An architecture teaching program to rescue the historical town of Ouro Preto, Brazil

B.T. de Oliveira
Architect D.Sc., IPHAN, Ouro Preto/MG, Brazil

E.C. de Araújo
Professor D.Sc., UFOP, Ouro Preto/MG, Brazil

J.N.S. Villaschi & L.C. Mancini
Architects, M.Sc., UFOP, Ouro Preto/MG, Brazil

ABSTRACT: Founded in 1698, Ouro Preto was, during two centuries, the capital of the State of Minas Gerais and stage of an intense nationalist feeling, that had influence on the independence of Brazil. As an alive testimony of secular traditions the city constitutes object of special cares in order to safeguard its integrity as the world largest baroque urban settle, and guarantee its historical, artistic and environmental heritage. In this sense, the Federal University of Ouro Preto proposes an Architecture and Urban Studies Course in order to face the social demand of the 21st century for professionals of the territorial planning as well as the preservation of its cultural values. The formation of critical mass on this professional performance area represents a most significant institutional relationship between the academic world and the daily community life, the urban space production and the destinies of Ouro Preto and its historical surrounding area.

I HISTORICAL CONSIDERATIONS

1.1 The Enlightenment in Ouro Preto

Brazil, since its discovery in the 16th century, has never been isolated from the rest of the world. The process of its continental dimensions territory's occupation was held through successive economic cycles addressed to the satisfaction of the European market. Unlikely the first extractivist cycle of “Pau Brasil” (Caesalpinia echinata), which didn’t favour any territory settlement, the mineral extractivism cycle generated deep transformations in the social and space structure and organisation, showing intense process of people displacement and the urbanisation of the country's interland.

During and after the two centuries of colonisation, the liberal ideas and philosophy, as well as other cultural influences were brought to Brazil, strongly inspiring revolutionary groups to promote the liberty and the necessary political changes.

The illuminist French thought “Liberté, Égalité et Fraternité” has greatly influenced the Minas Gerais people to become free from the colonial oppression and create our own national government. It also explains registers like the Minas Gerais flag “Libertas Quae Sera Tamem”. Different from Bahia’s disloyalty in 1798, promoted by the people, the “Inconfidência Mineira” was led by the highly wealthy society that filtered and translated the illuminist purposes. They defended Brazilian liberation of the colonial power, even though in a partial and less democratic way, once they were owners of thousands of slaves and they wouldn’t support the end of the slavery. According to Schmidt (1997), the Minas Gerais’ disloyers had then planned the transference of the Minas Gerais capital to the town of São João del Rei, while Vila Rica, nowadays Ouro Preto, would become an excellent university centre.

Under pressure of the Portuguese Kingdom and alleging the collection of late taxes, the authorities arrested the military Silva Xavier, the only disloyer who did not belong to the powerful society group. Betrayed by his own conspiracy partners, he was hung in a public square, having his body divided in many pieces that were exposed in different points of the town of Ouro Preto, as a demonstration of the power of the king against the fight for independence.

1.2 The gold cycle and the colonial times

In the 18th century, Brazil had become the largest world producer of gold and diamonds. Discovered by
the “Bandeiras” (expeditions in search of Indians and minerals), the main and more durable area of auriferous exploration was placed in Minas Gerais. The mining activities attracted immense number of people from all the world in search of immediate wealth, making the population in the colony to increase almost 10 times within just one century and the lack of infrastructure provoked hunger and conflicts in the area.

Portugal needed to create the “Minas’ Intendancy”, a fiscal organism directly linked to Lisbon and responsible for the administration and for the surveillance of the mining activities, but specially for the collection of tributes. The most important tax collected by the Kingdom was the “fifth”, which corresponded to 20% of all and any amount of gold found by any miner.

The official flowing of gold and diamonds to the closest port was concentrated on the “Estrada Real” (Royal Road), that covers more than 1400 km, constituted of two main roads converged in Ouro Preto: the Old Road that ties Ouro Preto to Parati and the New Road that links the city of Rio de Janeiro to Ouro Preto, later elongated until Diamantina. This road configuration turned Ouro Preto into the geographical and historical centre of the Estrada Real (Fig. 1).

In order to try to control the circulation and the transport of mineral wealth, some “Houses of Foundry” were created along the Estrada Real, where the powdered and the nuggets gold, which circulation had been prohibited, were all melted and marked with the royal stamp.

1.3 The urban and architectural evolution of Ouro Preto

Ouro Preto has had an original space formation that disobeys all types of traditional radial or nuclear urban organisation in most of the other Brazilian Colonial cities. Its organic and lineal configuration advanced in more than two centuries the urban phenomenon nowadays known as “nucleation”, that is, the formation of a city starting from the connection of several close urban nuclei.

