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The Urban Form as Palimpsesto Sociocultural in Hispano Andinas Cities of Peru

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Abstract: The conformation of cities is not isolated events, neither in space nor in time; one of the paths that enable their understanding is the study of their geometric patterns and archetypes behind which we can interpret the underlying social and cultural implications of ideologies and ways of life; each stroke refers to a conception of the world in time. The Andean cities of Peru owe much of their genesis and consolidation to European thought of the sixteenth century characterized by its pendular trajectory between the statements of Christianity and Renaissance ideals confronted and carried to the stroke by means of string and rule in territories that by their characteristics demanded a memory of their complex settlements; in spite of this, contained in their configuration, visible elements of cohesion and socio-cultural syncretism of rooting and influence for the others that later settled. The research is carried out in three main cities (Cajamarca, Jauja and Cusco), through an analytical historical methodology that analyzes traces of multiple scriptures, legible in their urban architectural warp amalgamated for centuries and that have been conforming various palimpsests. These urban hypertexts have been undermined by incessant anthropic erosion and banalization of their spaces; however, they show unique characteristics that turned into strengths can mitigate tendencies towards urban aporías due to the inertia in front of the desire to follow the questionable way of the big cities.

Key words: Urban form, palimpsests, urban memory, Peruvian cities.

1. Introduction

"*Why study the urban form as a socio-cultural palimpsest of the Hispanic Andean cities of Peru in the context and discussion of current urbanism?*", was one of the questions at the beginning of this work. At various places in the world we can see how memory and history tend to unify in the attempt to build public identities that seek to link with social and aesthetic functions to which they seek to be useful; it is so that the past of the cities has been incorporating[1] itself to the transformation of the spatial experience from policies of vindication of past knowledge within its development. Renowned urban planners and contemporary historians[2] have been contributing to this with their research and have come to establish that the cities with the greatest capacity to achieve a good standard of living are those that contain medieval urban matrices.

In the specific area of the Andean cities of Peru, they face a degradation in their urban structures and foundational origins as a result of the uncontrolled expansion and construction caused by the real estate overflow and lack of effectiveness in the planning mechanisms that give way to great part of these cultural heritages which are undermined and denied, in an effort to continue the questionable way of the great cities whose consequences are undermining their very existence.

However, since the analysis that has been carried out, these nuclei have great potential that underlies the qualities of their respective urban forms and palimpsests of enormous memory to which we can direct our eyes from angles that contribute to rediscover their vitalities.

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[1] Nowadays, there are countless cities that have been leading the historical revaluation of their nuclei in their urbanistic actions such as: Seville, Kyoto, Cartagena de Indias, Austria, etc.

[2] See the research papers of Jan Gehl, José Enrique Ruiz-Domènech among others.

2. Methodology

Based on the general scientific approach, we use the analytical historical method that investigates events and various subcomponents (Chronology, Geography and territorial analysis, Ethnology, etc.) within a heuristic process classified chronologically, which allows to know and study their morphologies by order of towns or cities seeking to relate historical facts and cultural manifestations in an interpretive perspective.

3. Measurement and Analysis

From 1492 onwards, one of the most massive projects of settlement and urbanization in the humanity history[3] was carried out in American territories, whose purpose of expansion, territorial domination and plundering of wealth by the Spanish crown has left indelible traces in the history and evolution of cities in the "new world".

An uninterrupted anteroom is the main previous experiences of city in Spanish territory such as those of Benirabe, today Castellón de la Plana in 1233, Almenara in 1250 or Villarreal de Burriana in 1271 (all in the Valencian Community) or the one of Santa Fe in Granada in 1491 (Community of Andalusia) among others, in which the classical tradition of regular layout was clearly used.

Based on these references, the first cities were implanted in the supposed Indies, the main ones being: La Isabela, one of the earliest cities in the New World located on the north coast of La Española, now the Dominican Republic; Santo Domingo de Guzmán, capital of the present Dominican Republic, in the Caribbean Sea, founded in 1494 by Bartolomé Colón;[4] Santa Maria the old one of Darién, founded at the end of 1510 by Martín Fernández de Enciso and Vasco Núñez de Balboa;[5] Panama Viejo, founded in 1519[6] by PedrariasDávila.

This is how the number of Spanish foundations in America from 1492 to 1810, is of approximately 970 cities in 25 countries; (Terán, 1989) [1] of these, 39 are located in Peruvian territory. This explains the dimension and size that from the conquest would come to delineate the urban scenario of the new world and that is largely maintained until today.

Of the thirty-nine cities of occupation or colonial foundation, six are the most important[7] and are located in the Andean zone; located in the old axis of the Inca road or "*QaphacÑan*" between Cusco and Quito of which three are the cases of study (Fig. 1).

The analysis has contemplated two important aspects: the first is the urban form whose theoretical framework has been structured under the concept that it comprises the set of "footprints" in the architectural urban space that in turn is the product of underlying social, cultural and modes of life that mold them and "dress" leaving traces that can be read and interpreted; each stroke refers to a conception of the world in time.

