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## Urban Trees and Urban Environmental History in a Latin American City: Belo Horizonte 1897-1964\*

### **Regina Horta Duarte**

n the morning of 20 November 1963, the inhabitants of the city of Belo Horizonte – capital of the state of Minas Gerais, Brazil – passing along the city's principal thoroughfare, the Avenida Afonso Pena, had a great surprise. During the previous night, the Mayor's office had started felling the 350 leafy ficus trees that stood along the avenue's



three-kilometre length, without having given previous notice or consulted either the public or the municipal legislative bodies.

The leafy view of the Avenida Afonso Pena had become a postcard symbol of the city.<sup>1</sup> The trees had been planted in 1910, in accord with an urbanistic conception seeking to integrate town and country. Belo Horizonte, founded in 1897 in south-eastern Brazil, had been designed after European models of what should constitute a "civilized" city in terms of sanitation and hygiene.<sup>2</sup>

Curiously, the felling of the trees in the Avenida Afonso Pena was not an isolated act of change in the city's environmental policy. During those months and throughout the 1960s, the widening of many other thoroughfares required the removal of the original trees, as the number of motor vehicles in Belo Horizonte – and the whole of Brazil – grew alarmingly.<sup>3</sup>

<sup>\*</sup> This study was supported by grants from Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG), Belo Horizonte, Brazil, and Conselho Nacional do Desenvolvimento Científico e Tecnológico (CNPq), Brasília, Brazil.

<sup>1</sup> O. Dias Filho, *Belo Horizonte: Bilhete Postal*, Fundação João Pinheiro, Belo Horizonte 1997; V.C. Nova, "Álbum de Postais", in *Autêntica*, R.P. Arruda (ed.), Belo Horizonte 2003, pp. 167-174; C. Castro, L. Dulci, *Belo Horizonte, Circuito da Memória 1897-1997*, PBH, Belo Horizonte 1997.

<sup>2</sup> On Belo Horizonte as a planned city, see: R.H.A. Silva, *A Cidade de Minas*, Master Dissertation, Universidade Federal de Minas Gerais, Belo Horizonte 1991; A. Barreto, *Belo Horizonte, Memória Histórica e Descritiva*, Fundação João Pinheiro, Belo Horizonte 1995; C.F.B. de Mello, "A noiva do trabalho, uma capital para a República", in *BH: Horizontes Históricos*, E.R.F. Dutra (ed.), C/A Editora, Belo Horizonte 1996, pp. 11-48; L. Julião, *Belo Horizonte: Itinerários da Cidade Moderna: 1991-1920*, Master Dissertation, Universidade Federal de Minas Gerais, Belo Horizonte 1992; M. Siqueira, M.A. Faria, *Belo Horizonte: O Fértil Solo Humano*, Salamandra, Rio de Janeiro 1997; B.H. Prefeitura, *Cenas de um Belo Horizonte*, Secretaria Municipal de Cultura, Belo Horizonte 1995.

<sup>3</sup> R.H. Duarte, N.S. Ostos, "Entre Ipês e Eucaliptos", in *Nómadas*, 22, 2005, pp. 74-85; C. B. Lemos, "Belo Horizonte nas Décadas de 40/50 e o Impacto da Pampulha", in *Igreja da Pampulha: Restauro e Reflexões*, M. Castro, S. Finguerut (eds), Petrobrás, Belo Horizonte 2006; R.L.M. Montemór, "Metropolização, Meio Ambiente e Qualidade de Vida", in *Belo Horizonte: Espaços e Tempos em Construção*, R.L.M. Montemór (ed.), CEDEPLAR-PBH, Belo Horizonte 1994, pp. 79-93; H.S.M. Costa, "Natureza, Mercado e Cultura: Caminhos da Expansão

The cutting down of the lush old ficus trees in the Afonso Pena was widely debated in the press, where it was bemoaned as a negative example of modern decadence or applauded as a courageous act in the service of the future, criticized as an arbitrary measure by the Mayor's office or defended as a decisive act by responsible authorities. It was regarded with nostalgia by those who had been wont to seek the comfort of their shade, or relief by those who had been tormented by the insects, the thrips, that had infested in the trees in the early 1960s. The relationship of humans with their environment cannot be dissociated from the relationships that exist among themselves, and the polemic over the cutting down of the ficus certainly had emotional, social, and above all, political implications.<sup>4</sup>

By the 1960s, the call for development had become widely accepted, and almost uncontested, even among sections of the Left, emerging as a sort of magic formula common to the most diverse political tendencies, and dominating all of them.<sup>5</sup> Under the influence of this political climate, Belo Horizonte witnessed a change it its initial urbanistic conception. Asphalt and concrete started to dominate public plans for urban improvement, both appearing as heralds of progress in a society replete with contradictions and marked by disordered urban growth.

It is also important to look at the city of Belo Horizonte within the broader context of the problems faced by several other Latin

Metropolitana de Belo Horizonte", in *População, Espaço e Gestão na Metrópole*: *Novas Configurações, Velhas Desigualdades*, J.G. Mendonça, M.H.L. Godinho (eds), PUC-MINAS, Belo Horizonte 2003, pp. 159-172; H. Shapiro, "A Primeira Migração das Montadoras: 1956-1968", in *De JK a FHC, a Reinvenção dos Carros*, G. Arbix, M. Zilbovicius (eds), Scritta, São Paulo 1977, pp. 23-87.

<sup>4</sup> Those were years of great tension. In March 1964, a military *coup d'état* inaugurated a period of truculent dictatorship. The military continued in power until 1985, when the first election for president of the Republic since 1960 was held. H.M. Starling, *Os Senhores das Gerais: Os Novos Inconfidentes e o Golpe de 1964*, Vozes, Rio de Janeiro 1982; B. Fausto, *História do Brasil*, Edusp, São Paulo 2004, pp. 463-513; J.M. Carvalho *Desenvolvimiento de la Ciudadanía en Brasil*, Fideicomiso Historia de Las Américas, Mexico 1995, pp. 117-128.

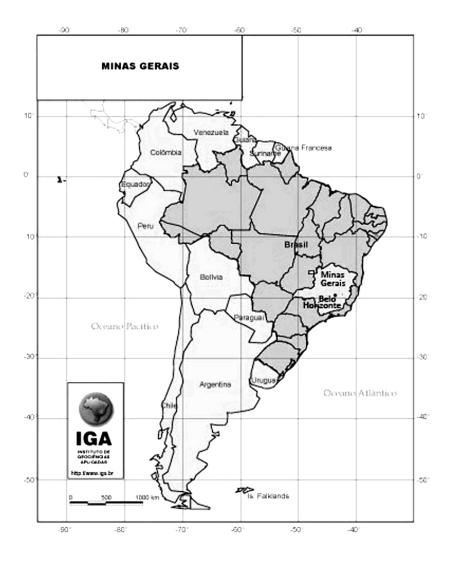
<sup>5</sup> A. Escobar, *Encountering Development, the Making and Unmaking of the Third World*, Princeton University Press, New Jersey 1995, pp. 55-101. American cities at the time. Throughout the 20<sup>th</sup> century, the history of Latin America was, among other things, also the history of an impressive urbanization process. If up to the 1930s Latin America remained predominantly rural, the following decades witnessed impressive urban growth. Cities became the axis of economic and demographic life. This transformation was beset with numerous tensions and latent contradictions, generating great social disparities and serious urban problems that subsequently became evident.<sup>6</sup>

Urban environmental history has emerged as a promising field of analysis for researchers seeking ways to cope with the major challenges we are facing today. This new focus should take into account social, cultural and political history. The idea of the city as an organic, self-contained whole is definitely on the way out. New approaches are coming to the fore, which look at cities' historical dynamism and their interactions with other cities and regions<sup>7</sup>, including rural areas or forests. Latin America, where political, social, and environmental issues are closely intertwined, is ideally suited for such interdisciplinary analysis.<sup>8</sup> The present work is intended as a contribution to the urban environmental history of Latin America.

