ARCHITECTURE
GUIDES TO MAINSTREAMING GENDER IN UNIVERSITY TEACHING

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PRESENTATION

What is the gender perspective and what relevance does it have in teaching undergraduate and graduate programmes? When applied to a university setting, the gender perspective or gender mainstreaming is a comprehensive policy to promote gender equality and diversity in research, teaching and university management—all areas affected by different gender biases. As a cross-cutting strategy, it involves all policies taking into account the characteristics, needs and interests of both women and men, and distinguishing biological aspects (sex) from culturally and historically constructed social representations (norms, roles, stereotypes) of femininity and masculinity (gender) based on sexual difference.

The Xarxa Vives d’Universitats (XVU) (Vives Network of Universities) encourages a cohesive university community and reinforces the projection and the impact of academe in society by promoting the definition of common strategies, especially in the gender perspective scope of action. It should be highlighted that policies that do not take into account these different roles and diverse needs and are, therefore, gender-blind do not help to transform the unequal structure of gender relations. This also applies to university teaching, where we offer students a compendium of knowledge to understand the world and intervene in their future professional practice, providing sources of reference and academic authority and seeking to promote critical thinking.

Knowledge transfer in the classroom that is sensitive to sex and gender offers different benefits, both for teachers and for students. On the one hand, deepening the understanding of the needs and behaviours of the population as a whole avoids partial or biased interpretations—both theoretically and empirically—that occur when using man as a universal reference or when not taking into account the diversity of the female or male subject. In this way, incorporating gender perspective improves teaching quality and the social relevance of (re)produced knowledge, technologies and innovations.

On the other, providing students with new tools to identify stereotypes, social norms and gender roles helps to develop their critical thinking and skill acquisition that will enable them to avoid gender blindness in their future professional practice. Furthermore, the gender perspective allows teachers to pay attention to gender dynamics that occur in the learning environment and to adopt measures that ensure that the diversity of their students is addressed.

The document you are holding is the result of the work plan of the XVU Gender Equality Working Group, focused on gender perspective in university teaching.
and research. The report entitled *La perspectiva de gènere en docència i recerca a les universitats de la Xarxa Vives: Situació actual i reptes de futur (2017)* [Gender Perspective in Teaching and Research at Universities in the Vives Network: Current Status and Future Challenges], coordinated by Tània Verge Mestre (Pompeu Fabra University) and Teresa Cabruja Ubach (University of Girona), found that the effective incorporation of gender perspective in university teaching remained a pending challenge, despite the regulatory framework in force at European, national and regional levels of the XVU.

One of the main challenges identified in this report in order to overcome the lack of gender sensitivity in curricula on undergraduate and postgraduate programmes was the need to train teachers in this skill. In this vein, it pointed out the need for educational resources that help teachers provide gender-sensitive learning.

Consequently, XVU Gender Equality Working Group agreed to develop these guidelines for university teaching with a gender perspective, under the coordination of Teresa Cabruja Ubach (University of Girona), M. José Rodríguez Jaume (University of Alicante) and Tània Verge Mestre (Pompeu Fabra University) in a first stage and M. José Rodríguez and Maria Olivella in a second one.

Altogether, 17 guides have been developed so far, eleven in the first phase and six in the second by expert lecturers and professors from different universities in applying a gender perspective in their disciplines:

**ARTS AND HUMANITIES:**

- **ANTHROPOLOGY:** Jordi Roca Girona (Universitat Rovira i Virgili)
- **HISTORY:** Mónica Moreno Seco (Universitat d’Alacant)
- **HISTORY OF ART:** M. Lluïsa Faxedas Brujats (Universitat de Girona)
- **PHILOLOGY AND LINGUISTICS:** Montserrat Ribas Bisbal (Universitat Pompeu Fabra)
- **PHILOSOPHY:** Sonia Reverter-Bañón (Universitat Jaume I)

**SOCIAL AND LEGAL SCIENCES:**

- **COMMUNICATION:** Maria Forga Martel (Universitat de Vic – Universitat Central de Catalunya)
- **LAW AND CRIMINOLOGY:** M. Concepción Torres Díaz (Universitat d’Alacant)
- **SOCIIOLOGY, ECONOMICS AND POLITICAL SCIENCE:** Rosa M. Ortiz Monera and Anna M. Morero Beltrán (Universitat de Barcelona)
EDUCATION AND PEDAGOGY: Montserrat Rifà Valls (Universitat Autònoma de Barcelona)

SCIENCES:
MATHEMATICS: Irene Epifanio López (Universitat Jaume I)
PHYSICS: Encina Calvo Iglesias (Universidade de Santiago de Compostela)

LIFE SCIENCES:
Nursery: M. Assumpta Rigol Cuadra and Dolors Rodríguez Martín (Universitat de Barcelona)
Medicine: M. Teresa Ruiz Cantero (Universitat d’Alacant)
Psychology: Esperanza Bosch Fiol and Salud Mantero Heredia (Universitat de les Illes Balears)

ENGINEERING:
Architecture: María Elia Gutiérrez-Mozo, Ana Gilsanz-Díaz, Carlos Barberá-Pastor and José Parra-Martínez (Universitat d’Alacant)
Computer Science: Paloma Moreda Pozo (Universitat d’Alacant).
Industrial Engineering: Elisabet Mas de les Valls Ortiz and Marta Peña Carrera (Universitat Politècnica de Catalunya)

Learning to incorporate the gender perspective in subjects merely implies a reflection on the different elements that constitute the teaching-learning process based on sex and gender as key analytical variables. In order to review your subjects from this perspective, the guidelines for university teaching with a gender perspective provide recommendations and instructions that cover all the following elements: objectives; learning outcomes; content; examples and language used; selected sources; teaching methods and evaluation, and management of the learning environment. After all, incorporating the principle of gender equality is not just a matter of social justice but also teaching quality.

M. José Rodríguez Jaume and Maria Olivella Quintana, coordinators
1. INTRODUCTION

This guide for the incorporation of a gender perspective into the teaching of architecture gives form to the teaching experience that professors María Elia Gutiérrez-Mozo, Ana Gilsanz-Díaz, Carlos Barberá-Pastor and José Parra-Martínez have been deploying for years in the lecture halls of the University of Alacant.

This guide values diversity in a broad sense: diversity in terms of emphasizing (and recovering) the work done (and ignored) by female architects; diversity in emphasizing the need to design and plan spaces that anticipate the experience and needs of people of different sexes and identities, from different generations, and with different abilities and resources; diversity in including the different agents that co-define the spaces in which we live; diversity in making visible the various strands of the profession (and other disciplines) that have historically been considered ‘minor’ (landscape architecture, urban planning, construction, interior design, window dressing, exhibition curation, industrial design, cultural management, etc.); and, finally, diversity in advocating for women in the field of architecture, not just as producers but also as promoters, builders and users. Therefore, this guide is an invitation to reflect on sexism in teaching, research and professional practice, areas which have traditionally been dominated by the hegemony of androcentric and heteronormative perspectives that condition and restrict the way we approach, learn and understand architecture, and even affect the way in which we occupy spaces, both built and imagined.

The guide foresees two starting positions for the incorporation of a gender perspective. The first is to carry out a revision of the contribution of female architects in order to enrich the history constructed around the discipline – and thus broaden our perspectives. The second involves using fieldwork as a method of knowing and practicing architecture from our own collective experience. From these foundations, the guide provides suggestions on how to include a cross-cutting gender perspective in university teaching of architecture, including objectives, contents, evaluation, organizational methods, classroom teaching methods, and resources. This guide also provides examples in areas of knowledge such as architectural graphic expression, architectural constructions, and architectural composition and urbanism. In addition, this text serves as a guide to the key references that will orientate and inform anyone interested in finding out more.
2. GENDER BLINDNESS AND ITS IMPLICATIONS

Gender blindness entails not recognising difference in order to avoid changing the power structures that perpetuate said difference. It maintains the assignment of roles and ignores different needs. Since the main task of architecture is to mediate between people and the world in order to make it habitable (which means making it welcoming, intelligible, and able to be enjoyed and shared), gender blindness affects architecture in a very specific, complex way. Architecture builds “tiny worlds” from the idea of the wider world and from a desire to transform it. Therefore, the conception of reality within which architecture operates is key to its intervention in the world.