The urban form is then the physical stage of a city, a kind of "backdrop" within which its inhabitants are the vital energy, actors and protagonists of all that can transcend. The urban form has been analyzed from the following components:

1. Territoriality (location, topography, networks of roads, paths or pathways, connection with rural space, borders or contours);

2. Layout (urban shape, blocks, streets);

3. Public and private space (relation surface built/free, squares, parks, urban shape);

4. Vital nuclei, strategic points or nodes (urban-architectural landmarks, neighborhoods, highlighting natural landscape, water routes).

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[3] Comparatively, the greatest empires in history came to dominate approximately: Spain 25 million km². Roman Empire 8 million km².

[4] On the eastern bank of the river Ozama, later transferred to the western margin by Nicolás de Ovando in 1502.

[5] In the isthmus of Panama, coast of the Caribbean Sea, today municipality of Unguía, republic of Colombia, capital of the Governorship of *Castilla del Oro* until 1519 when it moved to Panamá Viejo.

[6] It remained until 1671, then moved to its present location, one of the first European settlements on the Pacific coast. Between 1520 and 1530 it was the starting point of all expeditions to South America.

[7] The three case studies plus the cities of Huancavelica, Ayacucho and Castrovirreyna.

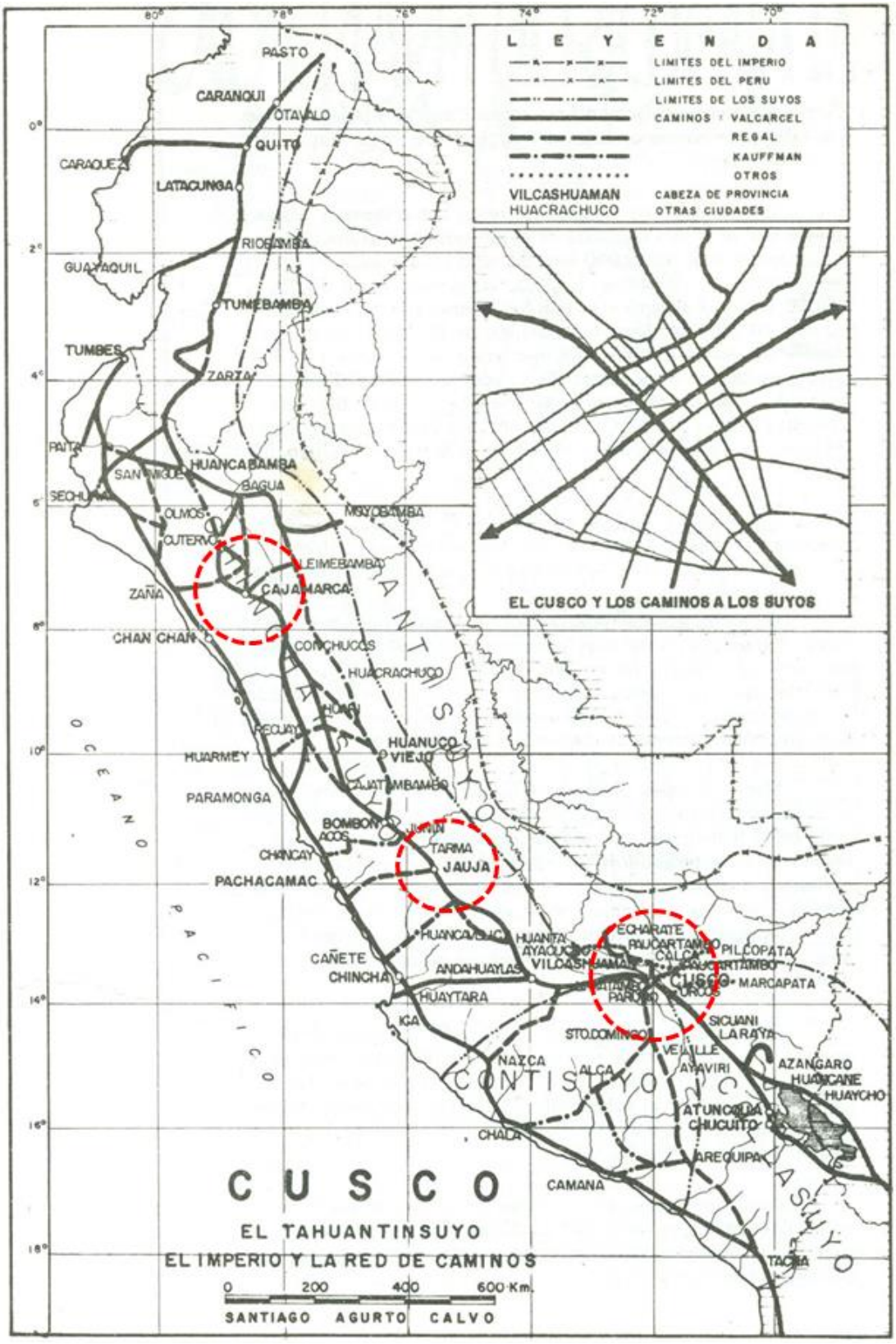


Fig. 1 Location of case studies cities.
Source: Agurto, 1987, p. 39 [2]. Circles in red, added by the author.