Several small settlements appeared in function of the discovery since 1698 of gold mines spread around the territory. Their connection (Fig. 2), was consolidated on the second quarter of the 18th century, by means of significant urban interventions promoted by the government of Mr. Gomes Freire of Andrade, called Earl of Bobadela (1735–63). In that period bridges and fountains were built, and the administrative centre was implanted, known at the present time as Tiradentes Square. It was delimited by the construction of the Palace of the Governors and later by the old House of Chamber and Prison. The new nucleus unified the two more important small villages, named Antônio Dias and Pilar. It highlighted Vila Rica as the main gold extraction centre of the 18th century, propitiating great innovations in the architecture, in the painting, and in the sculpture works. One of the most recognised is the artist Antônio Francisco Lisboa, known like Aleijadinho (the crippled).

In Minas Gerais, the buildings followed the models adopted in other Brazilian areas, developing simple architectural solutions standing out for the pleasant proportions and for the balanced rhythm of the whitewashed walls drained harmoniously by the empty spaces. The main constructive technique in the Brazilian popular architecture is still the “pau-a-pique”, which is constituted of wood bars covered of wet earth. Stone and whitewash walls were used only in the most important residences and in the monuments.

In the beginning of the 18th century, Vila Rica formed an architectural seatle of baroque style, constituted by white colour walls covered by ceramic tiles, harmoniously integrated with the topography and the surrounding nature.

In the religious architecture the Portuguese influences were assimilated, adapted and reformulated. In the beginning, the traditional conception of the first Brazilian Baroque style was adopted in Minas Gerais with rectangular plants and plane facades. Later, these facades were changed in curved formats and the heavy and robust proportions gave place to a larger lightness and harmony buildings. The curved plants
and facades had strong influence of Borromini and German Baroque styles. The sumptuousness of the inside ornaments of the churches complete and accentuate the monumental aspect and the singular character of the religious architecture.

Another peculiar aspect of Minas Gerais history, comparing to other Brazilian areas, was the prohibition to install regular religious orders in its territory. This fact explains the lack of schools and convents in the urban landscape of the mining colonial cities.

The neoclassicist’s premises in Vila Rica were first applied in the old House of Camera and Chain and later in the existent residence constructions and monuments, respecting its scales and old addings.

The first decline of the city happened at the end of the 18th century, with the exhaustion of the gold mines and the crisis of provisioning, resulting an strong economic decadence and in the demography emptying from the old Vila Rica.

On March 20th, 1823, Vila Rica received the title of Imperial City of Ouro Preto, maintaining its function of capital of the province of Minas Gerais.

The following decades and in the 19th century, Ouro Preto was modernized with urban expansions in Pilar Quarter in direction to Barra Quarter, besides the fixing of the railroad, of the telephony infrastructure, telegraph and illumination, as well as nets of water and sewer.

Several buildings of the colonial period were reformed and replaced for others, of neo-classic or eclectic taste. The main church of Pilar Quarter had its facade totally reformed between 1848 and 1852. The San Francisco de Paula’s church was built in 1804 and was reformed in 1878, under neo-classical influence.

At that time, urban interventions were accomplished, fixing boulevards of classic taste and also appearing constructions of neo-classical facades with iron counters.

The inauguration of the rail station (1889) and the creation of the Pharmacy’s School (1839), the Minas Gerais Lycée (1854), and the School of Mines were of great economic and social importance for the development of Ouro Preto in the 19th century.

With the proclamation of the Republic, in 1889, the image of the imperial city of Ouro Preto was revealed inadequate for the positivist purposes and for the scientifical rationality of the republicans’ ideals.

The change of the capital from Ouro Preto to Belo Horizonte, in 1897, produced an exodus of almost 50% of the population, provoking physical and economical damages to the city, characterizing its second decline process. As well as other historical cities, Ouro Preto preserved its physical and formal integrity because of the removal of the development that stimulates urban renewals.

In the beginning of the 20th century, the press had alerted about the abandonment of the cultural heritage of Minas Gerais and about the need of actions for its preservation. Starting from the twenties,
Ouro Preto begins to be visited by modern urbanists and architects as Lúcio Costa and Oscar Niemeyer, by poets as Cecília Meirelles and Carlos Drummond de Andrade, inspiring modernists like Mário de Andrade to classify the city as one of the most important bases of the national identity. Still in the twenties, several law projects were elaborated for the protection of the Brazilian historical and artistic heritage and, on July 12th, 1933, the Law-Decree 22.928 was promulgated leading Ouro Preto to National Monument. In 1937, at Gustavo Capanema’s administration in the Education and Health Ministry, the National Historical and Artistic Heritage Service (SPHAN) was created, and in 1938 it promoted the integral recording of Ouro Preto.