An androcentric worldview has constructed worlds in the images and likenesses of the dominant peoples, cultures and classes, excluding that which does not speak to the heteronormative and ethnocentric. The clearest example of what we are referring to is probably the modern city: a mechanism that facilitates and encourages productive activity while ignoring reproductive work, care work, kindness, affection and the notion of a secure environment. Not only does the contemporary city suffer from gender blindness in terms of its planning and management, but it also suffers in terms of architecture, since the discipline is one of the most powerful tools employed by authority to project and amplify itself, frequently overlooking women, as well as other human collectives and groups, as inhabitants.

The consequences of this gender blindness can be summed up in the dehumanisation of built spaces, erected as pure icons or symbols and – since mankind’s authority over nature has made us its primary predator – in the systematic depletion of the planet’s resources.

There are multiple implications of this. Let’s take as an example the place where architects are trained: schools. When the first female architect, Matilde Ucelay Maortúa, graduated in Madrid in June 1936, her status as a liberal woman and her affiliation with the Republican movement led to her purging. She was banned from practicing the profession for five years and forbidden from holding positions of trust her whole life. Despite the fact that there has been significant political and social evolution in Spain since then, including important changes to the organisational structures of architecture schools and to the curricula – which are becoming more inclusive – there is still work to be done. The view of architecture, and of teaching and research, that is presented to students is still often a partial one.
It is a perspective that often lacks female teachers or role models, as these have been systematically ignored by the history and historiography of architecture.

This is especially noteworthy given the multiple, original contributions of women to disciplines as diverse as planning and strategic thinking (Marion Mahony, Jane Jacobs), public policy (Catherine Bauer) architecture (Aino Aalto, Charlotte Perriand, Eileen Gray, Lilly Reich, Denise Scott Brown), landscaping (Gertrude Jekyll, Geraldine Knight Scott), environmental activism (Catherine Bauer, Alice Griffith, Dorothy Erskine, Esther Gulick, Kay Kerr, Sylvia McLaughlin), criticism (Ada Louise Huxtable), curation (Elizabeth Mock) and cultural management at the highest level (Grace Morley). Despite this long list, as Zaida Muxí (2018) and Daniela Arias (2018, 2019) have stated, the majority of these women are barely mentioned in accounts of modern architecture (Frampton, Curtis, etc.), and when they do appear it is almost always in association with, and under the tutelage of, a male architect, usually their partner. In the face of this blindness that conceals, or forgets, episodes of great importance whenever they involve women, and which – with even greater virulence – systematically erases the names of non-Western protagonists, one must ask what logic and interests govern the mechanisms for fixing memory, and how these come to affect the teaching of architecture.

Likewise, the practice of this discipline has been in the hands of a few select families, audacious gatekeepers to the profession, meaning that discrimination has been, at least, twofold: by gender and by social class. In this sense, a critical analysis should be made of architecture schools themselves, questioning the absence of parity among teachers, despite the fact that classrooms have had gender parity for a decade. Combating gender blindness should invite reflection on issues such as the number of female teachers, the positions they hold in academic administrations, the way they are considered within the university communities, and the specific difficulties they face when they are young and old.

Statistical data is relevant to this issue. Despite the fact that there have been many studies on the number of women – students and teachers – in schools of architecture, this information is not known or contended with by most teachers. Today, parity in the classrooms does not correspond to parity in the professional and teaching spheres (Torres, 2019). Therefore, the proposal is to establish an awareness around this subject in order to caution students that university is its own world and not always a reflection of reality.

The lack of awareness and interest around the issue of incorporating a gender perspective in architecture and in the teaching of architecture has led not only
to situations of discrimination, inequality and sexism in teaching, research and professional practice, but also to an androcentric vision of our discipline. This, in turn, has caused discourse to be focused on the work carried out by heteronormative male figures, conditioning and limiting our ways of knowing, studying, understanding and feeling architecture.

This traditional figure of the male architect is reflected, for example, in the film The Fountainhead (King Vidor, 1949), based on the novel of the same name by Ayn Rand. The architect is a man of great charisma: solitary, individualistic, misunderstood by society, idealistic and tenacious in achieving his dream. He is a fighter to the point of exhaustion, dauntless and, in the end, victorious. This figure has formed an image of the professional architect that bears little semblance to reality; not only to the reality of men – who are as diverse and pluralistic as women – but to the reality of the vocation to serve which, in our opinion, animates architecture and inevitably involves a large number of people who are crucial to the success of the process, and whose intense interaction requires high doses of empathy, flexibility and open-mindedness: qualities that are provided, along with much else, by the gender perspective.

In this sense, introducing the gender perspective in architecture and urbanism must also mean an opportunity for the “effective equality” to which, in accordance with legislation (Organic Law 3/2007), every society must aspire. This includes equality between genders (between people of different sexes or identities), generations (between professionals of different ages), and people with differing abilities and resources (not merely economic). By extension, this equality should also exist between human and non-human agents, bringing balance to our species’ relationship with our environment and to our much-abused interdependence with the finite resources of our planet. The gender perspective therefore involves paying closer attention to diversity in order to make it a central concept that – in addition to removing biases and barriers – makes it possible to make good use of the entire human capital of society. It is also about making the effort to see things differently, to put ourselves in the shoes of other subjects and, in doing so, to enrich our perception and understanding of what surrounds us.
3. GENERAL PROPOSALS FOR INCORPORATING THE GENDER PERSPECTIVE INTO TEACHING

The incorporation of the gender perspective in architecture is very recent, especially if we look at the trajectory of schools. And, in terms of teaching, it is still a pending subject (Gutiérrez-Mozo, 2014). The first steps towards including a gender perspective were taken in the 1970s (Torre, 1977; Heresies 11, 1981, etc.), when a handful of women in countries such as the USA and the UK began advocating for the high-quality work in design, architecture and planning that was being done by women. Therefore, only over the past 50 years – and to a very limited extent – has there been recognition of women architects. This is paradoxical in a discipline that should be at the service of life and of the conservation of the planet: woman's first home, where she has a role to play, and where her authorship has been shared, ignored, or even directly silenced.

Lilly Reich, Charlotte Perriand, Delfina Gálvez Bunge, Aino Maria Marsio-Aalto and Elsa Kaisa Mäkiniemi, Denise Scott Brown, and Anne Tyng are the names of the women who have worked with some of the most important architects in recent times: Mies van der Rohe, Le Corbusier, Amancio Williams, Alvar Aalto, Robert Venturi and Louis Kahn. All those men are studied at architecture schools, while the women have rarely been named. Today, however, the work and careers of these women are the subject of research that seeks to fill these absences, remedy the culture of “forgetting”, and correct past errors in the assignment of responsibilities in the historiography of modern architecture (Arias, 2018). This development has a clear impact on teachers and, especially, on students, who are increasingly aware of these demands.

The gender perspective in the teaching of architecture proposes to provide visibility and value to diversity in architecture, including work done by both male and female architects, as well as integrating people with different identities, from different generations, and with varying levels of abilities and resources. Similarly, the gender perspective seeks to show the multiplicity of positions and attitudes in design, use, and the appropriation of space on a series of different scales – from the object or construction detail to the whole city, landscape or region. It is crucial to convey the fact that in architecture there are no minor issues: each question must be studied carefully in order to learn and understand the influences that the environment has on our lives and to develop fairer and more equitable projects.
Consequently, the general proposal for the incorporation of a gender perspective in the teaching of architecture consists of a two-part exercise in making visible. Firstly, making visible the women and others who have historically been pushed to the margins of architecture; and secondly, making visible the architecture that has been absent from the literature but that is near to us in space and time, and that is responsible for building more inclusive environments. The first part of this exercise will lead to the revealing of the role of women as producers (of spaces, knowledge, models and transformative actions), as promoters, and as users; it will also reclaim the literature review as a method of study. The second part of this exercise will enrich the heritage of references and call for the implementation of fieldwork.

The proposal, therefore, is to carry out a literature review of the works made by female architects, as a first cross-cutting approach to all areas of knowledge, understanding the works as productions of all kinds (planning, architecture, design, knowledge, management, etc.). It is not just a case of redressing an injustice, but of valuing the work, because the systematic lack of recognition is logically a source of great frustration for women as professionals: “80% of female architects are satisfied with their profession, despite the fact that their income is clearly lower than that of male architects; but in the 55 to 65 age group, dissatisfaction skyrockets to 93%” (Agudo and Sánchez de Madariaga, 2011). This situation results in an impoverishment of society, which is why it is necessary to fight it by constructing new stories that are fairer and more balanced.

