



REPRODUCTION OF CAPITAL IN HOUSING TYPOLOGIES: APARTMENT GATED COMMUNITIES. FROM THE GLOBAL TO THE LOCAL, THE CASE OF CÓRDOBA, ARGENTINA

PABLO DARIO AVALOS

Instituto de Investigación Vivienda y Hábitat – INVIHAB – Instituto de Humanidades – IDH- CONICET-UNC – Facultad de Arquitectura Urbanismo y Diseño – FAUD-UNC – Av. Vélez Sarsfield, 264 – 1º piso 1º cuerpo – Córdoba – Argentina, 5000
<https://orcid.org/0000-0001-6375-1993>
pablodarioavalos@mi.unc.edu.ar

MARÍA FLORENCIA SOSA

Instituto de Investigación Vivienda y Hábitat – INVIHAB – Instituto de Humanidades – IDH- CONICET-UNC – Facultad de Arquitectura Urbanismo y Diseño – FAUD-UNC – Av. Vélez Sarsfield, 264 – 1º piso 1º cuerpo – Córdoba – Argentina, 5000
<https://orcid.org/0000-0003-0423-5889>
mfsosa@unc.edu.ar

Received: 02/08/2023

Approved: 26/10/2023

ABSTRACT

In the framework of neoliberal urbanization, global housing typologies produced by private management emerge as forms of reproduction of economic capital, which imply urban and housing transformations in their contexts of insertion. This study explains how this phenomenon occurs in apartment housing complexes in peripheral capitalism secondary municipality (Córdoba, Argentina). It also identifies the agency of real estate developers in the creation of attributes of economic valuation and the local State in this production and its effects on the residential real estate market. A methodology was developed by triangulating qualitative and quantitative data on the characteristics of economic capital and the incorporated urban and typological transformations. This study found that the reproduction of capital acquires specificities due to the social, economic, political, and urban context of its geography of insertion, in which the State plays a crucial role in its promotion or regulation. Real estate agents, acting under the logic of maximum profit reproduction, create attributes of economic valorization which are paid for by the demand for it and affect the housing market.

Keywords: Commodity housing. Real estate market. Closed clusters towers. Commoditization.

RESUMEN

En el marco de la urbanización neoliberal emergen tipologías residenciales globales producidas por gestión privada como formas de reproducción del capital económico, que suponen transformaciones urbanas y habitacionales en sus contextos de inserción. Este artículo explica cómo se produce este fenómeno en conjuntos residenciales del tipo torres de perímetro cerrado, en una ciudad secundaria del capitalismo periférico (Córdoba, Argentina). Se identifica la agencia de los desarrolladores inmobiliarios en la creación de atributos de valorización económica, del Estado local en esta producción y los efectos en el mercado inmobiliario residencial. La metodología se basa en la triangulación de datos cualitativos y cuantitativos sobre las características del capital económico y las transformaciones urbanas y tipológicas incorporadas. Se concluye que la reproducción de capital adquiere especificidades en el contexto social, económico, político y urbano de su geografía de inserción, donde el Estado tiene un rol clave en su promoción o regulación. Los agentes inmobiliarios actúan bajo la lógica de reproducción de máxima ganancia, crean atributos de valorización económica que son pagados por la demanda y afectan el mercado habitacional.

Palabras Clave: Vivienda mercancía. Mercado inmobiliario. Torres de perímetro cerrado. Mercantilización.



INTRODUCTION

De Mattos (2016) calls urban transformations a metamorphosis caused and deepened by changes in the social relations of production in the course of capitalist development. Global economic restructuring and globalization have configured the scene of these transformations (SASSEN, 1995) under the sign of neoliberalization. Although a seemingly global phenomenon, some particularities gain relevance in the contexts of intermediate and peripheral municipalities in the global South.

Neoliberal urbanization takes on the characteristics of the specific contexts in which it is introduced (THEODORE; PECK; BRENNER, 2009). Therefore, rather than a linear and universal process, it constitutes a varied and unequal process, which establishes a “new urban order” (MARCUSE; VAN KEMPEN, 2000) characterized by socio-spatial segregation, physical fragmentation, and urban inequality. In this scenario, the urban space assumes its maximum expression as a means to produce economic-financial capital in the built environment (HARVEY, 2007), establishing a new phase of real estate commodification and financialization (DE MATTOS, 2016), a product of investment in “new” closed residential typologies that refer to gated communities in the United States.

In Argentina, these typologies emerged in the central, pericentral, and peripheral areas of Buenos Aires in the 1990s, resulting from renovation urban transformations by densification and investments in high-performance real estate buildings, mainly aimed at a high-income elite (ELGUEZABAL, 2018; SZAJNBERG, 2010; WELCH GUERRA; VALENTINI, 2005). Production is carried out in the context of local urban neoliberalization (CICCOLELLA, 1999; JANOSCHKA, 2002) based on the logic of pro-business governance (HARVEY, 1989) in search of territorial and urban investments (CICCOLELLA, 1999), with the implementation of urban promotion and development instruments to strengthen public action in relation to

private investments (BLANCO BLANCO et al., 2016) under different names: public-private partnerships; urban planning agreements, etc.

At that time, public investments in Córdoba were directed to the infrastructure of public roads to improve accessibility for new services and functions (FALÚ; MARENGO, 2004), whereas private investments aimed at commercial, hotel, and suburban housing typologies (BUFFALO, 2009). Only in the 21st century, housing construction by private real estate management increases significantly compared to the previous decade (AVALOS, 2022; ROMO, 2013) and has registered, since 2004, a superlative increase of m² built in multifamily or collective housing (ECONOMIC TRENDS SA, 2016; AVALOS, 2022), with the particularity of the emergence of the typology of apartment gated communities. In addition to being walled and guarded by private security, they have common equipment or amenities (green spaces, gyms, swimming pools, playrooms, etc.), following the model of gated communities in Brazil (CALDEIRA, 1997) or those with gardens in Buenos Aires (ELGUEZABAL, 2018; WELCH GUERRA; VALENTINI, 2005).