In 1950, the installation of ALCAN enterprise (Aluminium of Brazil Limited), close to Ouro Preto, impelled the metallurgical and mining activities, provoking the growth of the population and the demand for new houses in the city. Such facts directed SPHAN to elaborate the first rules for approval of constructing projects, starting to recommend the traditional architectural elements of the colonial period, creating popularly architecture well known as “heritage style”.

The decade of 60 presented important alterations for the life of Ouro Preto, like the creation of the Federal University of Ouro Preto (UFOP) and the asphalting of the highway that links it to the capital of the State, Belo Horizonte. On that decade, fast urban transformations alerted the national public opinion and they stimulated public organisms to develop plans for the protection of the cultural heritage of Ouro Preto.

In the following years, successive attempts of cultural and environmental preservations and purposes of zoning were applied without solutions in the city and its surroundings. In September of 1980, Ouro Preto was declared as Cultural Heritage of the Humanity by UNESCO. Later, three state units of conservation in the surroundings were created: the State Park of Itacolomi, the Ecological Station of Tripuí and the Area of Environmental Protection (APA) of the Cachoeira das Andorinhas (Waterfall of the Swallows).

Successless, the settlement of the Addressing Plan proposed in 1996 constituted one of the county government’s last initiatives in order to put together the urban development of the city with the protection of its cultural and environmental heritage.

The architectural and urban group of Ouro Preto has 45 monuments recorded separately and approximately a thousand constructions recorded together. The lines and the colours of its architecture are contrasting and they complement with the profiles, the textures and tonalities of the surrounding hills. According to Sylvio de Vasconcellos, in Ouro Preto the constructions marry the topography perfectly, accentuating its contours, the colours and the forms of the roofs, confusing itself with the proper soils, its crests, looking like large nails or changing the natural foothills.

1.4 The city at the present time

Ouro Preto has a chaotic traffic, without an organized road system plan, with precarious traffic signals system and lack of areas for parking. There are few and an insufficient restrictions for traffic and the circulation of heavy vehicles is causing physical damages to the traditional structures of its stick-to-pricks, stone and adobe. A project for systemising the traffic was developed by the Monumenta/BID Program and it needs to be implanted with urgency.

The city also suffers a process of destruction of recurrent and temporary nature, with the realisation of megaevents at Tiradentes Square, without any planning or study of environmental impact.

Most of the protected properties are in reasonable conservation state and with compatible uses with their structures. The main problems are about compression, alterations of the internal spaces, replacing of materials and of the original constructive systems. There is a large demand of increments, addictions and reforms, besides numberless irregular constructions. About a hundred processes against irregular behaviours are registered in the State and Federal public ministries. Another problem of difficult solution is said in despite of the fund subject, with the existence of ownerships and lands without owners, as well as many irregular division of urban portion.

Data of the IBGE, the official national statistic searching foundation, has already demonstrated that, if in 1970 the portion of the Brazilian population that occupied the cities in Brazil was about 50%, in the eighties, that value arose for almost 70% in 1990, and the urban population reached 77% of the total population of Brazil.

Attracted by non-existent, precarious or insufficient urban employments and services, large contingent of low income population, without means to survive in the country areas, has been more and more concentrated in the cities of medium and big loads. An approached scenery of the problems can be designed adding the rural exodus, the demographic explosion and the housing deficit, among other historical factors. It concerns the challenges related to the urban planning of any size of cities in Brazil at this so early century: the proliferation of slums and settlements on irregular urban portions, the lacking of basic infrastructure, the deterioration of urban environment, and the saturation of transport system, among others.

Through urban indexes, it has been verified the unequivocal perpetuation of a development model that concentrates opportunities, socialising the damages and the problems while it turns benefits private.
Ouro Preto has known, during the last decades, a fast process of total disordered growth, characterised by the occupation of its hills and lands located in life risk areas, the invasion of public spaces and green areas and even archaeological sites. The normative demands of projects, the latent fire loads, the surveillance and the existent systems of protection against the fire are precarious. The actual possibility of a reaction in chain, provoking fires of great proportion in the heritage architectural is a cruel reality. It has been contributing to deteriorate the life quality in the Ouro Preto, besides changing the face of the environmental surroundings and of the architectural group declared Cultural Heritage of the Humanity (Figs 3 and 4).

UNESCO organised a mission of technicians of the World Heritage Centre to come visit Ouro Preto in April 2003, in order to list the existent problems and to identify, in co-ordinated action with the several spheres of the public power, the necessary measures to stop the alarming deterioration of its environment and its built seatle, which is provoking substantial changes in the historical landscape of the city.

