
Architectural Typologies
as Utopian Educational Values



Pablo Campos Calvo-Sotelo | USPCEU Madrid

Utopia has been for centuries the energy of transformation used by universities to renew their ideals, their missions and their physical spaces. Wherever Utopia has been a locomotive of idealism, a transcendental metamorphosis has occurred in the educational aims and methods, but also in the urban and social university environments.

University education has a higher purpose: to build up the formation of human beings, providing the individual with an overall integrated training. This mission imposes special emphasis on the proper arrangement of physical space in which this central undertaking takes place. Observed throughout history, the university's finest goal has been the raising of good citizens (see Nussbaum, 1997). Beyond a shadow of doubt, the quality of the university is directly connected with the quality of its architecture.

Any educational environment, including both architecture and open spaces, ought to express a special engagement to its specific natural (landscape, ecology and climate), social and urban context. Some principles are critical, the guidelines before starting any campus plan. As a first approach, the interference of foreign styles improperly understood should be avoided, in particular those whose origin, essence or formal display would not fit in with local cultures (see Chaabane / Mouss, 1998).

The planning process of any campus has to go beyond merely providing facilities. Designing a complex site demands artistic purpose as a mandatory requisite, and open spaces must play as great a part as built space in the project's development. Architecture, if not resolutely related to human beings, risks becoming an empty, cold and meaningless shell. By its nature, architecture may be considered as a genuine form of public art. And

whilst we may marvel at the links it creates with its metropolitan systems, the need to provide intelligent and bold forms in education planning cannot be separated from the inspiration that shapes its architecture.

Within a campus, architecture stands as an interactive dialogue between buildings and individuals; a dialogue which, related to human attitudes, should also be present between faculty and students.

II. Architectural Typologies for Educational Paradigms: The University of Virginia's Academical Village and the Case of the University-City of Madrid

Quality in education is intimately tied in to the quality of the physical setting where it is sited. And utopia has had narrow connections with architecture through the history of universities. One famous case was the utopian dream of Thomas Jefferson, when founding his "Academical Village" in Charlottesville (1817). Jefferson conceived a spatial typology that dressed architecturally the vision of a community of learning. Thus, architecture became a projection of the educational values of the brand-new institution. The unity underlying the overall scheme incorporated neo-classical architectural influences, as well as those learnt from the Italian Renaissance master Andrea Palladio. Some of Jefferson's notions drew on Greek sources – particularly the principle of life shared together by masters and disciples that today are termed "residentiality" – as well as Roman – in the architectural spatial layout. Amongst other influences thought to have exercised a role at the planning stage of Jefferson's vision was the Villa Trissino, which he knew from his European travels (Wilson / Butler, 1999: 7). The core of the campus (the "Lawn") embodies the shared space for faculty and students: a version of the ideal spatial typology of the original British *quadrangle*.

Since its origins, the American model has experienced many variations in its general setting and style. We can briefly mention, in chronological order, the repertoire of those diverse types employed, according to Paul V. Turner's classification: from the first open *quadrangles* of the colonial settlements inspired by the colleges of Oxford and Cambridge (like Harvard and William&Mary); the nineteenth-century complexes dominating a natural environment; the park-like campus proposal of the early Land Grant projects; the Beaux Arts fashion (like the University of California, Berkeley); later

revivals of the English intimate *quadrangle*, as a built symbol of a conservative educational philosophy; and recent plans, in which priority is given to circulation schemes. The chronological evolution of all these (and maybe some others) planning composition models can be identified even in one specific project; that would be the case of Princeton University (New Jersey), or the College of Lake Erie (Ohio). The scenario of the American campus was in the beginning of the past century quite diverse, but yet unknown in the Old Continent. Its utopian values and spatial typologies had no echo in European universities.

But an outstanding example, one of the most notable in recent history, took place in Spain: the planning and construction of the University-City of Madrid. The “Moncloa precinct” was the first Campus ever designed and built in Europe to follow the American paradigm.

It was in 1927, during the reign of King Alfonso XIII, that a utopian dream came true. Dissatisfied with the odd spatial arrangement of university buildings in Madrid, Alfonso XIII took the decision of creating a modern University-City, which he conceived as a new model for both Europe and Latin America.