<sup>6</sup> V. Bulmer-Thomas, "As Economias Latino-Americanas, 1929-1939", in *História da América Latina*, L. Bethel (ed.), Edusp, São Paulo 2005, pp. 19, 71-76; R. French-Davis, O. Muñoz, J.G. Palma, "As Economias Latino-Americanas, 1950-1990", in Bethel, *História da América Latina* cit., pp. 129-135, 143-150; A. Gorelik, *Das Vanguardas a Brasília: Cultura Urbana e Arquitetura na América Latina*, Editora UFMG, Belo Horizonte 2005, pp. 15-49; P.M. Hauser (ed.), *Urbanization in Latin America*, Columbia University Press, New York 1961; R. Morse, "A Framework for Latin American Urban History", in *Urbanization in Latin America: Approaches and Issues*, J.E. Hardoy (ed.), Anchor Press, Garden City 1975, pp. 57-108; A. Quijano, "The Urbanization of Society in Latin America", in *Economic Bulletin for Latin America*, XIII, 2, 1968, pp. 76-93; J.E. Hardoy, C. Tobar, *La Urbanizacion en America Latina*, Editorial del Instituto, Buenos Aires 1969.

<sup>7</sup> M.V. Melosi, *Effluent America: Cities, Industry, Energy, and the Environment,* University of Pittsburgh Press, Pittsburg 2001, p. 3; A.C. Isenberg, *The Nature of Cities,* University of Rochester Press, New York 2006, p. xii.

#### Figure 1. Belo Horizonte, Capital of Minas Gerais State, Brazil. Minas Gerais Government, www.iga.br, version by M.H. Ribeiro



### An avenue and its trees

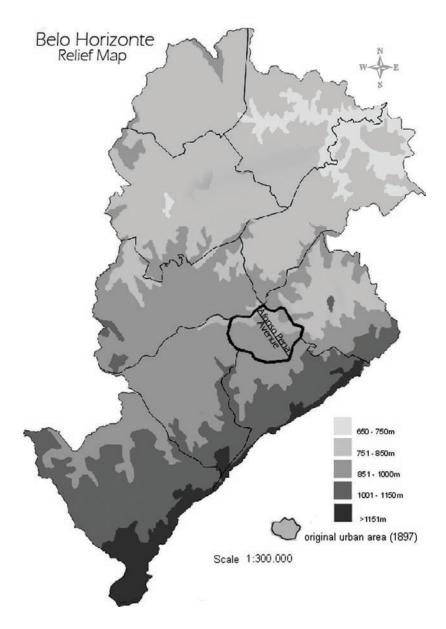
Belo Horizonte was founded to replace Ouro Preto, the former capital of Minas Gerais, one of the states in Brazil (Figure 1). Throughout the 18<sup>th</sup> century, the region of Minas – originally covered with tropical forests and *cerrado* (subtropical savanna), with numerous hydrographic basins and extensive hilly terrain – was a prodigious source of gold and precious metal for Metropolitan Portugal. In the course of the 19<sup>th</sup> century it became predominantly rural, with a strong incidence of slave labour, agriculture, cattle raising and textile production, as well as mining, albeit at lower levels of production than before.<sup>9</sup>

The Brazilian Republic was proclaimed at the end of the 19<sup>th</sup> century by military groups who were strongly influenced by the positiv-

<sup>8</sup> On Latin American urban environmental history, see: L. Sedrez, *The Bay of All Beauties, State and Environment in Guanabara Bay, Rio de Janeiro, Brazil, 1875-1975,* University Microfilms, Ann Arbor (MI) 2005; R.L. López (ed.), *Perfiles Habitacionales y Condiciones Ambientales: Historia Urbana de Latinoamérica Siglos XVII-XX,* Benemérita Universidad Autonoma de Puebla, Mexico 2007; S. Gallini, "Historias Desechables: Notas Preliminares para una Historia de la Basura en América Latina. El Caso de Bogotá, Colombia", in *Historia Ambiental e Cultura da Natureza: Libro de Resumenes IV Simposio SOLCHA*, Belo Horizonte 2008, p. 196; J.A.O. Osorio, *El Río Tunjuelo en la Historia de Bogotá, 1900-1990,* Alcaldía Mayor de Bogotá, Bogotá 2007; M.L. Ayala, E. Jimenez Huerta, "Ciudad y Periferias: Guadalajara, 1542-2004", in *Carta Económica Regional,* 17, 91, 2007, pp. 3-9.

<sup>9</sup> On Minas Gerais economy in the 18th and 19th century, see: R. Martins, Growing in the Silence, the Slavery Economy at Minas Gerais in the Nineteenth Century Brazil, PhD Thesis, Vanderbilt University, Vanderbilt 1980; D.C. Libby, Transformação e Trabalho em uma Economia Escravista: Minas Gerais no Século XIX, Brasiliense, São Paulo 1988; A. Lenharo, As Tropas da Moderação, Símbolo, São Paulo 1979; M.M. Godoy, No País das Minas de Ouro, a Paisagem Vertia Engenhos de Cana e Casas de Negócios, PhD Thesis, Universidade de São Paulo, São Paulo 2004; A. Martins, R.B. Martins, "Slavery in a Nonexport Economy: A Replay", in Hispanic American Historical Review, 64, 1, 1984, pp. 135-146; C.A. Paiva, População e economia nas Minas Gerais do século XIX, PhD Thesis, Universidade de São Paulo, São Paulo 1996. Some of the analysis in the present article has appeared earlier in R.H. Duarte, "À sombra dos ficus: sociedade e natureza em Belo Horizonte", in Ambiente e Sociedade, X, 2, 2007, pp. 25-44.

### Figure 2. Belo Horizonte Relief Map. Prefeitura de Belo Horizonte, www.portalpbh.gov.br, version by M.H. Ribeiro



ist philosophical ideals of Auguste Comte.<sup>10</sup> A project for the construction of a new capital was subsequently begun in Minas Gerais, to replace the Baroque city of Ouro Preto.

The site chosen for the new capital was in a region that up to then had been agricultural, with only a small settlement called Curral del Rey, carved out at the start of the 18th century in the São Francisco River basin.<sup>11</sup>

Belo Horizonte is surrounded by segments of the Espinhaço range, principally the Serra do Curral, with altitudes varying between 1000 and 1390 metres above sea level. According to Aarão Reis, the engineer who was mainly responsible for the initial project of the new capital, in 1895 the selected site had the "pleasant appearance of a vast amphitheatre, open to the east, as if to immediately receive the beneficial glow of the sun's rays", and with the Serra do Curral artistically framing its southern horizon (Figure 2).<sup>12</sup> Hence the name chosen for this model republican city, which means "Beautiful Horizon".

Belo Horizonte lies at latitude 19°55' south and longitude 43°56'

<sup>10</sup> J.M. Carvalho, "Brazil 1870-1914: The Force of Tradition", in *Journal of Latin American Studies*, 24, 1992, pp. 145-162; M.C. Eakin, *Brazil, the Once and Future Country*, Palgrave Macmillan, New York 1999, pp. 7-67; R.A. Hayes, *The Armed Nation: The Brazilian Corporate Mystique*, Center for Latin American Studies, Arizona State University, Tempe 1989; B. Fausto, "Brazil: The Social and Political Structure of the First Republic, 1889-1930", in *The Cambridge History of Latin America*, L. Bethel (ed.), v. 5, Cambridge University Press, Cambridge 1986, pp. 779-829; E.V. da Costa, "Brazil: The Age of Reform: 1870-1889", in *The Cambridge History of Latin America* cit, v. 5, pp. 725-777.

<sup>11</sup> Prefeitura de BH, *Anuario de Belo Horizonte*, PBH/Arquivo Público da Cidade, Belo Horizonte 2003; P.E. James, "Belo Horizonte e Ouro Preto: Estudo Comparativo", in *Boletim Geográfico*, 4, 48, 1952, pp. 1598-1609; M. Lucena, J. Gouthier, *Belo Horizonte: de Curral del Rei a Capital Centenária*, FTD, São Paulo 1996, pp. 42-49; J.P. Ferreira, *Enciclopédia dos Municípios Mineiros*, IBGE, Rio de Janeiro 1958, pp. 150-183.