In addition to the above, the second recommendation is to vindicate fieldwork as a fundamental method for learning about architecture from a sensory experience – individual and collective – of space. There is a great deal of valuable and honest architecture that remains unknown and unappreciated within the channels of diffusion. This is true, above all, of architecture in peripheral environments that has not featured in the great histories of the discipline, histories that have been created in accordance with the prestige of certain architects, without taking into account the real, effective contribution to the quality of life of the people who inhabit the spaces designed by said architects.

It is of vital importance to stop looking at the world through a screen and open ourselves up to the stimuli that architecture offers the senses. This is because the immediacy of images – often manipulated to make the places they depict unrecognisable – negates our senses. It is essential to vindicate an architecture of proximity for a life of community, a life that is shared.
And it is vital to experience environments and spaces in a way that goes beyond the primacy of vision to include touching, hearing and smelling – senses that require proximity. Planning from a place of sensitivity and attention to the surrounding environment is a value that accredits the good work of many professionals who are not promoted by the media and who, nonetheless, contribute to making life better for individuals and the community.

This method of teaching and learning architecture has two very beneficial implications. The first, obviously, is that it compels students to leave the classroom and go where architecture is to be experienced, known and enjoyed. It is essential to the education of architects that they cultivate the habit of traveling, albeit short distances. The second is that such an approach will ensure that students gain experience and knowledge of architecture in the company of others; this entails a recognition of others in the process of collective creation of architecture – a process in which, inevitably and fortunately, all involved are able to learn from each other.

The literature review and the fieldwork must go hand in hand from the start and should serve to recall Organic Law 3/2007 for the effective equality of women and men, which requires the collection and disaggregation of data by sex (Art. 20. Adequacy of statistics and studies). The systematic effort to observe the law in each of the works used by teachers and students (EDA, EMA, etc.) involves not only the production of information for “understanding the different situations, conditions, aspirations and needs of women and men in the various areas of intervention”, but also the acquisition of the habit of working with real vigour, which means leaving nothing and no one unexamined.

Nor can we forget the importance of inclusive language. On this subject, the observation made by Spairani and García (2019) is interesting because it raises this issue in an area – that of construction materials – that would not seem to leave much room for incorporating a gender perspective: “Therefore, there are certain aspects that must be taken into account, not only concerning the selected languages and sources, from the oral and written examples, annotations and presentations, but also concerning the social and cultural aspects that surround them in terms of the images presented and the practices utilised in the classroom. There must be an attempt to correct the androcentric focus of our expressions by naming our students correctly; fostering and making visible female models and reference figures; breaking with stereotypes; not using different qualities for students; not using the female gender as a reason to disqualify students; not making pejorative allusions to students; not engaging in inappropriate
behaviours and attitudes; not using the word ‘woman’ when we refer to the female population and the word ‘man’ as a universal, but using instead the 1st (or 3rd) person of the subject, or pronouns (we, us, ours). Also, we should use actual generics for collective nouns, abstracts, the two grammatical genders, etc.”. Spairani and García’s (2019) contribution includes each and every aspect of classroom communication that can be rethought, in a critical and constructive way, from the gender perspective. Language is not just an inclusive approach; it is also a series of contents that conceive of the gender perspective as an understanding of difference, of diverse ways of thinking and of the enrichment that said difference and diversity provide.

The proposal then, is to use inclusive language in teaching, and to pay particular attention to the written and visual documentation given to students, ensuring that it provides information, recommendations images and references that avoid stereotypes and promote diversity. In this sense, the pedagogical resources and recommended bibliography in this guide can serve as a very useful source for teachers who wish to include a gender perspective in their teaching of architecture.
4. PROPOSALS FOR INTRODUCING THE GENDER PERSPECTIVE INTO THE TEACHING OF ARCHITECTURE

According to Royal Decree 1393/2007, of 29 October, which establishes the organization of official university education (BOE no. 260, of 30 October 2007), modified by Royal Decree 861/2010, of 2 July (BOE no. 161, of 3 July 2010); and Order EDU/2075/2010, of 29 July, which establishes the requirements for the verification of the official university titles that permit practice as a professional architect (BOE no. 185, of 31 July 2010), the academic curriculum of the bachelor’s and master’s degrees should contain 300 and 60 European credits, respectively.

The degree in architecture must include at least the following modules and credits: the propaedeutic phase – Basic Sciences and Drawing – 60 credits (ECTS); the technical phase – Construction, Structures and Installations – 60 credits; the planning phase – Composition, Projects and Urbanism – 100 credits; and the End-of-Degree Dissertation – 6 credits.

As long as these conditions are met, each university can structure its architecture degree as it deems most convenient, timely and suitable to its objectives and resources. In general, Spanish schools of architecture, and degrees in architecture and foundations of architecture, have distributed credits in a similar way to the University of Alacant, which allocates 60 credits to what are considered basic subjects: Mathematics, Physics and Drawing; 228 credits to compulsory subjects: Construction, Structures, Installations, Urbanism, Composition and Projects; 6 credits to optional subjects; and 6 credits to the End-of-Degree Assignment (EDA).

Optional subjects are therefore reduced to a minimum – Construction, Structures, English, and Professional Internship – and do not take advantage of the opportunity provided by Article 25.2.a of Organic Law 3/2007, of 22 March, for the effective equality of women and men (“Public administrations will promote inclusion in the curricula, where appropriate, of education regarding equality between women and men”). Nor do they follow the recommendation of Article 3.5.a of Royal Decree 1393/2007, which states that “any professional activity must be carried out with respect for the fundamental equal rights of men and women, and must include in the curricula, where appropriate, teachings related to these rights”.

The technical and planning phases of study take up the majority of the credits. Planning modules take up 141 credits, while technical modules take up 87, adding up to 228 compulsory credits. Optional subjects (6 credits) and the end-of-degree dissertation (6 credits) bring us to a total of 240 credits ECTS.

Continuing with the example of the University of Alacant, the phase that Order EDU/2075/2010 labels ‘propaedeutic’ takes up 60 credits. These are allocated as follows: 36 credits for Graphic Expression and 24 for Basic Science (Mathematics and Physics); the 141 credits that make up the planning phase are divided into 69 credits for Projects, 36 for Composition, and 36 for Urbanism. The 87 credits that make up the technical phase are divided into 42 credits for Construction, 27 for Structures and 18 for Installations.

The proportion of credits between the planning phase and the technical phase is 1.62. In other words, the activity considered creative or projective – design – dominates the strictly technical or constructive activity – the trade. In this sense, the higher technical schools of architecture are more “higher” than they are “technical”. The distribution of credits in the planning phase of study is highly significant, because the Projects module takes up almost half of these (69 credits of 141), while the remaining half are primarily distributed between Architectural Composition (36) and Urbanism (36). Clearly, according to this distribution of credits, strategy (planning) outweighs principles (composition) and the field of action (urbanism): the method prevails over the idea (theory) and its implantation (practical); “how” rather than “why” or “where”.

With this frame of reference, and taking into account both the burden on credits within the curriculum and the specificity and affinity to architecture of each area of knowledge, one for each block of Order EDU/2075/2010 has been selected for this Guide.

Architectural Graphic Expression has been chosen from the propaedeutic phase because it takes up three times as many credits as each of the basic sciences and because drawing is – both in its most spontaneous form (annotation, sketching, drafting, etc.) and in its more elaborate form (with computer tools) – the language of architects. Drawing is an architect’s means of expressing (hence the name of the area) and communicating ideas. In fact, in some schools of architecture this subject is called Graphic Ideation. Drawing is present during the whole process: we draw to understand, we draw to think, we draw to plan and we draw to extend the record of construction, new or old.
From the technical phase, the subject of Architectural Construction has been chosen. Partly because it is the subject with most credits assigned, but primarily because it appeals to a primordial and elemental understanding of architecture as the art of building and as the craft of master builder. What has changed throughout history, since this forceful statement by Vitruvius (1st century BC), is the object on which the action of the verb falls: the verb which has evolved from Alberti’s “built thing” of the Renaissance, into the visionary images of the Enlightenment, the Romantic nineteenth-century prints, the future prophecies of the Avant-garde, and the Postmodern messages, to today’s augmented reality. In fact, the meaning and scope of the idea of “building” is currently at the heart of the architectural debate, and includes innovative and transversal meanings that incorporate concepts such as care, conservation, reuse, recycling and even disassembling: all concepts to which the gender perspective is especially relevant as it provides us with an inclusive perspective.