Although a globalized typology, its implementation in metropolises takes on characteristics from its socioeconomic, cultural, and political context. La Grange (2018) states this is due to the set of institutional practices of the urban districts in which they are established. This context could be summarized by four causal elements: 1) the supply of these residences on the market; 2) demand preferences; (3) consumers' characteristics; and 4) the morphological characteristics of these complexes based on demand responses. These typologies thrive under the promotion of their dissemination, whether by real estate producers-builders, landowners, the State, or other intervening agents (AVALOS, 2022). This offer aligned itself with consumer preferences (demand): such as security, privacy, status, lifestyle, amenities, location, etc. Consumer characteristics refer to their socioeconomic and

demographic aspects (age, economic position, number of children, etc.), which would respond to the production of a certain urban and architectural morphology.

Architecture and design act in the combination of these elements, creating a difference between supply and demand according to attributes of economic valorization (ENCINAS et al., 2016), which influence the purchase price of housing and affect the functioning of the real estate market in general (JARAMILLO, 2009).

Regarding Córdoba, several studies have addressed collective housing, finding the role of real estate agents, the location of housing complexes, the impact on the functioning of the market (LIBORIO, 2013; MATIZ; AVALOS, 2018), and how these urban forms express growth by densification and urban renewal with physical fragmentation and social homogeneity (MARENCO; LEMMA, 2017). However, almost no study has addressed these typologies as an expression of the “new” forms of economic capital reproduction in the local real estate dynamics. Therefore, aspects such as 1) the quantity and origin of economic capital; 2) urban location and the role of urban management; and 3) the urban-architectural characteristics of the typology configure issues requiring assessment.

This study aims to explain the reproduction of economic capital in apartment housing complexes in a peripheral capitalism secondary municipality, evident in its implemented urban and typological transformations. It also finds the capitalist and speculative agency of real estate actors in creating amenities, the role of the State in their production, and their effects on the real estate market.

From this type of production, this study offers the following question: what local urban and architectural characteristics does the reproduction of capital take based on apartment housing complexes and what urban and housing transformations does it entail? To answer this question, this study analyzed a sector in the northwest area of the municipality of Córdoba called the Colón Corridor on Av. Colón (between Zípoli and Circunvalación Avenues), which also has nine sets of apartment gated communities.

Methodology

The methodology is based on a triangulation of qualitative and quantitative data on the nine sets of apartment buildings. The economic capital invested in these projects, their built areas, and the amount of housing contribution were quantified. To quantify capital, real estate investments (in US dollars) were researched, as were those on built areas and housing units declared by the companies (including construction, land, management, and marketing costs) based on real estate websites and local specialized digital newspapers. Moreover, the built-up area of multifamily housing is recorded based on information from the Córdoba Private Construction Forum. Regarding urban transformations, the location and form of implementation of projects in the sector (integration, segregation, and/or fragmentation) in the period 2003-2023 were analyzed based on satellite images provided by Google Earth, which were processed on QGIS. This section also identifies the State actions that facilitated the authorization of these projects (ordinance adequacy, special resolutions, urban agreements, etc.) and the role of the involved development companies. As for housing transformations, the “new spaces” that emerged in this typology are described as components of economic evaluation that affect housing prices.

Reproduction of economic capital And urban housing dynamics

Piketty (2014, p. 43) explains that economic capital takes various forms and characteristics in the course of history and plays a dual role in capitalist development “as both a store of value and a factor of production.”.

In contemporary times, these forms of investment in residential real estate take certain particularities in the neoliberal model, such as 1) the role of the State in relation to real estate agents regarding market deregulation, the facilitation of housing, and the transfer of international capital or public-private agreements (HARVEY, 1989, 2007) and 2) the socioeconomic and political contexts in which real estate investments are established (THEODORE; PECK; BRENNER, 2009). Charney (2001) highlights the importance of macro and microeconomic and political events from

which real estate agents implement certain practices to take advantage of and/or modify the conditions of the real estate market and thus shape locations and insert the specific developments they market. At this point, the socioeconomic context of Argentina is relevant since micro and macro factors, such as the dollar-peso exchange rate, economic crises and distrust in the banking system, investment in real estate construction, etc., considerably impact real estate dynamics and market.

This process occurs in urban financialization (AALBERS; ROLNIK; KRIJNEN, 2020) as a form of capital reproduction that occurs at various levels and forms and is unequal and varied, especially in emerging or peripheral economies (FERNÁNDEZ; AALBERS, 2016). It coexists with more basic forms of capital reproduction, such as collective or multi-family housing, commonly known as “rental housing or housing commodity” (CUTRUNEO, 2015; LIENUR; BALLENT, 2014). At the same time, they can be part of processes of urban dynamics of renewal by densification, extension and densification, or both simultaneously (ABRAMO, 2012). In the last three decades, these processes have been framed in the discourses of international agencies and organizations on the “supposed” urban and economic benefits of densification. However, Burton (2000) and Neuman (2005) question whether a greater amount of housing promotes greater sustainability and compactness: the relation is non-linear and complex and influences various urban, physical, social, economic, institutional, and other aspects that affect housing production, market, and consumption.

Regarding the real estate market, the increase in the production of housing commodities increases urban commodification for all social segments (JARAMILLO, 2009; PÍREZ, 2014). This stems from the fact that the process of commodification can be represented in two dimensions: the production of use goods, which enables the appropriation of the surplus value generated when products are exchanged for a monetary sum that covers their costs and includes the profit of capital, and the access to them, depending on sufficient monetary resources to acquire them on the

market (PÍREZ, 2014); i.e., a “commodified consumption” (TOPALOV, 1979).