<sup>12</sup> A. Reis, *Revista Geral dos Trabalhos da Commissão Constructora da Nova Capital*, Lombaerts e Cia, Rio de Janeiro 1985, p. 21; T.L. Pontes, R.A. Pinto, *Álbum de Belo Horizonte*, Weiszflog Irmãos, São Paulo 1911, p. 49. On the social representations built around mountains in the planning of cities and the reorganization of states and societies, see S. Schama, *Paisagem e memória*, Companhia das Letras, São Paulo 1996, pp. 401-412. west. Its average altitude is 850 metres above sea level. Two streams traverse the city: the Arrudas and the Onça, which together receive a total of 56 tributaries, the majority of which were canalized in the course of the city's history. The original vegetation cover is *cerrado* (subtropical savanna). The climate is semi-humid subtropical, with a dry season from March to September and a rainy season from October to February.

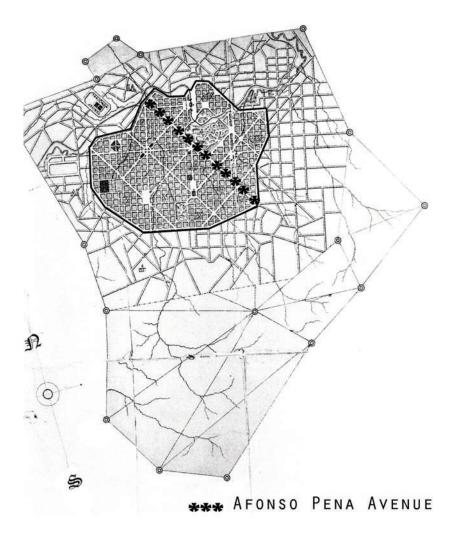
Unlike the colonial city of Ouro Preto, with its narrow, winding streets and lack of vegetation, the new city was to be modern and rational, constructed in straight lines and right angles, with wide pavements for pedestrians, avenues, parks and squares, and ample spaces planted with trees. The native mestizo population, looked down upon by the élite as racially inferior, was expelled from the more central sectors through land disappropriation; a movement which tended to be counterbalanced by an intense influx of immigrants, with an overwhelming preponderance of Italians.

The plan of the committee for the construction of the new capital had a segregationist effect, splitting the city into a central urban zone (whose axis was the Afonso Pena Avenue<sup>13</sup>), a suburban zone and a rural area (Figure 3). People and dwellings were thus divided according to a clearly defined hierarchy of space. The poor population lived in the suburban area, regarded as dangerous and unhealthy, with its landscape of low woodland interspersed with humble shacks, forming, almost as if in counterpoint, a non-city vis-à-vis the planned central spaces, and reflecting a spatial exile consistent with exclusion from the exercise of effective citizenship.<sup>14</sup>

<sup>13</sup> Afonso Pena was governor of the State of Minas Gerais between 1890 and 1894, the period when the decision was taken to change the capital, which up to then had been Ouro Preto. The site of present-day Belo Horizonte was chosen, although several cities coveted the honour. Subsequently, from 1906 to 1909, Afonso Pena was president of Brazil. F. Koifman, *Presidentes do Brasil*, Cultura, São Paulo 2002, pp. 124-149; R.H.A. Silva, "Belo Horizonte, o que marca sua singularidade", in *Álbum de Belo Horizonte* cit., pp. 145-154.

<sup>14</sup> J.M. Carvalho, A Formação das Almas, Companhia das Letras, São Paulo 1990, pp. 29-30; L. Julião, "Belo Horizonte", in BH: Horizontes Históricos cit., pp. 49-118; de Mello, "A noiva do trabalho" cit., pp. 11-47; M.M. Le Ven, Classes

## Figure 3. Original City Plan of Belo Horizonte, 1895. Archive of the City of Belo Horizonte, version by M.H. Ribeiro



The engineers who built Belo Horizonte were inspired by the concept of "garden city" formulated by the English urbanist Ebenezer Howard (1850-1928). The new capital was to have a limited number of inhabitants living in an area surrounded by a green agricultural belt. The idea was to allow greater organic integration of the functions necessary to human agglomerations, bringing together urban and rural values, and above all emphasizing the presence of nature within the city itself. To this end, a political structure was set up in which the power of public authorities was to be strong enough to control and maintain the land, plan the city and its buildings, and offer basic services.<sup>15</sup> These ideas were interpreted very selectively by the founders of Belo Horizonte, who organized agriculture in the surrounding area to produce supplies for the city – which had been planned for a projected population of 200 thousand inhabitants and centralized the decision-making process by restricting it to the municipal authorities. In spite of these limitations, Belo Horizonte's many squares and gardens did guarantee decent hygienic conditions and fresh air, generating an organic and rational balance in a city where views of straight tree-lined streets and avenues were intended as a means to refine the moral and aesthetic sense of its inhabitants.

Several of Howard's principles were indubitably disregarded, or even corrupted by the application of a more superficial and purely aesthetical perspective. The "importation" of ideas by the Committee for the Construction of the Capital – composed of several engineers and public officials – occurred in a political context where effective exercise of citizenship was limited to the upper classes. Thus, imported ideas were "adapted" to accommodate the interests of the dominant oligarchy, thereby acquiring a very specific local character.<sup>16</sup> The organicist conception of the city harmonized with

#### *Sociais e Poder Político na Formação Espacial de Belo Horizonte,* Master Dissertation, Universidade Federal de Minas Gerais, Belo Horizonte 1989.

<sup>15</sup> L. Mumford, *A Cidade na História*, Itatiaia, Belo Horizonte 1965, pp. 653-663; V. Chacham, "A Memória Urbana entre o Panorama e as Ruínas", in Dutra, *BH: Horizontes Históricos* cit., pp. 183-237.

<sup>16</sup> On exclusion from effective citizenship in the first decades of the Republic in Brazil, see: J.M. Carvalho, *Os Bestializados, o Rio de Janeiro e a República que não foi*, Companhia das Letras, São Paulo 1987; M.E.L. Resende, "O Processo Político na Primeira República e o Liberalismo Oligárquico", in *O Brasil Republicano*, J. Ferreira, L.A.N. Delgado (eds), v. 1, Civilização Brasileira, Rio de Janeiro the elites' desire to obscure power relations. Even the establishment of green sectors reflected the same logic of exclusion that informed the urban project as a whole: very soon, in the first decades of the city's life, a decree prohibited the insane, the unshod, the destitute, or anyone not wearing clothing regarded as decent from loitering in, or passing through, public gardens, squares and parks.<sup>17</sup>

This was certainly not an isolated case in the Latin American continent during those years. From the second half of the 19th century onward, cities with plenty of trees stood as models of the greatness of European civilization and were hence copied by societies aspiring to a new social order. Paris was the principal inspiration. Parisian landscapes were a decisive influence on urban reforms in Havana, Lima, Santiago, Rio de Janeiro, Buenos Aires and La Plata, as well as Belo Horizonte,<sup>18</sup> where the main avenue, the Afonso Pena, was patterned after the Champs Elysées.

Thus, the main streets of Belo Horizonte were bordered with greenery, an important element in perceptions shared by many of the capital's inhabitants. Urban trees were invested with heritage status. The image of the garden city gained strength in the course of Belo Horizonte's history, becoming a recurrent motif, regularly evoked by writers, poets, visitors, and newspapermen.<sup>19</sup> The literature on Belo

2003, pp. 89-120. Several Brazilian researchers amply discussed the question of the "importation" of ideas and their application in Brazilian lands in different senses than they had in their original countries. See, principally, M.S.C. Franco, "As idéias estão no lugar", in *Cadernos de Debate*, 1, 1976, pp. 71-74.

<sup>17</sup> Decreto 10, 24/06/1925, *Decretos e Leis Municipais de Belo Horizonte*, Imprensa Oficial de Belo Horizonte 1899-1963.