Two subjects have been selected from the planning phase: Architectural Composition and Urbanism. This is partly due to the fact that together they add up to almost the same number of credits as Projects. But they have also been chosen because they are especially pertinent to implementing the gender perspective. Due to its triple dimension – historical, analytical and critical – Architectural Composition facilitates a wide range of approaches, and provides great depth of perception to the issue. While it is in the subject of Urbanism that the highest number of contributions have been made regarding the inclusion of the gender perspective, so it seems reasonable to collect, classify and assess them. The architectural or urban planning project represents a moment in the process that may well find inspiration in these other areas for its own exercise of reflection, leading to the incorporation of the gender perspective into its various subjects.

4.1 Objectives

Consistent with the general proposal for incorporating a gender perspective into the teaching of the degree in Architecture and the Fundamentals of Architecture – to make visible – the general objectives of this introduction would be as follows:

a) FEMALE ARCHITECTS

1. Make creators visible.
To make the trajectory and work of women visible. To understand that there are many types of professional practice that can and must be vindicated and valued because it has been in these areas – those considered “insignificant” until now – where women have traditionally developed their careers: interior design, object design, textiles and so on.

2. Make ways of professional practice visible.

As well as enabling the incorporation of new references in the field of architectural works, the previous objective will also make possible new models of professional practice that – rather than being measured by scale – are measured by their contribution to improving people’s lives.

Nonetheless, it would be a positive development if architecture blogs such as “Del tirador a la ciudad” were to make an effort to review women’s contributions to the discipline: the landscape architects and urban planners, as well as those dedicated to building, interior design, window dressing, exhibition curation, industrial design, cultural management, and so on.

3. Make productions visible.

But it is not just a matter of scale, it is also a matter of diversity. In order to seek and find valuable contributions from women in professional practice, a comprehensive conception of the meaning and scope of being a female architect is essential. This will make it possible to think about the role of female architects in the civil service, in politics, in management, in administration and so on. Women have generally preferred such positions due to the job security and the quality of collective agreements they provide.

It is also of value to reveal the role of female architects as transmitters and producers of knowledge: as teachers and researchers. This aspect is fundamental to our students because it provides them with alternative references and role models to that of the “heroic” architect. It enables students to find examples of professional careers upon which to build their own.

b) FEMALE PROMOTERS, BUILDERS AND USERS

1. Make promoters visible.

As active subjects in the field of architecture, women are not only architects. They also exist as clients, patrons and sponsors. They
have played a key role in enabling specific projects, especially those considered risky due to their innovative nature, and those that are most supportive of, and committed to, social causes.

2 Make builders visible.

Although they may remain scarce on the building site, there are women leading construction companies who understand how to get commissions, how to bid in public administration, and how to reinvest profits for original and bold social and cultural purposes.

3. Make users visible.

Women are also users of architecture. Therefore, it is essential to incorporate their experiences, sensations and reflections regarding their specific ways of living into the teaching of architecture. As well as women, this applies to people – regardless of gender, age, race, creed, condition or situation – whose perspective has been overlooked, if not ignored or silenced. In this sense it is absolutely vital to incorporate the contributions of feminist, LGTBI+ and queer theories. Also of great interest are the feminist research methodologies and practices, IAPF, expounded by Marta Luxan and Jokin Azpiazu (Luxan and Azpiazu, 2016).

c) THE FEMININE AS AN ADDED VALUE OF ARCHITECTURE

1. The ultimate goal is to keep the gender perspective in mind during both the analysis and the architectural project itself. This means that the categories from which existing works are valued – or future ones are considered – should incorporate gender-sensitive aspects; and they should do so not as a substitute for conventional values, but as a compliment – or even a counterpoint – to them.

4.2 Contents

The following is a general reflection on the areas of knowledge outlined above. The aim here is to highlight the specific aspects of teaching through which it is possible to introduce the gender perspective in each area. Fundamentally, this should be done through the reinforcing of tools of study and the critical analysis of the aspect of reality that competes in the following disciplines:
4.2.1 Architectural Graphic Expression

Since the Renaissance, drawing has been the discipline that artists and architects have shared as a cultivation of sensitivity and training of the hand, a discipline that both have used to exercise their own visual languages. The main task of drawing is to know reality; there is no better method for being able to describe something in detail and with rigor than drawing it in the first place.

But the knowledge that the drawing provides about things essentially has to do with two aspects: the scale – the relationship between the size of the drawing and the size of its surroundings; and its proportions – the relationship of the drawing’s various measurements to each other. We should remember that the first instrument of dissection in the area of medical science was drawing. Drawing also serves to convey to other people ideas about what you want to do (the project), to express feelings and sentiments and, in this case, to connect sensibilities.

It is through drawing that the eye captures measurements and proportions which – guided by the brain and trained through practice – are shaped by the hand. Practicing this, by copying models principally, shapes and reinforces an ideal of beauty that ignores everything that does not conform to the standards of taste. An obviously heteropatriarchal set of standards that viewed, for example, the mother in the Ionic column and the maiden in the Corinthian column (Vitruvius).

Questioning the canons of masculine and feminine beauty and paving the way for other non-stereotyped forms of expression can be an integrative way of introducing the gender perspective into drawing. This is important partly because of the relationships between the measurements of the body; but also because the human being is, in turn, a measurement of the world. This leads us to another key issue: scale. The appeals made by the Stop Gordofobia (Stop Fatphobia) movement and its founder, Magdalena Piñeyro (2019), can be taken into account as a representative example of design’s traditional contempt for non-normative bodies.

The world has traditionally been measured from the male canon: white, young, in perfect physical condition and in full possession of his faculties. See Leonardo da Vinci’s Vitruvian Man or Le Corbusier’s Modulor. We need systems of measurements that can anticipate the diversity of bodies of real, flesh-and-blood people; individuals of all types and ages: women and men, not goddesses or gods. And not just people: the human being is just one living creature among the many that inhabit this world. It is essential that we recover our relationship of
interdependence with the natural world. Such a relationship is indispensable to the future of the planet and the species that live on it.

Ergonomics works towards this (the adaptation of machines, furniture and utensils to the person who uses them regularly, in order to achieve greater comfort and efficiency). But graphic design for other realities (in truth, the real reality) is an essential part of the training of future architects. In this sense, the highly specific and successful work of architects Marta Parra and Ángela Müller in “the architecture of Motherhood” should be taken into account.

4.2.2 Architectural Constructions

Technology is neither politically nor socially neutral, and it is therefore not gender neutral either. It is one of the most expressive manifestations of power and of the interests of power, often hidden under the mantle of prestige that it has been given due to it being a consequence of science. In architecture there is – as a legacy of a modernity that exacerbates technique and constructive reason – a specific strand related to this theme: that of high technology or high tech, a display of power in its most elementary expression. When, instead of being exposed, the “noise” created by all the technological fabric that a piece of architecture requires is hidden away – to the point of making it seem as if no human hand has touched it – reality becomes even more indebted to the economic power required to support such an image of frivolity. This is the case with some examples of architecture labelled minimalist.

Introducing the gender perspective into content relating to construction materials and systems and their implementation could involve, for example, reviewing the auxiliary apparatus – machinery and tools – to analyse how they exclude (women have great difficulty handling them), asking why they do so, and imagining how they could be used by more people. In addition, a very revealing exercise would be to devise and draw the construction details of high-tech buildings of the sort that refuse to reveal its apparatus, but to do so without covering up said apparatus, giving appropriate and fair dimension to its presence in accordance with the function it carries out. Another interesting exercise would be to imagine and draw minimalist architecture and reveal everything hidden by its apparent simplicity, assessing how much it costs in economic terms to hide all this apparatus.

When technology has supposedly been put at the service of women, it has been in the form of “domestic appliances” rather than “machines” (note the semantic difference). Far from freeing women from household labours, this has
perpetuated traditional gender roles, leaving them unquestioned, even bolstered by the “relief” that such appliances provide. In this sense, one way of introducing the gender perspective could be to study and analyse household appliances and ask the following questions: How many are there? Where are they? How are they used? Do they facilitate co-responsibility in the upkeep of the home and in childcare? In doing so it would be possible to expose the stereotypes that such appliances reproduce.