It is necessary, with pride and hope, to try to carry out this great work so that this university is one of the foremost of the world... My golden dream is to see in Madrid, created during my reign and for the good of our country's culture, a university renowned for being a model center of scholarship.¹ (King Alfonso XIII, 1927)

The King's ideal was to build a new university to be acknowledged worldwide. And the decision was to take the *campus* (yet unknown in Europe in those times) as a paradigm to redefine a new typology of urban layout, and a whole innovative understanding of universities' lifestyle. For such a purpose, a trip to visit the most relevant American universities was planned. In October 1927, a group of advisors of King Alfonso XIII, led by the architect Modesto López-Otero, planned a trip to the United States. Their aim was to study the American University as a model for the design of the new University-City in Madrid (see Campos, 2006). The American institutional model and spatial typologies thus stood as the doctrinal godfather of the formal manner in which the Madrid project was structured.

Before this time, European universities had been basically designed according to the cloister heritage, which reflected their medieval roots. This emblematic element (the cloister) created insular and self-sufficient learning environments. A big change was about to occur...

By means of the historical journey that took place in September-November 1927, the Old Continent came to investigate the American *campi*. The Spanish Commission set off this “Journey of Utopia”, having previously traveled to several European cities, where they examined the medieval origins of some famous centers. Looking for inspiration, they visited Harvard, Boston, Yale, Michigan, Rochester, Washington, Baltimore and New York. They also visited Toronto and Montreal in Canada.

Amongst other lessons, the four Spanish delegates realized how the American and Canadian campuses they visited embodied university ideals through a planned arrangement of spaces, above all, the *quad*. As already mentioned, this architectural typology received the heritage of the European *quadrangle*. Personified by the already mentioned paradigms of Oxford and Cambridge, the English university concretized the pioneer formalization of the integrated utopian ideal in which University and City were merged by means of the expansion and superimposition of the different colleges along the urban fabric. These academic built units came to be architectural elements of foremost repercussion in the Old Continent scene; later transported overseas to seventeenth-century North America, they evolved into the emblematic *campus* prototype. The English college plan was formed in a square or a rectangular shape, and its central court (the *quadrangle*) became the enclosed area in which teachers could exert their control over students’ life. The geometrical configuration of these collegiate organizations made easy to place them within the city lots, thereby profitably improving the land.

In the American campus panorama visited by the Spanish Commission in 1927, the *quad* played a key role in the organization of the university space. The influence of this architectural type was clearly demonstrated in the original Master Plan of the University-City of Madrid, as designed by the Director of the School of Architecture of Madrid, Modesto López Otero, in December 1928.

The huge cultural enterprise of the Madrid University-City meant the assumption of a new concept on Higher Education, one coming from North America and Canada. The importance of this event leans on the subliminal transformation of the university space that took place as a result. Somehow, it could be named as the “return-trip” of the one which happened during the sixteenth and seventeenth centuries, beginning from its medieval germ in Europe: the exodus of the “seed” of its embodied soul (the *quadrangle*) to the New World, the birth and diversification of the novel model (*campus*) and, finally, the described “return trip” of 1927 to Europe of this modern idea, and the prolific heritage that it has generated in the Old Continent since then. Under that same energy of utopia, the spaces of knowledge returned to the Europe of cloisters, to the compact “*Palaces of the Muses*” and to the “*Domus Sapientia*”, which came back to its origins with the same yearning to seek out the “Ideal City of Study” with which it had gone to America.

The notions of philanthropy together with such functions as “college + sports” were certainly inspired by the American campus, in both urban layout and functional program. But the architectural style came to reflect the European vanguard, the Modern Movement. Some decades earlier, Europe had been the birthplace of a new style in architecture. As a consequence, the emerging archetype of the University-City of Madrid became a hybrid project, an intelligent combination of two trends: university in its urban and landscape dimension (American influence), together with detailed architectural configuration (European avant-garde movements). Designed and built in Spain’s capital, the University-City bade fair to inaugurate in Europe a model that could be considered revolutionary; a style very different from the traditional university of earlier centuries, whose identity had rested on being at the historic center and in separate buildings (see Merlin, 1992).

The University-City of Madrid began its construction process in 1929. After the destruction of most of the buildings during the Civil War (1936-39), the *campus* experimented several stages of development, amounting to a sad loss of the original design spirit. But it never renounced its own continuity (see Campos, 2004).

The Madrid campus meant a critical change in the spatial history of the universities of the Old Continent. It had a wide influence across Europe and in Latin America since it

was created. And utopia must be acknowledged as the driving force, the guiding light for the four travelers in their 1927 journey around American *campi*. But utopia also carries with it a deeper inner meaning, as the legacy of progress achieved through the *Spaces of Knowledge* across the centuries.