<sup>18</sup> H.W. Lawrence, *City Trees: A Historical Geography From the Renaissance Through the Nineteenth Century*, University of Virginia Press, Charlottesville 2006, p. 251; R. Segre, "Havana from Tacón to Forestier", in *Planning Latin America's Capital Cities*, A. Almandoz (ed.), London, Routledge 2002, pp. 193-213; G. Ramón, "The Script of Urban Surgery: Lima 1850-1940", in Almandoz, *Planning Latin America* cit., pp. 170-192; J.A. Morosi, "La Plata: An Advanced Nineteenth-century New Town with Ancient Roots", in *Planning Perspectives*, 18, 1, 2003, pp. 23-46; J. Needell, "Making the Carioca Belle Époque Concrete: The Urban Reforms of Rio de Janeiro under Pereira Passos", in *Journal of Urban History*, 19, 2, 1984, pp. 383-422.

<sup>19</sup> Chacham, "A Memória Urbana entre o Panorama" cit., pp. 213-217.

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## Figure 4. Afonso Pena Avenue, circa 1920, and the backdrop of the Serra do Curral. Archive of the City of Belo Horizonte



Horizonte celebrated its peculiar landscape, reinforcing the "garden city" image – and here the concept gained a purely aesthetic focus. In 1920, one writer of chronicles described the capital as a "belvedere of the skies", planted with trees as "only paradise must be". One poet evoked its "enormous pools of shade", the "frightful struggle between forest and houses" as well as the cool silence of its trees shedding their leaves. Another, walking through the city of "so many trees", confessed with lyricism: "under each tree I make my bed, in each lawn I hang up my jacket".<sup>20</sup>

<sup>20</sup> J. do Rio, *Crônicas*, Bertrand, Lisboa 1920, pp. 99-110; M. de Andrade, *Poesias Completas*, Itatiaia, Belo Horizonte 1987, pp. 178-189; C.D. de Andrade, *Alguma Poesia*, Pindorama, Belo Horizonte 1930.

Official writings also emphasize such images as especially symbolic of Belo Horizonte; indeed, the notion permeates all the annual reports of the Mayor's Office, where the planting of trees is always given prominence as one of the administration's principal tasks, a means to preserve the city's landscape and urban identity. At the same time, the reports afford glimpses of an obstinate conflict between the ideal of a city of trees and the behaviour of part of the population who were constantly destroying saplings, fences and the trees themselves.<sup>21</sup>

As early as 1905, for example, the Mayor's report regretted the impossibility of guaranteeing policing of the actions of the "idle and vandals" who barbarously destroyed plants, trod down the grass and stole the saplings' protective stakes. To prevent such acts, the decision was taken to protect the trees with barbed wire. In 1937, the Mayor's Office indicated the city's own inhabitants as the most "atrocious enemy" of the greenery, whose "criminal hands" stole stakes and tore down saplings. In 1962, we find the same complaint about the difficulty of policing to prevent the "conscienceless actions of destroyers".<sup>22</sup>

These acts of vandalism reveal structural conflicts. By destroying precisely the little that they shared with the others, some inhabitants were expressing their resentment against a privilege enjoyed only by the better areas of the city, since the working class suburbs remained outside the range of public urban green policies. It is also important to remember that some of these actions were not wanton, but reflected the precarious nature of the living conditions of part of the population: the wooden fences and tree branches were prized as firewood for stoves in the more humble homes.

In this context, the trees of the Afonso Pena Avenue occupy a special place. At the dawn of the 20<sup>th</sup> century, hundreds of saplings of *Ficus benjamina* were planted along the avenue's whole length. This species, of Asian origin and much used in urban tree planting in sev-

<sup>&</sup>lt;sup>21</sup> Relatórios Anuais Apresentados pelos Prefeitos de Belo Horizonte, Imprensa Oficial do Estado de Minas Gerais, Belo Horizonte 1899-1969.

<sup>&</sup>lt;sup>22</sup> *Relatórios Anuais* cit., 1905, p. 25; 1906, p. 21; 1908, p. 26; 1937, pp. 61-148; 1962, p. 33.

eral Brazilian cities at the start of the  $20^{\text{th}}$  century, is characterized by strong, powerful and expansive roots, a thick trunk, generous foliage, a height of up to 20 metres and, above all, an extremely rapid growth rate. Furthermore, its foliage can be pruned to very homogeneous shapes, allowing various landscaping effects.<sup>23</sup> In Belo Horizonte, they were typically pruned in squared shapes to match the design of the streets. Although it was the tree preferred by the urbanists of the day, the choice of *Ficus benjamina* was also, in a sense, in contradiction with the original project's promise of clear thoroughfares allowing easy circulation. With the passage of time, the foliage increased and blocked off the light, and the trees' thick roots grew above and into the pavements, warping them and damaging underground piping. This problem already manifested itself in the first few decades after the foundation of the city, when the growth of the ficus trees presented the public administration with serious problems.

The trees transformed the Afonso Pena into a "tunnel thick with vegetation". Much of the fifty metres of its width was occupied by two parallel rows of leafy ficus, with their roots breaking up through and spreading over the pavement, making it bumpy and uneven, and their crowns intertwining to provide wide shaded areas for the people walking underneath. Over the years in which it established itself as an obligatory passage it became much more than a mere line on the map of the planned city: it evolved into a *lieu pratique*<sup>24</sup> by the residents of Belo Horizonte, who, as they walked along it, constantly reinvented it in a sense different from that imagined by the engineers who had designed it. Passers-by going their different ways at different times of the day infused life and new meaning into the Afonso Pena.

Just like the written word of poets and chronicle writers, photographic images also played a part in the symbolic definition of the avenue. Postcards showing the Afonso Pena became almost a rage in the first decades of the 20th century, consecrating specific view angles and making them almost mandatory, and thus establishing

<sup>&</sup>lt;sup>23</sup> G. Freyre, *Nordeste*, Record, Rio de Janeiro 1989, pp. 76-77.

<sup>&</sup>lt;sup>24</sup> M. de Certeau, *A Invenção do Cotidiano*, Vozes, São Paulo 2000, p. 179-216.

traditional vistas for citizens and visitors alike. Belying its pretended objectivity, photography creates interpretations of places.<sup>25</sup> In this case, rather than merely showing "what the Afonso Pena Avenue looked like", the postcards on sale at the newsstands of the city centre, as well as the photos appearing in the press, generated a common perception of this daily frequented space.

Some images of the avenue dating from the start of the century show the saplings protected by fences, already timidly casting small patches of shade in that vast empty space. Subsequent photos record the growth of the vegetation, evidently disciplined by the responsible authorities, who saw to the pruning of very low branches that might have interfered with pedestrian and possibly even tram circulation.<sup>26</sup>

In a photo of 1930, one clearly sees throngs of people around a tram shelter framed by the foliage of the rows of ficus. The picture suggests an interaction between the passers-by and the trees. Many congregate in their shade and around the shelter, and the tram cables are themselves swathed in foliage. Sunlight breaks through the crowns of the trees framing the picture. Photographs of the avenue from this period only show the people, the trees, and the street, merged as if in a friendly alliance. The architecture beyond the foliage remains hidden. In the present example, the photographer seems to want to include the viewer in the picture as one more passer-by at a time of great buzz and transit in the avenue (Figure 5).

On the other hand, while such views were immediately recognizable to habitués of the Afonso Pena, many postcards and photos offered a much less accessible perspective: a panoramic view taking in the whole avenue from the top of the Feira de Amostras, a building for agricultural and industrial exhibitions inaugurated in 1935. From there one could see the vast green carpet unrolling at the feet

<sup>25</sup> M.E.L. Borges, *História e Fotografia*, Autêntica, Belo Horizonte 2003, pp. 59-109; N. Shapochnik, "Cartões Postais, Álbuns de Família e Ícones de Intimidade", in *História da Vida Privada no Brasil*, N. Sevcenko (ed.), v. 3, Companhia das Letras, São Paulo 1998, p. 436; Arruda (ed.), *Álbum de Belo Horizonte* cit., pp. 14,149.

<sup>26</sup> Prefeitura de Belo Horizonte, *Cenas de um Belo Horizonte*, Prefeitura de BH, Belo Horizonte, 1994, pp. 83-112; Arruda, *Álbum de Belo Horizonte* cit., pp. 59-105.