Urban commodification has been exacerbated by investments in new real estate developments of various scales and typologies and in the public infrastructure, becoming a new form of expanded capital reproduction (DE MATTOS, 2016). The implementation of this model has worsened socioeconomic inequality and — although the interrelation with residential spatial segregation is complex (VAN HAM et al., 2021) — shows a new territorialization characterized as a “new urban order” (MARCUSE; VAN KEMPEN, 2000).

The “new” residential typology: an apartment gated community in Argentina

The apartment gated community, also known as the gated community in the heights or countries in the heights, refers to “classic” collective housing but establishes a series of urban and typological transformations, such as: 1) the establishment of a perimeter for the enclosed land (by walls, fences, electric fences, etc.) to offer the feeling of security and protection in the face of increased crime and poverty; 2) its central or peri-central location, justified by the urban zoning regulations that enable densification; and 3) the incorporation of amenities as generators of real estate surplus value.

Although the typology of apartment gated communities corresponds to a global model that refers to edge cities, rather than referring to faithful reproductions, it acquires local specificities in their architectural design by their economic and sociocultural aspects, such as preferences and values in the identity of the final demand (LIENUR; BALLENT, 2014).

In particular, Tella et al. (2010) state that this type of building greatly impacts the urban fabric by rupturing urban structures and degrading pre-existing structures.

In Argentina, especially in the central Pampas region, apartment projects significantly increased after the 2001 crisis in a context of economic recovery. Surplus

capital from different sectors of the economy (mainly agricultural exports) was mobilized to the real estate sector to safeguard its value and reproduction in the face of distrust of the banking system (BAER, 2008; SZAJNBERG, 2010). The production of enterprises dialectically boosted consumption due to a demand from segments with purchasing power (self-employed workers, entrepreneurs, company managers, etc.) for end use, permanent or temporary rental income, or as heritage preservation. This phenomenon occurred in Rosario, Santa Fe (LAPELLE et al., 2017; WOELFLIN et al., 2009), Buenos Aires (SZAJNBERG, 2010) and in Córdoba, as we will describe below.

Apartment gated communities in Cordoba, Argentina

Córdoba is the second largest city in Argentina in terms of number of inhabitants (1,565,112 inhabitants) (INDEC, 2023) and has an area of 576 km². It has dispersed and fragmented urban structure with low population density (60 inhabitants/ha) and ample growth (MUNICIPALIDAD DE CÓRDOBA, 2010). Its economy mainly stems from agriculture and productive services.

Buffalo (2009) warns that the high international prices of commodities due to international trade dynamics favored agricultural export sectors, providing a higher profitability that was redirected to economy sectors such as the construction of collective housing by private real estate management, causing a “real estate boom” (AVALOS, 2022; LIBORIO, 2013). Baer (2008) and Socoloff (2019) claim that the increase in construction was associated with two factors: the return of savings retained by the *corralito and corralón*¹ (which could be used for real estate operations) and the flow of surplus economic capital outside the banking system, including from undeclared activities.

Added to this are the particularities of the macroeconomic context, such as stable exchange rates (dollar-peso), the price gap between materials and labor, and the low value of land (in dollars) during the first years after the 2001 crisis (BAER, 2008).

En Córdoba, la construcción de m² de vivienda multifamiliar-colectiva aumentó significativamente, mientras que en el 2004 se construyeron 343.076 m², en 2015 este número ascendió a unos 521.874 m² (ECONOMIC TRENDS S.A., 2016). Es en este período que aparecen las torres de perímetro cerrado. Las primeras de este tipo se ven en el 2000, en el marco de un proyecto inmobiliario de gran escala y con programa de usos mixtos (hipermercados, un shopping, dos hoteles, un espacio de eventos musicales y entretenimiento, y residencias), localizado en el área intermedia. El proyecto fue impulsado por el gobierno local y desarrollado por la empresa Grupo Dinosaurio. En este emprendimiento aparece el primer barrio cerrado en altura (Parque Milénica I y II) compuesto por tres torres de departamentos y *amenities*. Este es el antecedente a la producción concentrada de barrios cerrados en altura en la Avenida Colón, caso de estudio de este artículo.

Characterization of the case study: Colón Corridor (Córdoba, Argentina) 2010-2020

The apartment gated communities this study addresses lie on one of the main streets of Córdoba: Avenue Colón, in its northwest quadrant. This avenue connects metropolitan towns (to the west, the towns of La Cailera and Villa Carlos Paz), crosses the middle area of the municipality, and connects, in its eastern sector, to Avenue Circunvalación. Specifically, it connects the urban fabric from Avenue Circunvalación Cárcano to the west and Avenue Zippoli to the east (Figure 1).

¹ Actions of restriction and confiscation by the Argentine State on savings deposits at the end of 2001. Corralito limited the withdrawal of money from banks and changed the conditions of savings exchange rates. Corralón changed the conditions for the use of confiscated savings, such as return periods and the type of currency in which they would be returned.

Municipal Ordinance no. 10,006² describes the corridor as a linear peripheral sector of mixed uses (commercial, industrial, residential), with medium and high-density housing (20 to 200 dwellings/ha) and urban-scale commercial³ complexes.

This study chose its case based on results from broader research (AVALOS, 2022) that included a sample of 56 typologies of collective housing in gated communities and found apartment buildings as the type with the highest growth both in terms of the number of m2 built and in real estate investment from 2003 to 2023. Thus, the sector has become a platform for the accumulation and reproduction of economic capital in the municipality in the last two decades. This is evident with the analysis of nine paradigmatic developments (with different architectural characteristics) executed by the main local real estate companies: 1) Cardinales Alto Panorama, executed by GNI; 2) La Diva de

Gama, executed by GAMA S.A.; 3) Parque Milénica V Sagrada Familia, executed by Grupo Dinosaurio; 4) Terra Forte I, executed by GAMA S.A.; 5) Terra Forte II, executed by GAMA S.A.; 6) Complejo Villasol, executed by GAMA S.A.; 7) Ciudad GAMA, executed by GAMA S.A.; 8) Altos de Villasol, executed by GAMA S.A.; and 9) Love Córdoba, performed by INVERCO.