And we must remark again that utopia finds its proper accommodation within the living reality of the *campus*. That quest for excellence guided the King of Spain to explore the New World in search of modernity and excellence. During that epoch-shaking journey, utopia acted as a true invitation to the adventure of thinking towards the future: it was a unique example of how – across history – universities served as links beyond frontiers (see Castrejon, 1990).

The fruit of the described “Journey of Utopia” was the establishment in Madrid of the first *campus* in Europe, as already explained. It was an historical connection between utopian dreams (connecting America and Europe) and a true bridge between cultures.

III. Conclusion: Utopia, University Values and Planning

Utopia must influence the foundation and evolution of any university seat. Some of the reviewed paradigms of history (Jefferson’s Academical Village, the University-City of Madrid) must reinforce the need of utopia when planning university seats worldwide. The window of opportunity which the European Higher Education Area (EHEA) has opened up reinforces the importance of planning, both as a technical and an ideological lever to help universities reinforce their institutional, academic and spatial values.

Planning has many faces. This article has examined one face in particular: viewing planning as the way through which the energies of a utopian vision are harnessed to meet a purpose that is realistic, realizable and operational. Converting ideas into practice is the business of campus planners (see Dober, 1997). Often it is carried out through a collaboration amongst several professionals: architects, landscape designers, psychologists, historians, educationists, as well as local experts whose knowledge of the immediate community, its culture and economy, allow the identification and subsequent inclusion into the university’s mission of specific features that find a sound echo in the local community.

Planning a campus implies a unique understanding of spaces dedicated to human formation. Thomas A. Gaines expresses this idea in quite a simple way:

Unlike the two-dimensional art of painting, the three-dimensional art of sculpture, and architecture, in which the fourth dimension is function, a campus has a fifth dimension: planning. The well-planned campus belongs among the most idyllic of man-made environments and deserves to be evaluated by the same criteria applied to these other works of art. (Gaines, 1991: ix)

The principle of human scale must be compatible with organizing the urban layout of a very large site. Furthermore, it demands the nicest of judgments in gauging the weight to be placed on physical space, as the prime agent in optimizing and sustaining human contact.

Utopian ideals have inspired universities for centuries. Sheldon Rothblatt, a leading scholar in the intellectual history of Universities British and American, reminds us:

The university, by virtue of its long and unbroken history and its central place in the definition of modernity, possesses features that can be described as “utopian” because some half dozen attributes are the result of a struggle between its desire to create an ideal world for itself and its unavoidable obligation to accommodate outside pressures. (Rothblatt, 2006: 56)

Throughout their history, utopia has always been a source of critical inspiration for universities in their unceasing quest for excellence and renovation. Should they then seek to recall the forgotten world of harmony, of a life shared in common on campus, rather than dissolve that human dimension, once inseparable from excellence and renewal, in the ethereal channels and networks of modern telecommunications?

Utopia has acted as a constant invitation to think about the future and to do so in the long term. In the recent past, the drive towards realizing the physical expression of major change and substantive improvements in Higher Education Institutions has drawn on town planning, urbanism and architecture. As a restatement of the utopian vision inserted into the mainly utilitarian priorities that higher education policy calls for today, the “Educational Campus”, which emphasizes both the spiritual and the ideal, the basic components of utopianism, can help universities in their unceasing search for excellence (see Campos, 2010b).

Education is a spatial, affective and collective act. Universities do well, then, to pay close and critical attention to the design of their physical facilities, if only because the quality of learning is intimately related to the quality of the architecture that houses it.

University urban planning and architecture provide the frame for an on-going and ever-renewed dialogue between buildings and individuals, a dialogue which transcends the mere supply of spaces. As a consequence, its planning process has to excel a mere provision of available areas. The clear artistic intention in the design of the *campi* must be a mandatory requisite, and it would be advisable that, in the development of the master plan, open spaces, works of art and nature were as essentially taken in account as the built volumes.

Artistic intention, clear and unambiguous, incorporated into and emerging from the design of the many complexes that make up a university, is the *conditio sine qua non* that ensures a “campus” built is also an “Educational Campus” with a clear commitment to innovative learning that reflects the goals and ambitions of the European Higher Education Area (see Campos, 2009). This new concept has been assumed by the Programme “Campus of International Excellence”, launched in 2009 by the Ministry of Education of Spain, a country with 77 Universities (50 public and 27 private) (see Campos, 2010b and Campos, 2011).