Similarly, there is another fashionable aspect in which it would be interesting to introduce a gender perspective. It is not just hard or high-tech technology that excludes women from its use. Soft technology and DIY also marginalise women due to the nature of the tools and the size of the parts involved. What was at the time a reaction to the capitalist economic system, was never against the heteropatriarchal system.

Finally, we must not forget the established roles in the control and management of architectural works, where the lack of an equal presence of women and men is glaring. In this sense, there is plenty of work to do. The university must act as a driver of change, by highlighting exemplary cases of equality in these areas of the profession – still so masculinized – and by providing concepts and tools for transforming this reality using alternative models.

4.2.3 Architectural Composition and Urbanism

The spirit of Architectural Composition involves thinking and making architecture think in order to understand it and to understand ourselves as architects. The knowledge it has traditionally encompassed is essentially made up of history, facts and ideas from antiquity to the present day. The main challenge we face in introducing the gender perspective is to explain and make visible the contribution that women have made to the discipline, a contribution that has historically and wilfully been ignored and suppressed. Similarly, attention must be paid to production that has been considered “minor” (object design, interior design etc.) and within which women have played a significant part. In other words, we must to construct and tell “women’s stories”, as well as the stories of other groups, collectives and communities that – due to identity, geography and/or culture (marginality, periphery) – have been ignored or silenced: what is not seen does not exist.

Architectural Composition deals primarily with the present, because it proposes approaches to architecture of all time periods (the architecture that history has
taught us) from the experience of our senses and our intellect; that is, as much from our senses and our body as from our capacity for discernment and the critical spirit of reason. This means that the most important factor is the contemporality of the values that this architecture prizes, the nature and meaning of it. In these cases, the inclusion of the gender perspective involves turning our own tools towards analysing these architectures in order to explore the experience of women; challenge current power relations and gender norms through feminist, LGBTI+ and queer contributions (see Section 6); and view the influence that cultural and social constructions have had on the planning, realization and perception of architecture and the city (AQU, 2019).

Finally, if we understand architectural criticism as the intellectual effort to reveal how much of a debt architecture owes to the past, how it responds to and interrogates the present, and, above all, how it anticipates the future, the gender perspective plays an essential role in the conception and assessment of complex, diverse, inclusive and egalitarian projects.

The discipline of Urbanism, with its powerful instruments for analysing the reality that it tries to order and plan has, as it has evolved, become better at incorporating the gender perspective in its approaches. This includes the efforts that have been made in Spain since the 90s (see, among others, examples collected in Gutiérrez Valdivia and Ciocoletto, 2013) as well as references and experiences from the United States since the 60s and 70s.

The critical points worth reflecting on are primarily those proposed by Azara and Gil in their Set para introducir la perspectiva de género en el proceso urbano (Set for introducing the gender perspective in the urban process) (2017). The first of these is the city model. Traditionally, urban structure and design have, as a consequence of capitalist growth models, prioritized production goals and economic activities over reproductive and care labour in society, most of which is done by women, who – as all studies show – have been neither valued nor favoured. As these authors complain, there are no multidisciplinary, cross-cutting analyses of different scales that, by contrasting economic, political, sociological, anthropological, and historical parameters, can provide information with the required level of complexity for engaging in in-depth reflection prior to decision-making in the urban sphere: “Therefore, they are the ones who suffer most from this problem of the city model, which is one of the main obstacles to women achieving their autonomy and enjoying their right to the city on equal terms” (2017: 7).
The second point is the perception of security. In this regard, studies indicate that, when it comes to security, statistics of the numbers of complaints filed matter less than the subjective perception how safe a space is. It is, therefore, a feature that must be attested to from experience. The perception of insecurity restricts citizens’ use and appropriation of the city’s public spaces. According to these authors, there is empirical evidence that women self-limit their travels around the city due to their perception of insecurity, restricting their movement to certain places at certain times of the day and, therefore, also restricting their access to urban spaces and public transport. Thus, this factor is revealed to be one of the primary obstacles to women’s autonomy.

The third point is public spaces and accessibility. As Azara and Gil (2017) maintain, even though most unpaid care work is done by women, there has also been an increase in female participation in the productive sector. This duplication of paid and unpaid work conditions women’s relationships to public spaces, amenities, forms of mobility, places of work and trade, and the interweaving of all these with the domestic sphere: “People who do not engage in care work make more limited use of the city, focusing on getting to places of employment and leisure at certain fixed hours. While women, tasked with care work, are more commonly faced with the daily obstacles and difficulties that cities present, such as accessibility issues” (11).

The fourth point involves mobility. According to Azara and Gil, numerous studies concur that mobility patterns of men and women are different. Men are primarily car users, while women depend more on public transport, travel more with minors or loaded with baggage. Women also travel more frequently outside peak hours due to the fact that their jobs are more likely to be part time: “The design of mobility infrastructures, made from supposedly universal guidelines, clearly values travel for business above every other form of travel” (2017: 13).

The fifth point is housing. To cite Azara and Gil once more, residential design and housing typologies mostly respond to traditional structures that do not always adjust to the diversity of family models and the needs of today. In general, “interior design of homes relegates space for household chores to secondary or ancillary areas” (2017: 15). In addition, “women, in some areas continue to have difficulty accessing home ownership or rental. There is a growing number of older women living alone in homes that are not adapted to their needs, which prevents them from enjoying autonomy over a longer period” (2017: 15).

Point number six is about representativeness and urban signage. In this field, there has frequently been an unjustifiable – and at times intentional –
disregarding of the role played by women, and their contribution to the city and
to a shared history, which has favoured non-egalitarian iconographies. Similarly,  
“public spaces continue to be invaded by advertisements with stereotyped or
sexist images and non-inclusive language that do not favour the creation of a
more egalitarian city” (Azara and Gil, 2017: 17).

The seventh and last point is citizen participation. Given that the practice
of architecture, urban planning, and design have traditionally been male
professions, women have seen their ability to influence decision-making in the
form and functioning of the city diminished. However, since “tasks arising from
reproductive work have caused women to be the greatest users and connoisseurs
of everyday spaces” (Azara and Gil, 2017: 19), it is essential to consider their
participation and experience in this field.

4.3 Evaluation

A gender-sensitive evaluation, as the concept is understood and set out in this
paper from a comprehensive and integrative approach, should propose different
ways of assessing the knowledge attained and the procedures utilised by students
in responding to their diversity. There should be at least three modalities: self-
evaluation (students assess themselves); co-evaluation (assessment by their
peers); and evaluation by teachers.

Teachers should establish procedures, instruments and criteria for assessing
knowledge and skills – appropriate to each subject – that avoid gender biases,
such as underestimating female students (Calvo Iglesias, 2018). The system of
evaluation should include different types of tests, according to the needs and
characteristics of the students. As well as explaining the scale and criteria of
evaluation that will be applied, tests must be designed that take into account the
processes of differential socialization according to gender. There should also be
an analysis of the probabilities of unequal treatment to which students may be
exposed due to the androcentric focus of communication assessment in which
the female communicative code or culture is unconsciously penalised (Rodríguez-
Jaume et al., 2017).

In addition, it would be useful to combine different evaluation methods with
the possibilities provided by a variety of instruments of evaluation. Examples
include a portfolio (Martínez and Crespo, 2007) – a workbook where students
compile the tasks designed, as well as drafts and versions, to acquire the
competencies set as objectives by teachers; traditional exams – oral and written
– in all their myriad varieties (development of a topic, short questions, multiple-choice tests, etc.); concept maps; problem solving, with special attention to the methodology followed; monographic works; etc. Regarding exam assessment in the various modalities, we suggest including questions relating to content taught from a gender perspective in each of the different subjects in order to highlight them and integrate a variety of practices, positions and forms of knowledge that avoid simplistic and schematic views of the various fields of knowledge in architecture.

As it is important to evaluate skills and values as well as knowledge, we should also take into account the following aspects: the interpretation – from a gender perspective – of the basic concepts of the subject; the incorporation of the plurality of experiences of all people, in testament to the diversity of subjectivities and gender identities; references in the women's bibliography; and a critical reading of sources – attentive to both normative and non-normative gender discourses – in order to question androcentric interpretations and incorporate intersectionality (Moreno, 2018).