Results

Private Equity Investments

En este apartado se analiza la cantidad, evolución temporal y origen del capital económico invertido en los emprendimientos en el caso de estudio durante 2003-2023, y sus relaciones con el contexto micro y macroeconómico. Además se identifica la agencia de las empresas inmobiliarias en la creación de valoración económica a partir de *amenities* y de la localización de los emprendimientos, aspectos que son valores económicos pagados por la demanda dirigida.

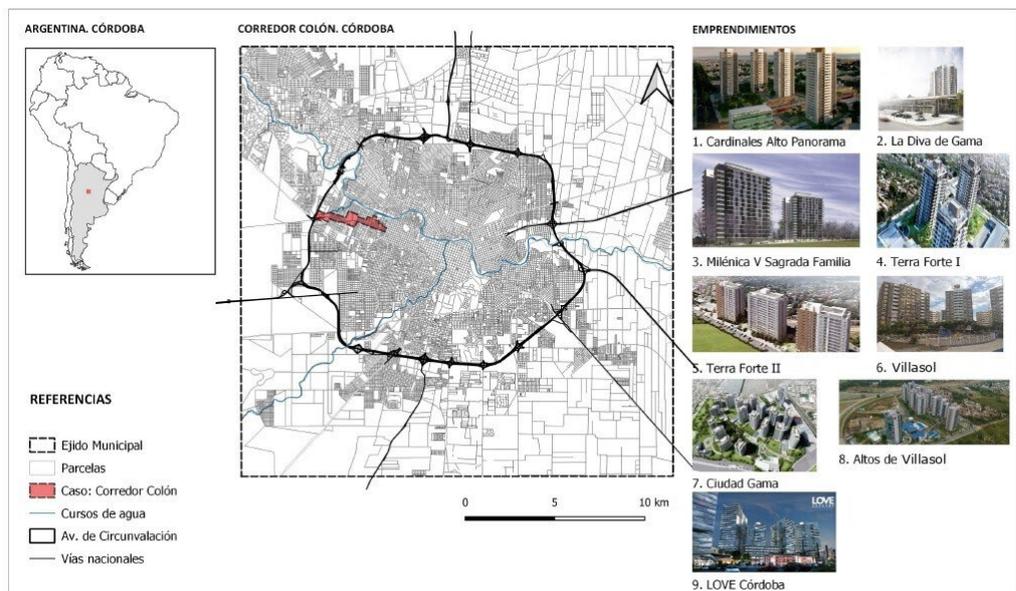


Figure 1 – Study sector
Source: Prepared by the authors based on data from the Urban Planning Directorate of the Municipality of Córdoba.

² Reglamenta a través de normativa urbana ciertas áreas de la ciudad de Córdoba, entre ellas el caso de estudio, nombrado como Área Especial Duarte Quirós-Colón – Sagrada Familia.

³ Hipermercados de venta de comestibles, materiales de construcción, automóviles, entre otros.

Based on the own⁴ company survey, the projected and planned⁵ investments for the nine analyzed projects total around 685,000,000 dollars (Table 1), with a temporal dynamic that coincides with the evolution of commodity exports.

A temporal analysis (2003-2023) of these investments shows that the construction of this typology rose in 2005-2013, including works⁶ spanning 832,160m². The Villasol (2005) and Altos de Villasol (2008) developments were the first to be built. Moreover, 2009 had no announcements of projects in the Corridor, registering a reduction in production and investment in the local market. This is associated with the effects of the inse-

curity of the international monetary crisis⁷, the reduction of commodity prices and exports, the adoption of Argentine peso-dollar exchange control policies, and state economic withholdings on agricultural exports.

However, in 2010, investments in the Corridor tripled compared to the 2001-2010 period, reaching an investment of 296,069,704 dollars. From 2011 to 2015, capital investments decreased, which is related to the exchange rate restriction and the redirection to the financial sector (bonds, stocks, etc.) in the face of a faster rate of return with greater liquidity and without administrative restrictions.

N°	Enterprise	Year of the beginning of the work	Covered built area (m2)	Number of dwellings (units)	Investment (Dollars)
1	Cardinales Alto Panorama	2012	45.300	560	20.000.000
2	La Diva de Gama	2012	23.000	122	19.636.364
3	Milénica V Sagrada Familia	2010	21.860	97	36.433.341
4	Terra Forte I	2010	18.000	450	35.000.000
5	Terra Forte II	2012	31.000	477	35.000.000
6	Villasol	2005	40.000	834	20.000.000
7	Cuidad Gama	2016	400.000	4.000	400.000.000
8	Altos de Villasol	2008	110.000	1.170	75.000.000
9	LOVE Córdoba	2013	143.000	850	100.000.000
TOTAL BUILT AREA			832.160		
TOTAL NUMBER OF DWELLINGS				8.560	
TOTAL INVESTMENTS					684.636.364

Table 1 – Investments, number of dwellings, and constructed area in the buildings at Colón Corridor
Source: Authors' elaboration based on information from development companies and secondary sources.

⁴ Composed of production costs (land, construction, administration, and management) in dollars from 2021 to 2023.

⁵ Planned refers to the projects still in progress, such as LOVE Córdoba, Ciudad Gama, and part of Alto Panorama

⁶ Currently, four projects are completed and inhabited, three are under construction in various stages of construction, and only two are yet to begin being built.

⁷ The 2008 monetary crisis stemmed from a housing bubble in the United States. These repercussions first manifested themselves in the U.S. financial system and then internationally, causing a deep liquidity crisis.