## Figure 5. Afonso Pena Avenue, 1930. Archive of the City of Belo Horizonte, José Goes Collection



of the privileged observer, with the imposing Serra do Curral putting the finishing touch to the vista, allowing the viewer to rise above life "down there", where the common folk lived.<sup>27</sup>

In an image from 1949, when expectations regarding development were soaring high and Belo Horizonte already boasted its first skyscrapers, the trees in the Afonso Pena are still there, their dense foliage obligingly providing shade for the few pedestrians strolling down the thoroughfare at a quiet time of the day, and concealing what cars may be there. The photograph shows the vast green corridor extending as far as the foot of the mountain, a view that seems to epitomize the harmonious coexistence of progress and nature in

<sup>27</sup> de Certeau, A Invenção do Cotidiano cit., p. 170.

#### Figure 6. Afonso Pena Avenue, 1949. Archive of the City of Belo Horizonte, José Góes Collection



the "garden city". In this picture, however, the buildings are given prominence, and their shadows occasionally extend over the tops of the ficus, as if to signify the ongoing competition between concrete and greenery (Figure 6).

Over the decades, the coming and going of pedestrians created a great variety of appearances for the Afonso Pena. The most illustrious celebrities walked down it, including foreign politicians and Brazilian public figures. Soldiers returning from the war paraded along it, as did Miss Brazil 1961 and victorious football teams. All sorts of people crowded the trams rolling along it. Most of the principal buildings of the city stood along the avenue, replete with bureaus, surgeries, dental clinics, foreign language schools, and libraries. The Municipal Park with its 600,000 square metres of green extended right off the middle of the avenue (it is presently reduced to 180,000 square metres). There were cafés, cinemas, newspaper stands, bookshops, and all other sorts of shops, with their respective clienteles.  $^{\mbox{\tiny 28}}$ 

It is not just folks headed to work or school who went down the Afonso Pena, but also whoever wished to learn about the latest fashion, just loaf around, pick pockets, learn the result of a lottery or the score of a football match, go for a stroll, discuss politics, check out girls, witness a public meeting, go to mass at the São José Church, participate in air-raid alert drills during the Second World War, watch the Carnival, play jokes on students, or visit the Exhibition of Minas Gerais products. Political life gained special prominence there: a rough protest demonstration or strike meeting only made a real impression if it was held in the heart of the avenue, the Praça Sete (7 September Square). Previously called 12 October Square, the Praça Sete was given its new name when it gained an obelisk during commemorations of the centenary of Brazil's independence, on 7 September 1922. Trees surrounded the monument. The square soon became a veritable ancient Greek agora, a space for social politics, a meeting point for students and politicians of the most diverse tendencies and parties, writers, and enthusiastic orators, full of hope following the end of the New State dictatorship, in 1945.

An owner of many faces and a stage for many scenes, the Afonso Pena Avenue departed from its engineers' dream of a perfect city, but gained a life of its own during the time it was lived in, written about, photographed, visited, modified in its architecture, and reinvented in various ways. It became a shared landmark, a place of memories, and a *lieu pratiqué*. Its history went hand in hand with that of its leafy ficus trees, whose shade cooled passers-by, who felt the lyric appeal of the dense foliage as they walked on the pavement pierced by the trees' thick roots and littered with their small fruit.

<sup>28</sup> S.M.A. Ribeiro, O Espaço Público em Belo Horizonte, a Avenida Afonso Pena como Local de Manifestação, Master Dissertation, Universidade Federal de Minas Gerais, Belo Horizonte 2000; A. Coelho, "A Afonso Pena", in O Diário, Belo Horizonte 31/01/1963, p. 2; C. Aulicus, "A Afonso Pena", in Estado de Minas, Belo Horizonte 12/12/1989, p. 10; V. Carvalho, "Bate Papo com o Pirolito", in Anuário de Belo Horizonte, 1, 1, 1953, pp. 57-61.

#### The cutting down of the ficus trees

From 1940 on, Belo Horizonte changed remarkably. It was around this time that it started to call itself "the capital of Minas Gerais of iron". The city went through a process of industrialization and development, involving growing state action. The Minas Gerais elites gained prominence on the Brazilian scene. In the first decades of the 20<sup>th</sup> century, a project for a differentiated economy was drawn up, with the objective of rationalizing agriculture and cattle raising as a basis for industrialization. From 1951 to 1955, however, plans for specialization in production prevailed, in which the iron and steel industry played a leading role, prevailed. Industrial towns sprang up on the outskirts of Belo Horizonte, destroying its green agricultural belt. Several highways were built to connect the capital to other Brazilian cities more effectively.<sup>29</sup>

Throughout those years, deforestation in the state of Minas Gerais went on at a hectic pace. Firewood was the principal source of power, the iron or steel plants required an immense amount of charcoal, and slash and burn was still a common agricultural practice. It is calculated that in the total state area (588,400 km<sup>2</sup>) forestland was reduced from 47.8% in 1911 to 28.6% in 1950, 7% in 1960 and an alarming 2% in 1965.<sup>30</sup>

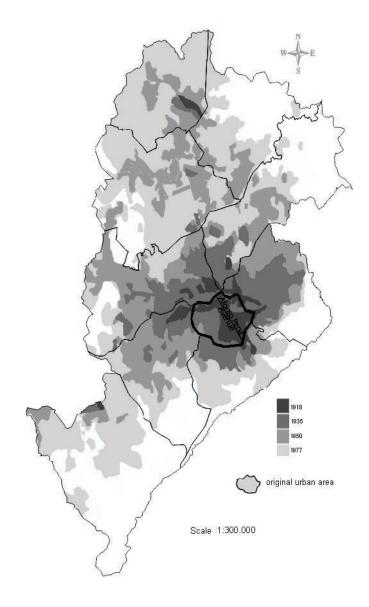
From 1950 on, the perimeter of the capital was one of the sectors most adversely affected by deforestation. Various factors contributed

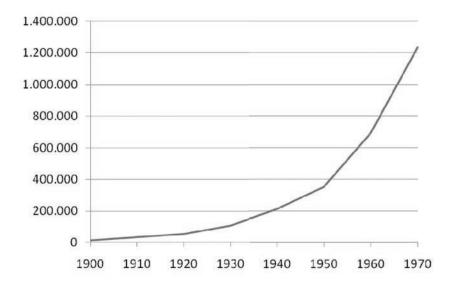
<sup>29</sup> O. Dulci, *Política e Recuperação Econômica em Minas Gerais*, Editora UFMG, Belo Horizonte 1989, pp. 93-105; J.M. Carvalho, "Ouro, Terra e Ferro: Vozes de Minas", in *Minas e os Fundamentos do Brasil Moderno*, Angela Castro Gomes (ed.), Editora UFMG, Belo Horizonte 2005, pp. 68-75; E. Eakin, *Tropical Capitalism, the Industrialization of Belo Horizonte, Brasil*, Palgrave, New York 2002, pp. 89-126; Office of the Coordinator for the Inter-American Affairs, *Belo Horizonte: A planned city with a plan*, vídeo, USA 1949 (available at http://br.youtube.com/ watch?v=0e2rUTPPxV4; http://br.youtube.com/watch?v=UODeUB65LSg&feat ure=related (part 1 and 2).

<sup>30</sup> W. Dean, A Ferro e Fogo, Companhia das Letras, São Paulo 2000, p. 291; Dulci, Política e Recuperação Econômica cit., p. 90; Duarte, Ostos, "Entre Ipês e Eucaliptos" cit., p. 80; "Notícia", in Estado de Minas, Belo Horizonte 19/09/1963, p. 11.

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Figure 7. Belo Horizonte Urban Expansion 1918-1977, Prefeitura de Belo Horizonte, www.portalpbh.gov.br, version by M.H. Ribeiro





# Graphic 1. Population Growth in Belo Horizonte, Brazil, from 1900 to 1970

Data of the Instituto Brasileiro de Geografia e Estatística, Brazil

to this, such as the foundation of the Industrial Park, migration, a population increase from 350,000 to 700,000 inhabitants in just ten years, the opening up of roads, the increase of civil building and the growth of slums (Figure 7, Graphic 1).