In addition, it is important to consistently (in all methods and instruments of evaluation) assess factors such as the use of inclusive language; respect for the opinions of others; a willingness to debate and dialogue; empathy; and the assumption of egalitarian principles and diversity (Moreno, 2018).

4.4 Modes of organising teaching dynamics

The relationships established in the classroom are very important, both for the teaching-learning process, and for the interaction between teachers and students. The classroom as a physical-temporal space must allow for a flexible configuration in accordance with the subjects taught and the requirements of the teaching modalities. In this sense, the elimination of physical barriers – such as platforms that hierarchize the space – or the redistribution of furniture as appropriate for each case, allows for different arrangements in accordance with the layout of the equipment. Furthermore, the recommendations that appear in the Guia per a la inclusió de la perspectiva de gènere en la docència universitària (Guide for the Inclusion of a Gender Perspective in University Teaching), prepared by the Xarxa Universitat, Docència, Gènere i Igualtat (The University Network, Teaching, Gender and Equality) of the UA indicate different strategies for achieving inclusive spaces for communication and interaction between the students. These include working in small, well-structured groups where roles
and time distribution of participation is monitored in the classroom in order to encourage respectful debate among students (Rodríguez-Jaume et al., 2017).

The method of teaching the theoretical class with the focus of attention on the teachers is a unidirectional way of organizing the space. This characteristic of the master class does not adapt well to other forms of content communication such as the seminar or workshop, where there is more interaction between students and teachers. In the teaching of architecture it is common to combine two methods – theoretical and practical – in which physical space must be able to be reconfigured for group work. It is important to encourage teamwork in mixed groups in which all members must be actively involved. Special attention must be paid to ensuring that the role of group leader alternates. Dialogue between members requires autonomy and the creation of an atmosphere that facilitates the exchange of ideas and opinions. The layout of the furniture and equipment in the classroom must therefore facilitate and accommodate these meetings and dialogues. In contrast, tutorials are a personalized format that should recognise students’ diversity and specificity. Face-to-face tutorials usually take place in a small office or classroom that should provide visual permeability – “seeing and being seen” – as far as is possible, in order to generate safe environment for both participants.

Furthermore, we must recognise and value the importance of transmission of knowledge in non-regulated areas – both inside and outside the university buildings – where interaction between people can also contribute to and/or reinforce mutual learning (Campos and Cuenca, 2016). Therefore, it is important to bear in mind the fact that the learning process continues in accordance with dynamics established between students beyond the physical limits of the classroom and the presence of teachers. In this way, spaces of transmission and connection – such as corridors, courtyards or terraces; and spaces of communication and amenities – such as cafeterias or places or residence – can also be activated as spaces for learning. In the case of the Polytechnic IV building at the University of Alacant, where architecture is taught, its spatial organization makes possible transitions from private spaces to public ones, from the inner areas of classrooms and offices to the exterior.

There are half-covered corridors, terraces and courtyards, all of which create spaces for movement, interactions and meetings (Gutiérrez-Mozo, Parra-Martínez and Gilsanz-Díaz, 2018). As well as areas within the campus, free spaces outside the campus should also be included (Campos Calvo-Sotelo and Cuenca Márquez, 2016), as should other environments, such as the city during visits or study trips.
This multiplicity of spaces for interaction and learning that must accommodate the diversity of students can also be achieved via the use of dynamizing tools such as information and communication technology (ICT), to encourage collaboration and the exchange of ideas.

4.5 Teaching methods

Based on the fact that there is an equal number of males and females studying architecture, the inclusion of the gender perspective in teaching implies encouraging and stimulating a critical spirit in the students. The exercise of critical thinking implies the development of a capacity for judgement and for self-criticism that makes it possible to explore the issues addressed, revealing a multiplicity of positions, making visible forms of inequality, empowering students and enabling a transformative attitude towards society. Teaching a more inclusive architecture implies the active participation of diverse working groups in which – through dialogue with teachers, and paying attention to verbal and non-verbal language – all aspects relating to the gender perspective are integrated and internalised into the learning process. The use of inclusive language should therefore be encouraged among teachers and students, both in the classroom and in the elaboration of work and research. Similarly, masculine terms should be replaced by nouns that refer to both sexes (students), collective nouns (population) and abstract nouns (management). Images that depict diversity – women and men coexisting – should be used, avoiding sexist stereotypes and roles. The further recommendations contained in the *Guia per a la inclusió de la perspectiva de gènere en la docència universitària* (Guide for the Inclusion of a Gender Perspective in University Teaching) should also be followed (Rodríguez-Jaume *et al.*, 2017).

Theoretical contents can be treated from sensitization towards the diversity that surrounds us in order to make visible forms of inequality so they can be critically analysed at a later date. To this end we recommend that the materials, sources and bibliographic resources used in the classroom include architects, researchers and professionals belonging to social and racial minorities who have developed relevant proposals in the field of architecture, in order to ensure that students can discover new references. In this sense, when it comes to research work of all kinds, it is important to instil in students the need to question the citation systems that produce the norms of bibliographic reference in academia since, as Zaida Muxí states (2018), they make people invisible from the outset. Similarly, updating library holdings is essential in order to facilitate access to
new sources of knowledge that address the gender perspective. This includes, for example, the acquisition of compilations of articles (reader) on gender in all its connotations.

Moreover, there should be a reflection on the nature and focus of the contents taught in order to rethink the syllabus from the analytical and critical framework of the gender perspective. This can be achieved by, for example, combining master classes and guided activities with other activities that are more open to student collaboration and in which students – informed by their own concerns – can use the theoretical frameworks provided by teachers to contribute to identifying stereotypes, gender norms and social roles (González and Virgen, 2018).

The fact that the teaching of architecture is of both a theoretical and practical nature makes it easier to incorporate into the group real experiences and participatory dynamics connected to current events from different areas of knowledge. In this regard, the vindication and exercise of critical thinking is essential to promoting gender awareness and, at the same time, to encourage engagement as active agents in the transformation of social norms (Rebollo-Catalán, García-Pérez, Piedra and Vega, 2011). For this purpose, a variety of resources can be used in teaching. These include incorporating and discussing current affairs from different areas of knowledge in order to raise awareness and understanding of different needs and attitudes (see examples of blogs on Architectural Composition by the University of Alacant: <https://composicionii.blogspot.com/> and <https://compoarq4.blogspot.com/>).

The range of subjects taught in the bachelor’s degree in Architecture is very varied, but each subject is likely to include issues sensitive to the gender perspective that can be approached in different ways:

- In classes on theory, select examples that contribute to the widening of students’ range of references. Review the historiography of architecture and make up for its flagrant omissions.

- Reduce androcentrism in the transmission of knowledge. Vindicate the role of female collaborators in architectural projects and in the production of knowledge to counteract the fact that exclusive recognition of male architects has historically relegated female architects to a secondary role, or hidden their impact altogether.
• Promote and recognise the collaborative work and collective intelligence of men and women working in architecture, as advocated by Denise Scott Brown (2013).

• During the technical phase of study, show students the difficulties and inequalities that exist in the management and administration of architectural works (roles, posts, etc.) to raise their awareness and provide them with the tools they need to confront and transform this reality.

• Analyse the architectural works selected as examples for applying technical knowledge – in areas of construction, facilities and structures – in order to explain, for example, the hierarchy of spaces and hidden codes, and to include projects that bring visibility to forms of inequality and gender stereotypes.

• In seminars, workshops, and practical classes, propose exercises that make it possible to reflect on issues around the gender perspective, such as diversity, inequality, feminism, stereotypes, age, minorities, security, care, and so on.

• When it comes to fieldwork, inclusive methods should be encouraged. It is also important to pay attention to factors and tools that are universally accessible, as indicated in the Guia de reconeixement urbà amb perspectiva de gènere by Col·lectiu Point 6 (2014).

• For case studies, interactive classes and work in groups are encouraged, as is the monitoring of roles of male and female participants (Lamelas, 2013).
5. TEACHING RESOURCES

This guide aims to help teachers design didactic methodologies which are free from gender bias and develop strategies for improving the usual procedures, attitudes and practices. It also envisions teaching programs which support students in adopting an active and participatory position with responsibility for social change, combined with techniques that make it possible to interrogate the pedagogical practice itself, while incorporating processes of transformation of hegemonic discourses, and maintaining a critical awareness of concepts such as science, power, subject and state (Donoso-Vázquez and Velasco-Martínez, 2014).