In 2016, the new national government issued economic policies to remove the regulatory norms of the previous government, such as the restriction of exchange rates, the removal of the limit for foreign currency purchases, the permission to carry out short-term foreign exchange operations (capital inflow or *golondrina*), and the release of reference interest rates (BONA, 2018). Development companies have received these changes well; evident in the case of the construction of the Ciudad Gama housing, commercial, and hotel development with an initial investment of \$50,000,000 and \$4,000,000,000 for completion. By 2023, no more constructions of this type were recorded in the Corridor.

The evolution of the capital invested over these 20 years shows the interference of the international commodity trade and the reinvestment of returns for collective housing and its deceleration in unfavorable macro and microeconomic contexts (with milestones in 2009 and 2016), in which real estate production begins a production reduction phase.

Urban transformations and public-private agreements

The developments lie in the intermediate area of the municipality⁸ in a sector with an important stock of large lots governed by regulations that promote densification in medium-high housing density areas and public-private agreements. In other words, real estate companies and local urban management promoted the urban transformations in the sector.

As for the regulations, the study sector is governed by Municipal Ordinance No. 8,256/1986 (and its amendments), which defines zones with land uses and forms of land occupation based on indicators such as land

use factor (FOS)⁹, total occupation factor (FOT)¹⁰, heights, etc., in addition to Amendment No. 10,006, implemented in 1998, which established the sector as a special area, causing an increase in occupancy rates and construction intensity, with a profile of isolated apartment buildings and collective or multifamily dwellings.

In some projects, development companies requested changes to these regulations to increase land occupation heights and percentages, which was resolved by executive resolutions with economic counterparts¹¹. This situation would consider the discretion of these negotiations. Then, in 2012, Ordinance no. 12,077 was sanctioned, which regulates the contracts between City Hall and the private sector by Urban Agreements (UA). UA configure an urban public-private partnership legal instrument decreed by the local government. By them, the municipality can make the current regulation more flexible, as requested by the initiating party, and, with this, the local government receives an economic benefit. In this case study, three agreements were made between the Municipality and the companies GNI S.A., GAMA S.A., and Grupo INVERCO (Table 2), in which the modification of the indicators shows the transformations in the urban profile, the morphologies of the lots, and the architecture of the enterprises.

Figure 2 shows the urban transformations in the local environment: the use of occupied land, the free space, the size of the lots, and the relations of integration and physical segregation of the enterprises.

The projects, in general, have a land occupation rate around 25 to 30%, leaving free spaces for recreational use and support for amenities. The built area is distributed in a compact and vertical way (condomi-

⁸ According to the classification of the Córdoba 2020 Plan (MUNICIPALIDAD DE CÓRDOBA, 2008).

⁹ FOS is the ratio between the area determined by the projection of the building in the horizontal plane of the site and the total area of the lot defined as a percentage.

¹⁰ FOT is the ratio of the total area for construction to the total area of the lot.

¹¹ As in the case of Altos de Villa, in which an executive resolution enabled apartment buildings to span a height of 36 to 60 m.

Legal Entities and/or Individuals	Enterprise	Occupation	Height	Counterpart
		ORD. 8256; 10.006 (amendments)		
INVERCO - Investment in construction	LOVE Córdoba	FOS Land Cover Factor increase of 75%=>50% and 35% Total Occupancy Factor FOT: from 2 to 4.	Increase from 38.5 m to 60 m and 70 m.	Repaving «Road to Chacra de la Merced- Stages 1 and 2», from Av. 24 de Septiembre hasta Circunvalación
GAMA S.A.	Ciudad GAMA	FOT Total Occupancy Factor increased from 2 to 2.5	Increased height. An apartment building with 140 m and height and another with 80 m.	Work “Suquia River Coastal Execution by Rivera Norte with two lanes” -Project and Budget -Implementation - If any funds remain, they will be allocated to social housing or another destination established by the City Hall
Fideicomiso Cardinales Alto Panorama-Proprietarian S.A.	Cardinales Alto Panorama	48% increase in the Total Occupancy Factor FOT of one of the lots.	Increase up to 77.80 m and 29.50 m	Construction of a pedestrian area on San Martín Street - 3rd Stage (between Rioja and Humberto Primo) - Execution of asphalt layer on streets with curbs - B° Maldonado.

Tabla 2 – Current urban regulations and public-private agreements in the corridor
Source: Prepared by the authors based on the information provided by the Urban Planning Directorate of the Municipality of Córdoba.

niums), showing one of the main changes in the urban morphology of the sector: the increase in height. For example, Altos de Villasol shows a considerable contrast because it stands on a low environment (3 m to 6 m) and its verticalization reaches 60 m. The same happens in Ciudad Gama, which projects 16 apartment buildings of 50 to 60 m and 2 of 140 and 80 m in height.

The heterogeneity in lot size (from 1 to 16 ha) influences the forms of physical integration/fragmentation and socio-spatial segregation. Smaller lots impact less the fragmentation of public roads and pedestrians than larger lots. The latter, configured as a housing complex, more greatly impacts physical fragmentation, as in Ciudad Gama (with 16 ha), and lies next to large-scale hypermarket complexes, worsening the situation (Figure 3).

This new pattern of urbanization resulted in the spatial urban fragmentation with the neighborhood and sector environment. The created urban landscape is dominated by the physical separation of public space and housing, with the commercial premises of the project being the only ones with a direct relation with the street (mainly accessible by Av. Colón). The incorporation

of apartment buildings in a low-lying periphery area suggests the local characteristics of this typology.