A plan for the recovery of the cultural and environmental heritage of Ouro Preto means wide and diversified initiatives. It must contemplate actions in historical and archaeological research, for preventive maintenance of the cultural and environmental heritage. That task is immense and it can generate some hundreds of permanent jobs in the county, also contributing to the increase of the tourism and for the dynamical action of the regional economy. Only a collective action among the Municipal, State and Federal governments can remove Ouro Preto from its disordered and self-destructing expansion process, in order to replace the city on the way to the development over preservation patterns.

In that sense, some effective initiatives and purposes have being taken and, among them, it must be underlined the creation of an Architecture and Urban Studies course by the Federal University of Ouro Preto (UFOP), addressed to the preservation of cultural memories.

2 THE ARCHITECTURE TEACHING PROGRAM

The Brazilian Association of Architecture Teaching (ABEA) is working since 1989, on the settlement of a national politics for the establishment of profiles and patterns that assure the architecture professional’s qualification in the depth of the social challenges related to the current process of globalisation.

The general curricular guidelines have for main goal the qualification of the students that will be graduated in courses recognised by the Ministry of Education for the professional exercise. It must provide to the future Architect the essential domain of the necessary matters to their performance, guaranteeing an unique qualification and strengthening their specialised knowledge, without losing the notion of group of problems of the architecture and urbanisation and their relationships with the society.

The purpose of structuring the Architecture Course in Ouro Preto is according to an old and wished institutional aspiration, within the growing social demand for professionals of the territorial planning. According to the intrinsically multidisciplinarity of the academic formation and to the architectural professional practices, this course has been constructed with a vigorous potential of articulation of the several knowledge areas, gradually implanted in UFOP, especially in the last decade.

On the other hand, the formation of a critical mass in this professional area, that congregates slopes of the arts and of the applied sciences, represents significant depth of the institutional relationships between the academy and the society, the production of the city and the destinies of Ouro Preto. This double inside
and outside articulations punctuate clear perspectives of inserting UFOP and the city in the national and international subjects concerning the urban planning, the cultural heritage, the natural and built environment, the daily life quality, the renewed technological procedures in the civil construction, the aesthetic potential of our works, among others.

This course, proposed by the Escola de Minas (School of Mines) – UFOP, far away from representing just one more Architecture Course in Minas Gerais, have special characteristics in Brazil, as far as it proposes integral professional formation with two inside emphases in “Conservation and Restoration of Buildings” and in “Metallic Constructions”. It assists to peculiarities and historical potentials of the area, which are the important architectural sets of the mining colonial cities and other Brazilian historical nuclei, besides the traditional participation of Minas Gerais in the national metallurgy development.

The subject of the cities’ planning and administration should necessarily be a permanent subject of discussion inside public institutions and, particularly, in those dedicated to higher education. If the universities cannot be away from that mission, it is necessary to underline the important role that fits to UFOP in order to carry out this reflection and, above all, the formation of professional staffs, considering the most significant presence of this institution in the life of the community where it interferes. In this context there is a great need of performance of the very different professionals affected to the city planning, especially of the Architect and Urban Planning.

Base of the Brazilian colonial architecture, inspiring centre of the arts and strong pole of culture, science and technology, Ouro Preto has always been fertile source of professionals to the country. With all its tradition, UFOP has contributed, all along its history, with the formation of professionals in important areas, like mineral extraction, its transformation in steel plants, civil big works (highways, hydroelectric dams, airports) and, more recently, in the tourism. This concentrated know-how strengthens still more the credibility and the potential necessary for the creation of the Architecture Course, as well as the certainty of the success and of the benefits that will come from such academic enterprise.

3 CONCLUSIONS

Through a systemic research of the social, natural and architectural parameters it is easy to conclude that Ouro Preto suffer an accelerated process of complete decline. However, it’s necessary and it’s still time to save this historical monument from several types of actions. The collective action among the national and international public powers can still avoid its entire destruction and place it on the way to the solemnity-sustainment. Besides, the settlement of an University Architecture and Urban Studies Course in the city will provide the teaching and the researching activities for the production of the city based on the preservation of the architectural, natural and cultural heritages, in order to promote a based critical context. This demand is about secular and the national and international organisms are about to unify their efforts in order to make possible the settlement of this Course in Ouro Preto. The supports can be financial or through institutional agreements.

A good example was given by UNESCO that highlighted: “One good news is the next opening of the career of Architecture and urbanism, with emphasis on the protection of the cultural heritage, in the Federal University of Ouro Preto (UFOP). In addition, the university, in collaboration with the Historical and Artistic Institute of Patrimony (IPHAN), developed a Continued for Education Project for the sustainable preservation of the cultural heritage, available to the entire community of Ouro Preto” (Paris, 2003).

REFERENCES