Deforestation was thus caused as much by the activities of the wealthy sector and the iron and steel plants' insatiable demand for charcoal as by the multiplication of the basic needs of the growing lower classes. The larger trees on the outskirts of the capital were always threatened with being converted into timber for cheap, flimsy construction, or charcoal. The city's disordered demographic growth went hand in hand with large-scale devastation of vegetation on its outskirts. The police were frequently called in to protect eucalyptus plantations from being ravaged by poor families. At that time, the minimum worker's salary was 21,000 cruzeiros (the currency of the time), while a cubic metre of firewood sold for 1600 cruzeiros.<sup>31</sup>

By the early 1960s, life in the capital had become very far removed from the situation idealized in the original catchword "garden city". The lack of urban planning in a context of such high population growth led to constant water shortage (due to the exhaustion of the nearest sources), a precarious organization of refuse collection, and poor sewerage. Some indexes leave no doubt as to the gravity of the situation: in 1962, Belo Horizonte totalled 886 deaths by gastroenteritis, gaining a shameful first place in Brazil. Since its population was of 800 thousand inhabitants, it thus attained an annual mortality rate from acute diarrhoea of 110 per 100,000 inhabitants.<sup>32</sup> In 1963, when the population had reached 900,000, 42,000 vehicles were licensed; there was, that is, approximately one car for every 21 inhabitants. By 1964 there were one million inhabitants and 50,000 cars. An estimated 200,000 people and 30,000 vehicles passed every day just on Afonso Pena Avenue. One of the preferred parking places was in the central spaces of the avenue itself, on the upper roots of the ficus, which ran almost parallel to the ground, and this certainly caused great damage to the trees.<sup>33</sup>

In those years, a very harmful insect pest took residence in the trees, an event which had certain important consequences. The extent to which the insects infested the ficus can be explained in part by the appalling conditions they were kept in. Their roots were constantly injured by the wheels and weight of the cars frequently parked on

<sup>31</sup> Siqueira, Faria, *Belo Horizonte, o Fértil Solo Humano* cit., p. 75; "Atentado ao Direito de Propriedade em Plena Capital", in *Estado de Minas*, Belo Horizonte 12/09/1963, p. 5; "Devastação de Florestas em Minas é um Problema Mais Grave que em Outros Estados", in *Estado de Minas/ Suplemento Econômico Financeiro*, Belo Horizonte 19/09/1963, p. 11.

<sup>32</sup> "Calor traz a Morte em BH", in *O Binômio*, Belo Horizonte 18/11/1963, p. 7. The mortality rate is an indicator used worldwide by epidemiological studies: A.M. Lilienfeld, D.E. Lilienfeld, *Foundations of Epidemiology*, Oxford University Press, Oxford 1980, pp. 71-75.

<sup>33</sup> "Belo Horizonte de Roupa Nova faz 66 Anos", in *Diário da Tarde*, Belo Horizonte 12/12/1963, p. 1; A. de Souza, "Belo Horizonte já foi Cidade Jardim", in *Estado de Minas*, Belo Horizonte, 20/09/1964, p. 4; Coelho, "A Afonso Pena" cit., p. 10

them. Their trunks were always covered with advertisements and posters, and writings and drawings were incised in their bark with pointed tools. Because of Belo Horizonte's chronic lack of water, the public trees were certainly not watered regularly. And, finally, their "educational" pruning – e.g., the cutting of their foliage in straight lines and squares – was not conform to botanical health standards.<sup>34</sup>

The attack of the thrips, however, was just part of an ecological disaster of wider proportions that was taking place in those years. This urban environmental problem was actually transnational in character. The Gynaikothrips ficorum Marchal 1908 is an insect of South-Asiatic origin and pan-tropical occurrence that is widespread wherever trees of the genus Ficus have acclimatized, including very diverse areas such as Israel, Palestine, Sicily, Spain, Algeria, the Canary Islands and the whole of America. Thrips are 2.6 to 3.6 mm long in their adult phase. Although most of the time they remain in the foliage, feeding continuously, they can fly very quickly when driven off the trees by excessive heat or wind. On these occasions, they sometimes sting people or fly into their eyes. Around 1960, thrips propagation went seriously out of control in the United States of America, with the pest spreading to ficus trees in Hawaii, Florida, California and Texas. It is probably around this time, in the wake of the success of the Cuban Revolution in 1959, that these small destructive insects came to be nicknamed Cuban lauren thrips. 35

Thrips arrived in Brazil around 1961. There are records of problems caused by them in several cities, including Rio de Janeiro, Niterói, Campinas, Santos, and Recife. In Belo Horizonte, the infestation began in 1961 or 1962. The population went through a period of great discomfort. Older inhabitants recount how the insects would

<sup>34</sup> "Ficus vão ser sacrificados", in *Diário da Tarde*, Belo Horizonte 20/11/1963,
p. 1; J. Lutzenberger, *Ecologia*, LP&M, Porto Alegre 1992, pp. 17-22.

<sup>35</sup> L. Lewis, *Thrips: Their Biology, Ecology and Economic Importance*, Academic Press, London 1973, p. 251; L. Mound, R. Marullo, *The thrips of Central and South America: An Introduction*, Associated Publishers, Gainesville 1996; "Cuban laurel thrips – Gynaikothrips ficorum (Marchal)", in http://creatures.ifas.ufl.edu/orn/thrips/cuban\_laurel\_thrips.htm; "Cuban Laurel Thrips", in http://mrec.ifas. ufl.edu/Foliage/entomol/ncstate/thrips3.htm (consulted on 24/08/2008).

crawl all over their clothes whenever they walked down Afonso Pena Avenue, and frequently got into people's eyes, driving them to despair. One of the most conservative newspapers in Belo Horizonte warned of the advance of the pest, indicating the island of Cuba as its area of origin, where it had allegedly been combated with "unreliable Communist methods". At a time when Cuba appeared as a source of malignant dangers for the whole of Latin America in the eyes of an increasingly paranoid Right, the *Cuban Lauren Thrips* was regarded as a fatal threat, as it reproduced exponentially, threatening not only to spread to all the other trees, but also into gardens, orchards, yards and, who knows, even into homes, crawling over people's faces and getting into their eyes, "declaring war on the men who had been unable to fight them". The implied analogy with Communism is obvious, especially when one considers that the newspaper in question daily carried hysterical articles against the Cuban Revolution.<sup>36</sup>

Over the months, the thrips reproduced vigorously. The Mayor's Office tried applications of Malathion, to no avail.<sup>37</sup> As I remarked above, the trees were probably not sufficiently healthy to offer any resistance to the insects. Neither were there any really effective natural predators to contain the invasion. The urban bird life prevalently consisted of sparrows. For many decades the *Passer domesticus* (Linnaeus 1758) had been the predominant species in several Brazilian cities. There is a certain disagreement about the exact causes and circumstances of the introduction of the species in Brazil, but there is a consensus that it occurred at the dawn of the 20<sup>th</sup> century. Sparrows are often accused of being responsible for the disappearance of other bird species from the urban environment, even though scientific observation does not confirm this. In fact, sparrows are opportunists, because, like the domestic pigeon, they prosper where other birds cannot survive. They usually build their nests in trees, but can also nest in roof

<sup>&</sup>lt;sup>36</sup> "Prefeito Carone está desafiado a dar guerra aos 'cuban trips'", in *O Diário*, Belo Horizonte 21/02/1963, p. 3.