Typological transformations in relation to demand

This section analyzes typological changes in relation to architectural programs. At first, the housing level shows few innovations as they compactly organized by use segregation (kitchen, dining room, bedrooms, bathrooms, etc.) with little functional flexibility. Units usually have one, two, or three bedrooms in apartments or duplexes (in a few cases). Although the nine projects follow the same program (apartment buildings with common spaces and indoor and/or outdoor shops), real estate operations create differentiating attributes regarding housing and complexes called amenities, such as gyms, paddle tennis courts, swimming pools, etc. These operations express a type of action by development companies to create a supply for a demand that seeks social identification and positioning.

These attributes refer to elements that intervene in the urban design of the complex as technological, formal, and functional resolutions of the program, becoming an added value, having a price, and being paid by objective demand.



Figure 2 – Above, the sector in 2003, with the demarcation of the lots of the projects as free areas. Below, the sector in 2023, with the names of the sets. Source: Google Earth.



Figure 3 – Enterprise Ciudad Gama Source: Google Earth and the Gama S.A. website

In all analyzed cases, the speculative agency of real estate companies creates valuation attributes that affect the dwelling closing price, in which design and architecture play a decisive role. Some of them include:

- 1) Creation of intermediate residential and complex spaces. The rooms have balconies or terraces with differently sized barbecue grills that are connected to other spaces such as living rooms or bedrooms, thus enabling the better use of the view from the height of the typology. The size, characteristics, functionality, and amount of connection with interior spaces show the economic value of each unit. At the overall level, in all cases, green and recreational spaces are developed on a floor plan (25 to 30% of the floor space), with different areas and configurations, showing their relevance for the program.
- 2) Amenities: common spaces are created for sports and leisure. The most common include swimming pools; barbecue spaces; and areas for various uses, gyms, and commercial places inside the complex. The more sophisticated developments offer professional tennis courts and a heated Olympic-sized swimming pool.

3) Materials and finishes: differentiators of supply following the targeted demand. Some cases are solved with finishes and basic building materials, resulting in a more modest product. For example, when aluminum joinery with the minimum dimensions is used following current regulations. On the other hand, the program may include sets that stand out, including materials with better characteristics, such as curtain walls, porcelain floors, façade coverings with aluminum panels, radiator heating, etc..

CONCLUSION

Considering its objective, this study described the dynamics of economic capital reproduction in apartment gated communities in Córdoba, Argentina, based on local macro and micro socioeconomic effects and their influence on housing construction (the main implemented urban and typological transformations).

Investments in projects concentrated in the Colón Corridor from 2003 to 2023 reached superlative economic levels than in previous periods. Investments in quantity and origin of capital show heterogeneity over these 20 years, largely responding to the mobilization of capital from the circuit that produces export commodities for the real estate sector. This is due to the political-economic conditions that affect the impulse or retraction of enterprises, especially in secondary and peripheral municipalities such as Córdoba. This aspect highlights the reinvestment of real estate sector capital into collective housing in a gated community intended for final use and temporary or permanent rental for high socioeconomic segments. This dynamic shows how capital production from the first sector can be reinvested in the second. This study also observed the agency capacity of companies to maximize profitability by creating urban architectural attributes in housing complexes that influence final prices.

Thus, State regulations take an extremely important character to facilitate reproduction. In this case study, urban agreements authorized modifications to regulations, whose economic counterpart will lie far from the capital gains obtained by developers.

Regarding urban changes, the location of typologies occurs in the intermediate and peripheral areas with sufficient soil stock, large areas, and greatly qualified services and infrastructure, enabling the development of these large enterprises. So consumers seek this sector, real estate companies design products that aim to meet the characteristics of their demand and preferences. Then, resource architecture and design create attributes of economic appreciation that are paid for as added value by demand. The analyzed cases incorporate attributes such as house and complex intermediate spaces, amenities, and technological resolution that affect final prices and differentiate each development.

Thus, the analyzed sector becomes a platform for the real estate valuation of commodified consumption, reducing accessibility to this urban space for a large part of society¹² by only offering real estate products that target the middle and upper-middle socioeconomic classes regarding capital protection and reproduction by rental, temporary or permanent housing, or simply as a patrimonial asset.

Finally, this study found the involved actors' levels of agency, especially the role of the State as a guarantor of this process of reproduction of socio-spatial differentiations that worsens physical fragmentation and segregation. This form of municipality production causes social impacts that are yet to be assessed, thus evincing the need for an urban policy that promotes a more sustainable and inclusive municipality.

¹² To get an idea of the excluded population, 39.5% of the people in the Gran Córdoba agglomeration are poor and 6.9% are homeless (INDEC, 2022).

