainly in the fringe courses, such as Design, and where, instead, any technical expertise prevails; then we observe lack of focus on paradigm renewal and, above all, a definite rootedness of sustainability in the hedonic paradigm.

5. (NOT) CONCLUDING REMARKS

The University teaching of Appraisals is the early stage of the educational path aimed at arising and growing sensitiveness and awareness in value judgement of future Architects and Engineers.

Such an “estimative habitus” involves private and public goods (and projects) as for the relationship between a “being objects” and a “being (economic) goods”, that is being able to bear a price or to be – somehow and in some cases – substitute goods.

Furthermore, Appraisals learning is an experience driving pupils to pursue just one among the many possible visions of the reality of value, the normative one, which is relevant in social sense and, also in case of private estimates, inspired by ethics:

- ethics of cost, in finding the fair conditions for the most favourable trade-off between labour protection and optimal budget allocation;
- ethics of real estate, in defence of the social and cultural structure of the historical cities and cultural heritage;
- ethics of project, in finding the options able to balance conservation and innovation;
- ethics of landscape, as the overarching dimension framing land and environment, and as a consequence, the needs of settlements and the natural ecosystems resilience.

Such a normative vision can be found at different scales: in micro-estimates, as ordinarity principle, in the assessment of land-urban transformation processes, as fairness principle, in macro-estimates, as sustainability principle.

The geographical synopsis of the perspectives featuring the Appraisals teaching in Italy, has been displayed here trying to answer the questions: “who”, “where”, “how much”, “what”, “how” the contents and the objectives of Appraisals are taught within the Degree Courses, Universities and educational groups – according to the professional possibilities and the general educational programs.

Such multiple perspectives drove us to explore the amount of data collected with the aim of providing an information system including subjective interpretation as well.

Although the answers we provided are partial and not exhaustive, they aim at reopening the debate on Appraisals as the starting point for further reflections about many criticalities, and at outlining national and local strategies involving:
Figure 17 - Quali-quantitative report of the educational supply of Appraisals, by Universities

<table>
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<th>Personality</th>
<th>Proficiency of analysis</th>
<th>Managerial</th>
<th>Vertical deepening</th>
<th>Goods</th>
<th>Processes</th>
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Figure 18 - Qualitative report of the educational supply of Appraisals, by Universities
• the role of Appraisals in the professional and personal educational path of Architects, Engineers, Land planners and Designers responsible for environment, land, city and products transformation and conservations;

• the asymmetries in geographical allocation, organization, classes and credits;

• co-working/competition with other scientific sectors taking part in horizontal (holistic) or vertical (deepening) chains;

• recognisability as an autonomous discipline although the heterogeneity of the classes’ titles, and of the alchemies of the syllabuses contents;

• the ad-aptation and ex-aptation of Appraisals in the medium term (new frontiers of national and international research oriented towards new issues and techniques, as well as inclusion of sustainability), and short term (specific educational needs of a Degree Course) changes.

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* Giovanna Acampa, Professore Associato di Estimo presso la Facoltà di Ingegneria e Architettura dell’Università di Enna "Kore". e-mail: giovanna.acampa@unikore.it

** Salvatore Giuffrida, Ricercatore di Estimo presso il Dipartimento di Ingegneria Civile e Architettura - Struttura Didattica Speciale di Architettura - dell’Università di Catania. e-mail: sgiuffrida@dica.unict.it.

*** Grazia Napoli, Ricercatore di Estimo presso il Dipartimento di Architettura dell’Università di Palermo. e-mail: grazia.napoli@unipa.it

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