<sup>&</sup>lt;sup>37</sup> For images of the spray with pesticides (Malathion) at the ficus of Afonso Pena Avenue, Belo Horizonte, see: http://br.youtube.com/watch?v=hA2bXQrACbo (consulted on 24/08/2008).

gutters, damaged eaves and ruined walls. They live on an omnivorous diet of fruit, seeds and insects, but can easily adapt to different conditions, managing to thrive even on rubbish in the streets.<sup>38</sup>

Perhaps because of Belo Horizonte's dreadful sanitary conditions of the time, the sparrows, although numerous, did not turn into significant predators of the thrips. In spite of being thoroughgoing insectivores during the first days of their life – when they are fed only insects by their parents – the city sparrows probably found food all too easily on the streets for them to take much interest in the thrips. Thus, by the early 1960s three exotic species were cohabiting in the chaotically growing city, each generating various inconveniences. The thrips were resented because of their inopportune waylaying of passers-by, getting in their eyes or adhering to their clothes. The sparrows, in spite of the appeal they held for poets as well as some of the inhabitants, were regarded by the majority of the population as harmful intruders. Urban growth and the destruction of the vegetation on the outskirts of the city had led to the migration to more remote areas of several species of bird which had previously been common in the city, such as tico-ticos (Zonotrichia capensis subtorquata), bem-te-vis (Pitangus s. sulphuratus), joões de barro (Furnarius rufus rufus), gaturamos miudinhos (Euphonia chlorotica serrirostris), saís-bicudos (Dacnis cayana paraguayensis) and sabiás laranjeiras (Turdus r. rufiventris), arousing great nostalgia in the inhabitants. Many believed, incorrectly, that the sparrows were responsible for expelling the other bird species from the city streets.<sup>39</sup>

<sup>38</sup> O. Pinto, "O Pardal em suas Relações com a Agricultura", in *Boletim Biológico*, Bayer do Brasil, São Paulo 1933, pp. 15-20; H. Sick, "A Invasão da América Latina pelo Pardal, com Referência Especial ao Brasil", in *Boletim do Museu Nacional Série Zoológica*, 207, 1959, pp. 1-31; id., "Notas sobre o Pardal no Brasil", in *Arquivos do Museu Nacional*, 54, 1971, pp. 113-120.

<sup>39</sup> Interviews with inhabitants of Belo Horizonte (10 were conducted with people of various ages in 1963: children, adolescents and adults, in the 12, 18 and 30-40 year ranges). V. Coaracy, "Pardais, etc", in *O Estado de São Paulo*, São Paulo 26/03/1961, p. 9; C. Andrade. "Birds resist Urban Chaos", in *Estado de Minas*, *Caderno Gerais*, Belo Horizonte 16/05/2004, p. 21-22. A Brazilian scientific manual on birds, whose first edition came out in 1939, defined sparrows as 'feathered and beaked calamities". According to the author, sparrows destroyed agriculture in the

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And, eventually, many started to blame the ficus trees for hosting the insect pest, but also, especially, for impeding the passage of cars and holding up the city's "progress".

The action taken by the Mayor's office to eliminate the ficus was undertaken without any previous consultation with the public or announcement in the press. The initial justification for the action was that there was no other way of combating the insect pest. At first, the Mayor's office announced that heavy pruning would be carried out. During the following days it announced that some of the trees would be removed and, finally, that all the trees in the Afonso Pena, numbering 350, would be cut down and the lanes of the avenue widened to improve vehicle circulation. The cutting down of the ficus became quite a hot issue during those days and a subject of intense debate among political players, the inhabitants of the whole city, shopkeepers in the Afonso Pena Avenue, poets and the press. From November 20th until the middle of December, the residents awoke every day to an increasingly unrecognizable avenue, since the felling was always done at night. The Mayor explained this working at night with the need not to interfere with vehicle and pedestrian traffic, which was indeed intense during the day; many, however, saw this as a cowardly excuse for the concealing of an act of treason, the destruction of something looked upon as a common good, a part of the city's collective memory, in the name of progress and development (Figure 8 and 9).40

Some shopkeepers along the Afonso Pena supported the action, alleging that their establishments now received more light and attracted more customers. The Traders' Association demanded only

countryside, attacked gardens and orchards in the cities, drove out useful insectivorous birds and reproduced excessively. The manual, in accessible language and directed to the wider public, enjoyed good sales: between 1939 and 1979 it came out in 4 editions, one of them by a publishing house in Belo Horizonte. E. Santos, *Pássaros do Brasil*, Itatiaia, Belo Horizonte 2004, pp. 35-42, 125-130, 189-195, 198-201, 322-326. It should be noted that scientific literature about sparrows published in Brazil does not confirm the notion of this species being responsible for the decrease of native birds in urban environments: see the works cited in footnote 38.

<sup>40</sup> "Alguma Coisa está Errada", in *Estado de Minas*, Belo Horizonte 29/11/1963, p. 4.

Figure 8. The cutting down of the fícus, Estado de Minas, Belo Horizonte 21/11/1963, p. 1



that a proper urban plan be drawn up after the sacrifice of the trees. Several journalists defended the measure as inevitable. Some argued that the trees were diseased and condemned. Others pointed to the need to improve circulation. Thus, many saw the cutting as one of a number of reforms necessary for the city's development.<sup>41</sup>

<sup>41</sup> "Arborização da Cidade Preocupa Diretores da Associação Comercial", in



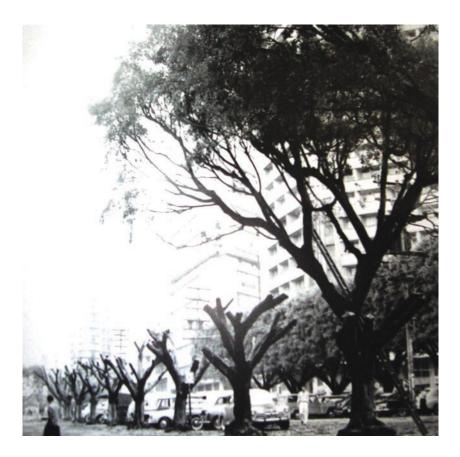
Many others, however, lamented the felling. The press and radio stations started to receive daily phone calls from residents venting their indignation. Some newspapers carried protest headlines: "Death comes to the trees by night", "Goodbye to the trees", "The denuding of the avenue". One of the city's most famous poets, Carlos Drummond de Andrade, wrote a protest chronicle against the "manufacturing of ruins by a dendrophobic authority". The mayor's political opponents started to accuse him of having poisoned the ficus to weaken them and thus justify the felling. Some aldermen proposed the opening of an enquiry to investigate the accusations. The Minas Gerais Society of Agronomical Engineers also protested, issuing a note in which they insisted on combating the thrips by means of insecticides, suggesting technical solutions for the problem and demanding the immediate suspension of the felling.<sup>42</sup>

During the days when the trees were being felled, between 19 November and 10 December 1963, the city was going through one of the hottest periods of its history, a fact that many attributed to the devastating cutting down of the forests in the state of Minas Gerais to provide charcoal for the iron and steel works furnaces. In the week following the felling of the trees on the Afonso Pena

*Folha de Minas*, Belo Horizonte 08/12/1963, p. 6; "Carone Promove Administração Revolucionária", in O Diário, Belo Horizonte 12/12/1963, p. 7; J.M. Rabelo, "As Árvores da Avenida", in *O Binômio*, Belo Horizonte 30/12/1963, p. 3; "Afonso Pena mais Bonita terá 8 Pistas e Problema de Estacionamento para Resolver", in *O Diário*, Belo Horizonte 29/05/1964, p. 6.

<sup>42</sup> "O Dia dos Ficus", in *Diário de Minas*, Belo Horizonte 20/11/1963, p. 1; "Não se Combate uma Praga Destruindo Árvores", in *Estado de Minas*, Belo Horizonte 21/11/1963, p. 16 ; "Vida e Morte', in *O Diário*, Belo Horizonte 21/11/1963, p. 6; "Morrem os Ficus da Avenida Porque Foram Envenenados", in *Estado de Minas*, Belo Horizonte 26/11/1963, p. 11; "Câmara Municipal de BH", in *Minas Gerais*, Belo Horizonte 28/11/1963, p. 9; "Agrônomos Fazem Apelo a Carone Para Cessar a Poda das Árvores", in *Folha de Minas*, Belo Horizonte 30/11/1963, p. 2; "Chegou o dia dos Ficus", in *Diário de Minas*, Belo Horizonte 11/12/1963; "Adeus às Árvores", in *C Diário*, Belo Horizonte, 10/12/1963, p. 5; C.D. Andrade, "Árvores, um casal", in *Estado de Minas*, Belo Horizonte 11/12/1963, p. 4; "Cidade Vende como Lenha Ficus que sai do Centro", in *Correio de Minas*, Belo Horizonte 17/12/1963, p. 1.