REFERENCES

- AALBERS, Manuel B.; ROLNIK, Raquel; KRINEN, Marieke. The Financialization of Housing in Capitalism's Peripheries. *Housing Policy Debate*, London, v. 30, n. 4, p. 481-485, 2020. DOI: 10.1080/10511482.2020.1783812.
- ABRAMO, Pedro. La ciudad com-fusa: mercado y producción de la estructura urbana en las grandes metrópolis latinoamericanas. *Revista Latinoamericana de Estudios Urbano Regionales*, Santiago, v. 38, n. 114, p. 35-69, 2012. DOI: 10.4067/S0250-71612012000200002.
- FERNANDEZ, Rodrigo; AALBERS, Manuel B. Financialization and housing: Between globalization and Varieties of Capitalism. *Competition and Change*, Thousand Oaks, CA, v. 20, n. 2, p. 71-88, 2016. DOI: 10.1177/1024529415623916.
- AVALOS, Pablo. *La producción de vivienda colectiva de perímetro cerrado: agentes y estrategias: Córdoba, Argentina 2001-2020*. Tesis (Maestría en Gestión y Desarrollo Habitacional) – Universidad Nacional de Córdoba, Facultad de Arquitectura Urbanismo y Diseño, Córdoba, 2022. Disponible en: bit.ly/43yp5G9. Acceso em: 18 jul. 2023.
- BAER, Luis. Crecimiento económico, mercado inmobiliario y ausencia de política de suelo: Un análisis de la expansión del espacio residencial de la Ciudad de Buenos Aires en los 2000. *Proyección*, Mendoza, v. 2, n. 5, p. 1-31, 2008.
- BLANCO BLANCO, Andrés; CARRIÓN, Diego; FRETES CIBILS, Vicente; HURTADO TARAZONA, Adriana; MENDIVE, Carlos; MUÑOZ MIRANDA, Andrés; PRITZ, Juan Pablo; PÉREZ, Carlos A.; REESE, Eduardo; SANDRONI, Paulo. *Expanding the use of the valorización del suelo: La captura de plusvalías en América Latina y el Caribe*. Washington, DC: Inter-American Development Bank, 2016. DOI: 10.18235/0000391.
- BONA, Leandro. *La fuga de capitales en la Argentina: sus transformaciones, alcances y protagonistas desde 1976*. Buenos Aires: FLACSO, 2018.
- BUFFALO, Luciana. La ciudad frente a las demandas del capital privado: el caso de la ciudad de Córdoba, Argentina, en el siglo XXI. *Gestión y Ambiente*, Córdoba, v. 12, n. 1, 2009. Disponible en: <https://www.redalyc.org/articulo.oa?id=169414454003>. Acceso en: 6 nov. 2020.
- BURTON, Elizabeth. The Compact City: Just or Just Compact? A Preliminary Analysis. *Urban Studies*, Thousand Oaks, CA, v. 37, n. 11, p. 1969-2001, 2000.
- CALDEIRA, Teresa. Enclaves fortificados: A nova segregação urbana. *Public Culture*, Durham, NC, v. 8, n. 2, p. 303-328, 1997.
- CHARNEY, Igal. Three Dimensions of Capital Switching within the Real Estate Sector: A Canadian Case Study. *International Journal of Urban and Regional Research*, Hoboken, NJ, v. 25, n. 4, p. 740-758, 2001. DOI: 10.1111/1468-2427.00342.
- CICCOLELLA, Pablo. Globalización y dualización en la Región Metropolitana de Buenos Aires: Grandes inversiones y reestructuración socioterritorial en los años noventa. *Revista Latinoamericana de Estudios Urbano Regionales*, Santiago, v. 25, n. 76, p. 5-27, 1999. DOI: 10.4067/S0250-7161199900760000.
- CUTRUNEO, Jimena. *Arquitectos y Mercado Inmobiliario*. Tesis (Doctorado) – Universidad Nacional de Rosario, Rosario, 2015.
- DE MATTOS, Carlos. Financiarización, valorización inmobiliaria del capital y mercantilización de la metamorfosis urbana. *Sociologías*, Porto Alegre, v. 18, n. 42, p. 24-52, 2016. DOI: 10.1590/15174522-018004202.
- ELGUEZABAL, Eleonora. *Fronteras urbanas: Los mundos sociales de las torres de Buenos Aires*. Ciudad Autónoma de Buenos Aires: Café de las Ciudades, 2018.
- ENCINAS, Felipe; MARMOLEJO, Carlos; AGUIRRE, Carlos. El impacto de los proyectos inmobiliarios

y sus atributos de sustentabilidad sobre el valor del suelo: ¿causa o consecuencia? dos estudios de casos para Santiago de Chile. *Hábitat Sustentable*, Concepción, v. 6, n. 2, p. 70-79, 2016.

FALÚ, Ana; MARENGO, Cecilia. Las políticas urbanas: desafíos y contradicciones. In: *El rostro urbano de América Latina*. Buenos Aires: Consejo Latinoamericano de Ciencias Sociales – CLACSO, 2004. Disponible: <https://biblioteca.clacso.edu.ar/clacso/gt/20100930124923/10p4art2.pdf>. Acceso en: 13 dic. 2023.

FORO DE LA CONSTRUCCIÓN PRIVADA DE CÓRDOBA; ECONOMIC TRENDS S.A. *Sistema Estadístico de la Construcción Privada de Córdoba*, 2016. Disponible en: bit.ly/3Okxit5. Acceso en: 24 nov. 2023.

JARAMILLO, Samuel. *Hacia una teoría de la renta del suelo*. México: Universidad de los Andes; CEDE Ediciones Uniades, 2009.

HARVEY, David. From managerialism to entrepreneurialism: the transformation in urban governance in late capitalism. *Geografiska Annaler, Series B, Human Geography*, Abingdon, v. 71, n. 1, p. 16, 1989.

HARVEY, David. *Breve Historia del Neoliberalismo*. Madrid, ES: Akal S.A., 2007.

HARVEY, David. *Diecisiete contradicciones del Capitalismo*. Quito, EC: IAEN, 2014.

INDEC. *Censo nacional de población, hogares y viviendas 2022: resultados provisionales*. Buenos Aires: Instituto Nacional de Estadística y Censos, 2023. Disponible en: <https://bit.ly/476caNT>. Acceso en: 24 nov. 2023.

INDEC. Incidencia de la pobreza y la indigencia en 31 aglomerados urbanos: Segundo semestre de 2022. *Informes técnicos*, Buenos Aires, v. 7, n. 63, 2022.

JANOSCHKA, Michael. El nuevo modelo de la ciudad latinoamericana: fragmentación y privatización.

Revista Latinoamericana de Estudios Urbano Regionales, Santiago, v. 28, n. 85, p. 11-20, 2002. DOI: 10.4067/S0250-71612002008500002.

LA GRANGE, Adrienne. Classifying elements of a typology of gated communities. *International Journal of Housing Markets and Analysis*, [S. l.], v. 11, n. 3, p. 520-540, 2018. DOI: 10.1108/IJHMA-07-2017-0065.