It should be noted that a section of this guide has been devoted to pedagogical resources. Due to the importance and length of this section, it has been separated into the following subsections:

- Research groups and projects
- Teaching plans. Specific subjects
- Associations. Groups. Collectives. Discussion forums
- Guides. Manuals
- Bibliography

And we must also keep in mind that there are no strict boundaries between these resources and the so-called pedagogical resources, because they can all be used to teach and learn architecture with a gender perspective. The current section focuses on those resources that, although they are certainly relevant, are not so easily assigned to the previous categories.

These include the digital library of university teaching resources specific to the inclusion of the gender perspective developed by the University Teaching Network “Universitat, Docència, Gènere i Igualtat” (University, Teaching, Gender and Equality) of the University of Alacant: <https://web.ua.es/va/unidad-igualdad/docen-cia-igualdad/biblioteca/biblioteca-de-recursos.html>. According to the University Teaching Network, the introduction of the gender perspective should be done in a cross-cutting way: not only taking into account what is taught, but also the way it is transmitted in all areas of university teaching (Berná, Rodríguez and Maciá, 2014). The main purpose of this website is to open the doors of higher education to the design of subjects that include a gender perspective.
It is an online space where you can consult experiences, reflections, practices and projects implemented in university teaching with the primary purpose of promoting training in gender equality and facilitating the planning of subjects. The space includes a specific library dedicated to architecture: <https://web.ua.es/ua/unidad-igualdad/docencia-igualdad/biblioteca/arquitectura/index-arquitectura.html>.

In the same vein, the Equality Unit of the University of Oviedo also makes available to the university community tools for incorporating gender content in teaching, and for obtaining economic resources and subsidies for the development of research projects in this area: https://igualdad.uniovi.es/recursos

For its part, the Observatory for Equality of the Universitat Autònoma de Barcelona and the EGERA (Effective Gender Equality in Research and the Academia) Project have produced a guide aimed at providing theoretical material to teachers for incorporating the gender perspective into the subjects and curricula, while coordinating its implementation from the need to: “Explain the gender perspective in the creation of teaching guides and study programmes from an inclusive university model” (Third Action Plan for Equality Between Women and Men in the UAB 2013.2017): <https://www.uab.cat/doc/guia_perspectivagenere_docencia>.

Another guide: Gender Curricula for Bachelor and Master Courses. Integrate Women’s and Gender Studies into the Curriculum created by the Women’s and Gender Research Network NRW (North Rhine-Westphalia), collects resources of special interest for the discipline of architecture and provides content and methodologies for the inclusion of the gender perspective in the teaching of different university specialities, including architecture: <http://www.gender-curricula.com/en/gender-curricula-startseite/>.


Stanford University's Gendered Innovations is a website that develops and displays case studies of the benefits of including a gender perspective in teaching and research: <http://genderedinnovations.stanford.edu/>. 
Another resource is the Ameco Press news portal. Information towards equality: an information agency specialised in the production, dissemination and transmission of journalistic information from a gender perspective: <http://ameco.press/en/>

And, finally, here is a list of audiovisual resources of special interest for their cultural, social and political interpretations:


06. TEACHING HOW TO CARRY OUT GENDER-SENSITIVE RESEARCH

It seems hard to understand an architectural project that, in order to be consistent with its own purposes, does not involve prior research. Although there is not always a comprehensive symbiosis between project and research – given the radical nature of this approach – there is no example of architecture which, according to Bernard Tschumi’s thesis (2005), does not feature a concept (the idea that provides coherence and identity to a project), a context (historical, geographical, cultural) and content (what happens in or thanks to architecture). This obliges us to investigate what it is (the subject), where it is (the location), and for whom and how the architecture is made. Therefore, whether to align with a series of references or to respond to them, research into the genealogy and the implications of an idea, into the physical and cultural geography of a place and especially into the needs of the people who will use the architecture, is an essential part of the project. But it is not enough. Research in architecture, whether as an end in itself for producing knowledge, or as an instrument for approaching the project, requires the gender perspective – among others – as an essential foundation upon which to build an analytical and conceptual framework that makes it possible to modify a given situation and/or produce results in the desired direction.

In the degrees of Architecture and Fundamentals of Architecture, the study programmes do not provide – with the exception of some optional subjects – training in research by male and female architects. However, it should be noted that any architectural project, regardless of the scope of the term, should be preceded by research that provides a foundation for intuitive work and decision making (Gutiérrez Mozo-ACPII, 2019). Teaching students how to carry out research in architecture should help reinforce their critical faculties: their capacity for discernment and judgement. It is, therefore, a process that students must apprehend in a scalar way, being accustomed from the start of their training to conceive of projects and tasks as small research assignments. Students should be taught to uncover situations and assess references that enable them to connect their own ideas with earlier knowledge, supporting, contrasting or questioning those who thought before them, or those who understood things differently. At the same time, students should be encouraged to consolidate and exercise, respectively, their desire and their right to contribute to the collective progress with their own findings.
This way of approaching the architectural project from the start of their training is also the best antidote students have against a dual and naïve temptation: to succumb to the weight of the past by taking for granted everything that tradition has bequeathed to us or, at the other end of the scale, to believe that any contribution must necessitate a break with what came before and that this entails progress.

Due to its attention to diversity, the gender perspective allows us to conceive projects and methodologies that treat architecture as a cultural, political, social ecological and technological assembly capable of generating new viewpoints on the built environment, the landscape and the territory. It also enables us to approach with sensitivity the plurality of ways of being and existing in the world. In this sense, research in architecture from a gender perspective must go through three stages in the development of the future or of the professional future: fostering attitudes (in the degree), developing procedures (EDA, EMA) and, finally, original interpretations of reality (in doctoral studies) that take into account this framework of theoretical and conceptual analysis. Therefore, teaching how to conduct research from a gender perspective is to accompany and encourage students to take a critical position from the moment they are receivers of knowledge to the moment they become producers of knowledge.

For precisely this reason, teaching research from a gender perspective must help transform both the person doing the research and the citizens who will benefit from it thanks to the changes in mentality that will result in a fairer, more egalitarian and inclusive society.

In the Spanish context, the entry into force of Organic Law 3/2007, of 22 March, for effective equality between women and men, has provided an indispensable frame of reference that has inspired legislation instructing higher education to work towards achieving real equality of opportunity in all professional fields. Within this framework, Organic Law 4/2007, of 12 April (LOMLOU), which modifies the Organic Law of Universities of 2001, or the Royal Decree 1393/2007, of 29 October, which establishes the organization of official university education, together provide the basic elements underpinning specific measures aimed at promoting teaching and research as axes leading to “knowledge and development of human rights, democratic principles, principles of equality between women and men, solidarity, environmental protection, universal accessibility and design for all, and the promotion of a culture of peace” (Royal Decree 1393/2007).
As Inés Sánchez de Madariaga points out in her white paper, *Situación de las mujeres en la ciencia española* (2011), any field of research must promote the incorporation of the gender perspective as a cross-cutting category, and it must be taken into account in all aspects and protocols of the research, from the definition of priorities, problems arising from the category, theoretical frameworks, use or construction of methodologies, collection and interpretation of data – almost always disaggregated by sex, conclusions, applications, and proposals for future studies.

Perhaps, compared to other humanities, such as philosophy or social science (though with a clear advantage over other technical disciplines), in architecture teaching and research has been slower to incorporate a reflection on the levels of equality between people. This is somewhat surprising since, as Lucía Pérez-Moreno has stated (2018), there are so many connections between this discipline and gender studies and perspectives. Thus, we can consider a wide variety of areas. One example could be that of the agent who practices architecture, leading us to consider the multiple inequalities between men and women throughout the educational phase and on to professional practice, whether self-employed, working for others, teaching, employed by the civil service, and so on. Another strand that could be examined asks who uses the architecture and how they use it, and how their experience is, despite the efforts made, clearly determined by gender conditioning.

Therefore, the first condition for doing and teaching gender-sensitive research is to observe and pay attention to our surroundings; the second is to cultivate a critical and rigorous spirit and an open mind which understands the diversity of situations, conditions, aspirations and needs of others not as a problem, but as an opportunity for integrating said diversity into a common project.