Figure 9. Afonso Pena Avenue, Estado de Minas, Belo Horizonte 04/12/1963, p. 1



Avenue – which had provided shade and helped to keep down the temperature in the city centre – the temperature in Belo Horizonte reached 96.8 °F in the shade, the climax of a whole year of prolonged heat. Water in the reservoirs in Minas Gerais reached very low levels, threatening to force the authorities to cut the supply. With the heat, the already unreliable sanitary conditions became even worse: 35 children died of acute diarrhoea in Belo Horizonte

in a single week.<sup>43</sup> The coincidence of these events probably aggravated ill feeling for the rapid clearing of the avenue. The inhabitants were now left without trees, shade or water at the mercy of impossibly sultry weather.

The newspapers associated the cutting down of the trees with the increase in heat in the city's central streets, and likewise blamed deforestation in the State of Minas Gerais for the drought. Belo Horizonte turned 66 years old on 12 December 1963 with an unreliable water supply in a year that was almost rainless. Reports of the time complained of the sun beating mercilessly on the streets, without the barrier of the trees to mitigate the heat with their "generous shade".<sup>44</sup>

The cutting of the trees thus took on political relevance. Many different players participated in the debate. Still, there was no consensus, and even among those who adopted the same posture, whether of defence or criticism of the measure, there was frequently considerable diversity of motive.

Many other issues were touched on in the speeches of the participants in these debates. It was a decisive moment in the history of Brazil, marked by the advance of an anticommunist wave among the Right and the middle classes, the developmentalist illusions of the Left, ideological and political excitement among students and intellectuals, fascination with – and terror of – the Cuban Revolution, the dilemmas of a nation seeking modernity and progress in a world divided by the Cold War, and the search for a balance between the safeguarding of nature and the craving for growth. Within this broad context, the felling of the trees in the Afonso Pena Avenue intertwined with other choices and dilemmas. It became a symbol of the important crossroads at which Brazilian society found itself. Curiously, sectors of the Brazilian populist Left supported the cut-

<sup>43</sup> "Calor traz a Morte em BH", in *O Binomio*, Belo Horizonte 18-24/11/1963, p. 7; "Nossa Cidade", in *O Binomio*, Belo Horizonte 9-15/12/1963, p. 3; "Árvores e Estiagem", in *Estado de Minas*, Belo Horizonte 07/12/1963, p. 4.

<sup>44</sup> "Alegria sob as árvores", in *Estado de Minas*, Belo Horizonte 22/11/1963, p. 1; "Árvores e Estiagem" cit., p. 4; "Belo Horizonte de Roupa Nova faz 66 anos", in *Diário da Tarde*, Belo Horizonte 12/12/1963, p. 1; "A Derrubada das Árvores", in *O Diário*, Belo Horizonte 24/01/1963, p. 4.

ting down of the trees in the name of development. In the months that followed, the coup d'état of March 1964 suddenly congealed most of the political developments that had been going on since 1945, during the democratic experience, on behalf of a project that, while itself developmentalist in character, was carefully combined with a conservative defence of the family, religion and private property. I would interpret the manner in which the felling of the trees was conducted as a manifestation of the radicalism of the politics of the time: the polarized relationships between individual members and groups in society were somehow reflected in the relationship between societies and their natural environment.

At the same time that the trees were being cut down, a room in one of the principal buildings of the Afonso Pena Avenue hosted the meetings of a group of businesspeople and politicians. They were organizing a conspiracy that was to play a decisive role in the coup d'état that brought down the government of president João Goulart a few months later. In March 1964, the treeless avenue was the stage for a march of the victorious troops. In May of the same year, a group of women organized a march "for the family, with God, for private property", which was one of the milestones of the rise of authoritarianism in Brazilian society at that time. These events inaugurated tragic times, when the range of choices of possible directions for Brazilian society was dramatically restricted and a conservative modernization project allied with the interests of international capital prevailed. In the following years, Belo Horizonte gradually divested itself of large numbers of trees and many green areas were occupied by commercial establishments. In Minas Gerais, the mining of iron ore disfigured landscapes, polluted water courses and, above all, destroyed forests, since the main power source was still charcoal. The above-cited poet Carlos Drummond de Andrade refused to return to Belo Horizonte, because he felt "deprived of its green tunnels and planted areas"; the city had become a "sad horizon".45

<sup>&</sup>lt;sup>45</sup> C.D. Andrade, "Triste Horizonte", in *Discurso de primavera e algumas sombras*, José Olympio, Rio de Janeiro 1977.

### Conclusions

Studies on Latin America have much to gain from the vigour of the current debate on the potential and challenges of urban environmental history. The case of Belo Horizonte exemplifies the political and social peculiarities of Latin American societies. It also bear witness to their entanglement in transnational networks. The acclimatization of the *ficus*, the introduction of sparrows and the attack of the thrips provide clear examples of the functioning of these networks, and the political and social context in which contacts were established.

At the start of the 20th century, the ideal of the modern and civilized city applied to Belo Horizonte was inspired by the landscaping of European cities, with their tree-lined boulevards and green areas, designed to guarantee a healthy and hygienic environment for their inhabitants. In the post-war period, the then hegemonic developmentalist ideals and a conception of progress epitomized by cities with wide thoroughfares for traffic - as in the United States - ushered in a new approach involving the cutting down of trees, the widening and asphalting of avenues and streets, and the construction of high-rise buildings. Now, at the beginning of a new century, Belo Horizonte faces big environmental challenges. Urban planners are now confronted with the difficult task of creating a sustainable city. In the bosom of contemporary environmental conceptions, with the value they attach to tropical environments, new urban projects have seen the light. Several green areas have been restored and are today replete with trees native to the region, which in their turn are attracting back various birds that used to be native to the urban milieu. The transformations of the Avenida Afonso Pena – which has maintained its central political role in the city to this day - are part and parcel of the history of these different urbanistic conceptions.

Nowadays Belo Horizonte is one of the pilot cities in the Third Urban World Forum (2006) project for the development of urban indicators of the sustainability of cities, and the first Brazilian municipality to institute a special secretariat for environmental problems (in 1980). Many things have changed. The water supply has been restored to normal and the whole population has access to excellent-quality water. Sixty per cent of the sewage receives treatment before being discharged into the river that runs through the city. The city's waste recycling program, organized by wastepaper collectors and supported by the public authorities, is a world reference. Public health has seen advances, as has education. However, the challenges remain. Belo Horizonte still faces many serious urban environmental problems, made worse by continuing poverty and civil society's still weak exercise of political citizenship.<sup>46</sup>

Rather than restricting myself to the presentation of a case study, I wanted to use the theme examined here as a basis for a discussion of the relationships between nature and society in urban environments. By concerning themselves with the trees lining their streets, or their public gardens, people are participating in an important wider debate as to what sort of society they want to live in, and what values should prevail in it.

<sup>46</sup> R.P. Medeiros, *Permanências e mudanças em Belo Horizonte*, Autentica, Belo Horizonte 2001; Mendonça, Godinho, *População, Espaço e Gestão na Metrópole* cit.; R.L.M. Montemór, *Novas Periferias Metropolitanas, a Expansão Metropolitana em Belo Horizonte, Dinâmica e Especificidades no Eixo Sul*, Editora C/Arte, Belo Horizonte 2006; A.A.L. Friche, W.T. Caiaffa, C.C. César, L.M.F. Goulart, M.C.M. Almeida, "Indicadores de saúde materno infantil em Belo Horizonte: análise dos diferenciais intra-urbanos", in *Cadernos de Saúde Pública, 22, 9, 2006*, pp. 1955-1965; A.T.G. Matta-Machado, *A relação de cursos d'água em leito natural em ambiente urbano com mortalidade infantil e hospitalização por diarréia em crianças abaixo de cinco anos, em Belo Horizonte, 2007; V.H. Kemp, H.M.R. Crivellari, <i>Catadores da Cena Urbana, Construtores de políticas Socioambientais*, Belo Horizonte, Autêntica 2008.