LAPELLE, Hernán Claudio; TARDÍO, María Josefina; VILLA, Micaela. *El sector de la construcción en la región Rosario durante el período 2003-2015*. In: JORNADAS “INVESTIGACIONES EN LA FACULTAD” DE CIENCIAS ECONÓMICAS Y ESTADÍSTICA, 22., nov. 2017. Santa Fe: Universidad Nacional de Rosario, 2017. Disponible en: <https://rephip.unr.edu.ar/items/b4092a00-cdff-415f-b514-d24cbb9e9887>. Acceso en: 25 jun. 2021.

LIBORIO, Miriam. *La vivienda agrupada y colectiva de gestión privada*. Córdoba: Advocatus Ediciones, 2013.

LIENUR, Jorge; BALLENT, Anahí. *La casa y la multitud: Vivienda, política y cultura en la Argentina Moderna*. Buenos Aires: Fondo de Cultura Económica, 2014.

MARENGO, Cecilia; LEMMA, Martín. Ciudad dispersa y fragmentada Lecturas de forma urbana en emprendimientos habitacionales privados, Córdoba 2001-2010. *Cuaderno Urbano*, Corrientes, v. 22, n. 22, p. 7-28, 2017. DOI: 10.30972/crn.22222041.

MARCUSE, Peter; VAN KEMPEN, Ronald. *Globalizing cities: a new spatial order?* Oxford: Blackwell Publishing Ltd, 2000.

MATIZ, Elvia; AVALOS, Pablo. Resiliencia en la gestión inmobiliaria en contextos del periurbano. Experiencias compartidas Córdoba - Bogotá. In: CONGRESO INTERNACIONAL VIVIENDA Y CIUDAD: DEBATE EN TORNO A LA NUEVA AGENDA URBANA, 3., 2019, p. 892-922. *Anais [...]*. Córdoba: Universidad Nacional de Córdoba, 2019.

MUNICIPALIDAD DE CÓRDOBA. *Programa de densificación urbana*. Córdoba: Municipalidad de la Ciudad, 2010.

MUNICIPALIDAD DE CÓRDOBA; UNIVERSIDAD NACIONAL DE CÓRDOBA. *Bases para el Plan Director de la Ciudad de Córdoba. Lineamientos y Estrategia General para el reordenamiento del Territorio*. 2008. Disponible en: <https://www.mininterior.gov.ar/planificacion/pdf/planes-loc/Cordoba/Plan-Director-Cordoba-2020.pdf>. Acceso en: 24 nov. 2023.

NEUMAN, Michael. The Compact City Fallacy. *Journal of Planning Education and Research*, Thousand Oaks, v. 25, n. 1, p. 11-26, 2005. DOI: 10.1177/0739456X04270466.

PIKETTY, Thomas. *El capital en el siglo XXI*. Ciudad de México: Fondo de Cultura Económica, 2014.

PÍREZ, Pedro. La mercantilización de la urbanización: A propósito de los “conjuntos urbanos” en México. *Estudios Demográficos y Urbanos*, Carretera Picacho Ajusco, v. 29, n. 3, p. 481, 2014. DOI: 10.24201/edu.v29i3.1469.

ROMO, Claudia. Las urbanizaciones residenciales cerradas en la periferia de Córdoba Nuevas modalidades en la expansión suburbana del siglo XXI. *PENSUM*, Córdoba, v. 1, n. 1, 2013. DOI: 10.59047/2469.0724.v1.n1.12749.

SASSEN, Saskia. La ciudad global: Una introducción al concepto y su historia. *Brown Journal of World Affairs*, Providence, v. 11, n. 2, p. 27-43, 1995.

SOCOLOFF, Ivana. Financiarización variada de la producción inmobiliaria en Argentina: el caso del boom inmobiliario en Buenos Aires y la post crisis en perspectiva (2002-2015). *Scripta Nova*, Barcelona, v. 23, p. 26, 2019.

SZAJNBERG, Daniela. *Torres Amuralladas*. Buenos Aires: Nobuko, 2010.

TELLA, Guillermo; CAÑELLAS, Estela; MUÑOZ, Martín; NATALE, Daniela. La irrupción de las torres: Una explotación intensiva en las periferias metropolitanas. *Revista Vivienda*. Buenos Aires. [online]. Disponible en: bit.ly/3rEq0aU. Acceso en: 10 jun. 2022.

THEODORE, Nick; PECK, Jamie; BRENNER, Neil. El urbanismo neoliberal: La ciudad y el imperio de los mercados. *Temas Sociales*, Santiago, n. 66, p. 1-12, 2009.

THEURILLAT, Thierry. The negotiated cities: between financialization and sustainability. *Géographie, Économie, Société*, Cachan, v. 13, n. 3, p. 225-254, 2011.

TOPALOV, Christian. *La urbanización capitalista. Algunos elementos para su análisis*. Ciudad de México: Edicol, 1979.

VAN HAM, Maarten; TAMMARU, Tiit; UBAREVIČIENĒ, Rūta; JANSSEN, Heleen (orgs.). *Urban Socio-Economic Segregation and Income Inequality: A Global Perspective*. Cham: Springer International Publishing, 2021. DOI: 10.1007/978-3-030-64569-4.

WELCH GUERRA, Max; VALENTINI, Paula. Torres Jardín en Buenos Aires. Proyecciones de una tipología habitacional. In: *Buenos Aires a la deriva*. Transformaciones urbanas recientes. Buenos Aires: Biblos, 2005.

WOELFLIN, María Lidia; LAPELLE, Hernán Claudio; LÓPEZ ASCENCIO, Guillermo. El comportamiento del sector construcción-inmobiliario frente a la crisis de 2008. In: JORNADAS “INVESTIGACIONES EN LA FACULTAD” DE CIENCIAS ECONÓMICAS Y ESTADÍSTICA, 14., nov. 2009. Santa Fe: Universidad Nacional de Rosario, 2009. Disponible en: <http://bit.ly/470YN1d>. Acceso en: 24 nov. 2023.