The design of a Higher Education nucleus must pay special attention to the symbiosis City-University, bearing a solid commitment to its social, natural and urban environment. This implies that the architecture of the university must be oriented towards the achievement of some fundamental objectives regarding the utopian educational ideals, so as to promote the processes of creation and knowledge transference, generating therefore a solid empathy between the scholars and the physical layout of the university. Finally, it must build up an organization of spaces over which their users can draw up the emotional memory of such a unique period for the human being.

Space (open areas and architectural typologies) plays a key role in the motivation of campus users (students, faculty and staff), as well as enriches the use of university zones for general citizens of the urban contexts. It has been pointed out that a stable social environment may reduce attrition rates, and help students achieve academic and social aims (Wisely / Jorgensen, 2000: 16-28). Thus, an appropriate spatial framework has the

capacity to foster positive attitudes, which may build into excellence in education itself. Amongst others, some factors contribute to the mentioned desirable attitudes in students: visual, psychological and environmental comforts; curiosity; positive perception of shape and form, overall feeling of wellness. All have then to be borne in mind before starting the formal design of a campus, or of any human settlement, especially those which have to host human formation processes (see Alexander *et al.*, 1976).

The designing of urban and architectural spaces is an all-consuming vocation, for two main reasons: first, those spaces express, or can be made to express, certain values – sustainability and aesthetics, for instance; second, they sustain creative, human contact, as the basic value on which the university is founded.

We must redeem the lost energy of utopia, starting new journeys that lead us to the quality of Higher Education all over the world. Under the impulse of utopia, good architecture enables and stimulates good human formation.

Works Cited

- Alexander, C. *et al.* (1976), *A Pattern Language. Towns. Buildings: Construction*, Center for Environmental Studies, USA, Oxford University Press.
- Campos, P. (2011), *Identity, Innovation and Environment at Spanish Universities*, Madrid, Spain, Ministry of Education.
- (2010a), *Spain: Campus of International Excellence*, Madrid, Spain, Ministry of Education.
- (2010b), *The concept of "Educational Campus" and its application in Spanish Universities*, Paris, CELE Exchange, 2010/8, OECD Publishing.
- (2009), "La Educación, un hecho espacial: el Campus-Didáctico como arquitectura para el Espacio Europeo de Educación Superior", in *La cuestión universitaria*, Madrid, Cátedra UNESCO – Universidad Politécnica de Madrid, N° 5.
- (2006), *The journey of utopia*, Hauppauge, NY, Novascience Publishers.
- (2004), *75 Años de la Ciudad Universitaria de Madrid. Memoria viva de un campus transcendental*, Madrid, Ed. Complutense.
- Castrejon, J. (1990), *El concepto de Universidad*, Mexico D.F, Trillas.
- Chaabane, A.S., / Mouss, L.H. (1998), "The North-South Dialogue Through Higher Education", in *Higher Education Policy 11*, pp. 81-94.
- Dober, Richard (1997), "Confessions of a Campus Planner", in *Planning for Higher Education*, vol. 26, no.1, Fall, pp.1-7.
- Gaines, T. (1991), *The Campus as a Work of Art*, Westport, Connecticut, Praeger Publishers.
- Merlin, P. (1992), *L'urbanisme universitaire en Espagne*, Paris, Ministère de l'Éducation nationale et de la Culture.
- Nussbaum, M.C. (1997), *Cultivating Humanity: A Classical Defence of Reform in Liberal Education*, Boston, MA, Harvard University Press.
- Rothblatt, S. (2006), "University as Utopia", in Guy Neave, Thorsten Nybom and Kjell Blücker (eds), *The European Research University An Historical Parenthesis?*, New York/London, Palgrave Macmillan.
- Turner, Paul Venable (1984), *Campus: An American planning tradition*, Cambridge, MA, The MIT Press.

Wilson, R. / Butler, S. (1999), *University of Virginia*, New York, Princeton Architectural Press.
Wisely, N., / Jorgensen, M. (2000), “Retaining Students Through Social Interaction: Special Assignment Residence Halls”, in *Journal of College Admission*, 167 (Spring), pp.16-28.

Notes

¹ King Alfonso XIII: Before the Construction Board of the University-City, June 1, 1927 in Historical Archives of the City of Madrid, Complutense University in collection “Construction Board of the University-City of Madrid” Volume of Minutes 1927-1932, Minutes of Meeting June 1st 1927.