In the face of this, social norms and stereotypes – including those relating to gender – have a significant impact on numerous aspects of people’s public and private lives, lives that are affected by design and by conditions and methods of use which can operate as axes of oppression and marginalization. Architecture should not contribute to this by perpetuating explicit or subtle forms of violence. On the contrary, it should challenge these tendencies with emancipatory proposals. Therefore, from the start of their training, it is important to encourage students to use research to refute and exercise dissent against any form of injustice – whether it is to be found in the concept, context or content of a project – to critically analyse even those paradigms that are fully assimilated with the
gender perspective when these could come into conflict with other parameters. This would be the case with Jane Jacobs for example.

She is one of the most-cited references due to her attack on the determinism of modern planning and her pioneering demand for a different way of seeing, thinking about, and living in cities, paying special attention to the seemingly minor, small-scale and everyday issues to which gender-sensitive urban planning has since been linked. However, in Jacob’s seminal work (1961), often cited without independent research, there is, as Margaret Crawford (2015) has argued, a conspicuous omission. That is the race-ethnicity binomial, the inclusion of which would have compromised her study’s idyllic vision of the New York Village. By incorporating this other variable, she would have diverted attention from her main focus: the battle against the car. But the city – like architecture – is complex and contradictory, and researching it requires multiple perspectives.

It is therefore imperative to make students aware of the importance of understanding the spaces we design and inhabit in terms of their plasticity as frameworks that intersect with the sexuality, gender and identity of those who use said spaces. Even though it has been articulated later than in other cultural fields, this has been one of the discursive lines of feminist and queer criticism of architecture since the 90s. Gender and sexuality have both repeatedly been identified with metaphors and devices of spatial organization. In 1992, the publication of Beatriz Colomina’s Sexuality and Space focused on how space and representations of space produce and reproduce gender. The book provided disciplinary support for previous feminist interpretations, while also highlighting the need for an interdisciplinary spatial critique and paving the way for further research on gender mainstreaming in the negotiation of discourses in modern and contemporary architecture (Heynen and Baydar 2005, Baydar, 2012, etc.). A whole series of enlightening research papers, mainly by North American authors, providing feminist perspectives on the history of architecture (Wright, 1976; Hayden, 1981; Friedman, 1998, etc.), based on the analysis of spatial categories relating primarily to the domestic sphere and/or to its challenge by innovative designers responding to pre-established family structures and social conventions, were published during the 70s, 80s and 90s. In the 1990s, a growing number of critical contributions from queer theory and activism were added to this body of work. The concept of queer performativity is founded on Foucault’s ideas (1976, 1984) on the emergence of the sexual subject and its conflicts with the repressive discourses and institutions of modernity (to which architecture would contribute decisively), as well as on the first feminist critique bringing attention
to the fact that space is not indifferent to sex and gender, and that technologies of production – and therefore of subjectivity – are not politically neutral.

What queer performativity (Butler, 1990) does is deconstruct the binary structures – heteronormative or homonormative – that articulate sexual identity and gender in order to vindicate other non-conforming, transgressive and dissident forms of sexuality, affectivity and spatiality that interrogate conventions and institutions (Sedgwick, 1990). By destabilizing conventions, gender-sensitive research, like the examples cited above, has opened architecture to alternative institutive spatial practices that form and transform a multiplicity of identities and experiences. In addition, such research contributes to overcoming dual thinking, introducing a richness and diversity to new ways of understanding how identities arise in space and time, not only at the intersection of sexuality and gender, but also in other fluid categories such as generation, ethnicity, race, class and social ability.

Therefore, gender-sensitive research is not just about focusing on certain situations to incorporate differences: more women architects, more clients and users. Nor is it simply about including more non-white or homosexual perspectives. It is also, as Paul B. Preciado (2019) argues, about questioning the hegemony of the patriarchal, colonial and heterocentric epistemologies that construct us as subjects and categorize and exclude everything outside the norm. It is therefore essential for architecture research to examine and expose the role that normativity plays in the construction of space and – conversely – the way space itself determines and produces normativity. There is no way of being outside the space, just very different ways of being, acting or feeling inside that space.

We choose not to propose general methodologies because each research project requires its own definition and its own conceptual and methodological construction. However, below is a reminder of some of the tools and guides we have already mentioned in this document, as well as some other websites that may be of help in conducting gender-sensitive research:


Guide for the introduction of the gender perspective in quantitative and qualitative research and studies in any discipline, published in 2006 by the Department of Youth, Education and Women of the Island Council of Tenerife.

In addition, the website of the Yellow Window design agency has a specific section dedicated to gender in research: <https://www.yellowwindow.com/genderinresearch>

Finally, on Stanford University’s Gendered Innovations website there is an implementation guide to the design of homes, residential complexes and neighbourhood spaces: <http://genderedinnovations.stanford.edu/case-studies/urban.html#tabs-2>

The Stanford University checklist is also very helpful.
07. PEDAGOGICAL RESOURCES

7.1 Research groups and projects

- FATALE, Feminist Architecture Theory-Analysis, Laboratory, Education. School of Architecture, KTH: [http://fatalearchitecture.blogspot.com/]
- Gender, Science, Technology and Environment – genderSTE
- UNESO Chair on Gender: [https://www.gendersteunescochair.com/]
- Hypermedia: [http://hypermedia.aq.upm.es/portfolio_category/espacio_tiempo_lenguaje-desde-una-perspectiva-de-genero/]
- Now What?! Advocacy, Activism and Alliances in American Architecture since 1968: [https://www.nowwhat-architexx.org/articlesall]
- Office for Political Innovation
- Pornified Homes. Oslo Architecture Triennale 2016: [https://officeforpoliticalinnovation.com/work/pornified-homes/]
- Pioneering Women of American Architecture: [https://pioneeringwomen.bwaf.org/]
- Proxecto MAGA Galicia: [https://www.udc.es/en/gausmaga/arquitectura_xxenero/proxecto_mag a]

7.2 Teaching plans. Specific subjects

- Architecture and Gender. KTH Royal Institute of Technology: [https://www.kth.se/student/kurser/kurs/AD236V?l=en]
- Architectural Composition. University of Alacant: [https://composici-onii.blogspot.com/] and [https://compoarq4.blogspot.com/]

• Gender and Race in Contemporary Architecture. School of Architecture, University of Illinois: <https://arch.illinois.edu/sites/arch.illinois.edu/files/faculty-courses/ARCH%20GWS%20424%20FALL%202016%20course%20description.pdf>

• Gender Perspective in Architecture. School of Architecture, National Autonomous University of Mexico: http://escolares.arq.unam.mx/pdfs/2074/3045.pdf


• Women’s, Gender, and Sexuality Studies. Gender, Territory and Urban Space. Yale University: <https://wgss.yale.edu/>

7.3 Associations. Groups. Collectives. Discussion forums

• AMAE, Asociación Mujeres Arquitectas Españolas: <https://mujeresarquitectas.org/>

• Architecture + Women / New Zeland: <https://www.architecturewomen.org.nz/>

• Arquitetas Invisíveis: <https://www.arquitetasinvisiveis.com/>

• Beverly Willis Foundation: <https://www.bwaf.org/>

• Col·lectiu Punt 6: <http://www.punt6.org/>

• Un día | Una arquitecta (blog): <https://undiaunaarquitecta.wordpress.com/>
7.4 International Conferences on Architecture and Gender

- ArquitectAs: 1st Symposium on Architecture and Gender: <https://arquitectas.tumblr.com/>
- Dexenero: <http://dexeneroconstrucion.com>
- Equal Saree: <http://equalsaree.org/es/>
- Equity by Design [EQxD]: <http://eqxdesign.com/>
- Femenino e plural: <https://femininoeplural.wordpress.com/>
- IAWA- The International Archive of Women in Architecture: <http://spec.lib.vt.edu/IAWA/>
- MOMOWO- Womens’ creativity since the Modern Movement: <http://www.momowo.eu>
- MujerArquitectA: <http://www.mujerarquitecta.org/>
- Mulheres na Arquitectura: <https://about.me/mulheresnaarquitectura>
- OWA- Organization of Women Architects and Design Professionals: <http://owa-usa.org/>
- Parlour- Women, equity, architecture: <https://archiparlour.org/>
- Soy Arquitecta: <http://soyarquitecta.net/>
- WICI- Women in Cities International: <http://femmesetvilles.org>
- Women in Design / Harvard, USA: <http://designforequality.org/>
• Women who build (ended in 2014): <http://lamujerconstruye.blogspot.com/>

• WPS Prague: <http://www.wpsprague.com/>

7.4 Guides. Manuals


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