The second aspect, becomes the condition of palimpsest that in this case is used metaphorically from the field of literature,[8] taking into account that cities are never built at once because they are not immediate; are settling in different political regimes or states that define their patrimonial condition with the passing of time. This term, allows to allude to the city like a set of layers feasible to be "deciphered" by times; what at some point became blurred or disappeared may surface and be visible again; gives place to articulate the purpose of the preservation of certain socio-cultural elements of a city that can continue being valid.

In other words, the city is a sort of "urban manuscript" or "hypertext"[9] on which the work of man is written and impregnated as a "superposition of texts"; allegorically expresses the diachronic juxtaposition of spaces materialized in their cultural configuration and urban memory. The concept helps to understand the cities as complex entities with respect to the produced culture conformed by precedents that have not been completely erased, can be reinterpreted.

In this context of analysis, the historical centers of the cities in the Peruvian ande, from their characteristics of implantation have been classified in:

1. Cities of new plant or Ex-Novo (Cajamarca, Ayacucho, Huancavelica);

2. Cities with evidence of pre-Hispanic pre-existence that had no major impact on its definitive foundation whose current core is in a sector different or close to it (Jauja, Huánuco, Castrovirreyna);

3. Cities in which the Hispanic plot is juxtaposed on the pre-existent Inca fabric in a convincing way (Cusco, Ollantaytambo).

All of these had strategic functions to be: advanced nuclei, centers of provisioning, administration, population control and implementation of the "new order" and a "new way" of understanding the world within whose process is implicit the found by the conquerors as culture in that *"mutual dazzle"* that was sedimenting palimpsests that singled out its spatiality and social use.

4. Cajamarca, Epicenter of Meeting and Advanced Territorial Conquest

Cajamarca, capital of department and province of the same name, located in the north Andean zone of Peru at an altitude of 2,720 m.s.n.m. A political nucleus of thirteen provinces, it is the most populated of all with 316,152 inhabitants (capital district, c. 2007), within an area of 2,979.78 km² that results in a density of 106.1 hab./km².

5. Palimpsests Identification

In pre-Hispanic times it had a strategic position within the network of the Camino Real or "QapacÑan" as a node for access to the city of Quito and that at the time of the conquest served for the various incursions and definition of its territoriality that is maintained until today within a rugged topographical relief adjoining extensive countryside.[10]

The layout of its historical nucleus is reticular with heterogeneous apples in terms of measures, whose main axes of streets have been the origin for the continuity of its tissue towards the zones of growth that evidences an orthogonal predominance in the whole city.

The built space is a predominant hybrid architecture of two and three floors with a tendency to rise higher to the surrounding areas. Its first floors are of commercial use that defines a homogeneous urban profile in a peculiar scale. Its central streets lodge nuclei of important civil buildings from the colonial time like the

[8] Palimpsestus, is the ancient manuscript that still retains traces of an earlier writing within the same surface, expressly erased to rewrite. One of the most celebrated and ancient is the Palimpsest of Archimedes.

[9] Concept created by Vannevar Bush, coined as "hypertext" by Ted Nelson in 1965. Hypertext, non-sequential structure that makes it possible to create, add, link and share information from various sources through associative links.

[10] The first Spaniards, after occupying and founding San Miguel de Piura, encouraged by the news of treasures and wealth of the vast Inca territory used this network of roads, and burst in Cajamarca on November 15, 1532 to star in the epic encounter between two worlds: European and Inca.

legendary room of the rescue, important barroque religious architecture, natural landscape highlighting as the hill Santa Apolonia,[11] the baths of the Inca,[12] etc.

The main square is the nucleus of the epic historical outcome, whose trace overlapped the preexisting triangular space [3][13] whose hypothetical geometric elucubration is shown graphically (Fig. 2).

6. Jauja, Mythical City and First Capital of Peru

Jauja, is the capital of the province of the same name, located in the Department of Junín at an altitude of 3,352 m.s.n.m. With a relatively rugged topography, political nucleus of thirty-four districts, the most populated of all with 17,433 inhabitants[14] within an area of 10.1 km² translated into a density of 1,726 hab./km².

7. Palimpsests Identification

In pre-Hispanic times it has had an important location within the network of the Camino Real or "QapacÑan" as access and transit to the north of the empire and by the opposite extreme south towards Cusco within whose plot it is implanted as a city in the century XVI.

The layout of its historical nucleus of colonial foundation[15] is of orthogonal reticular form (blocks of an average of 85 x 90 ml) whose main axes of streets

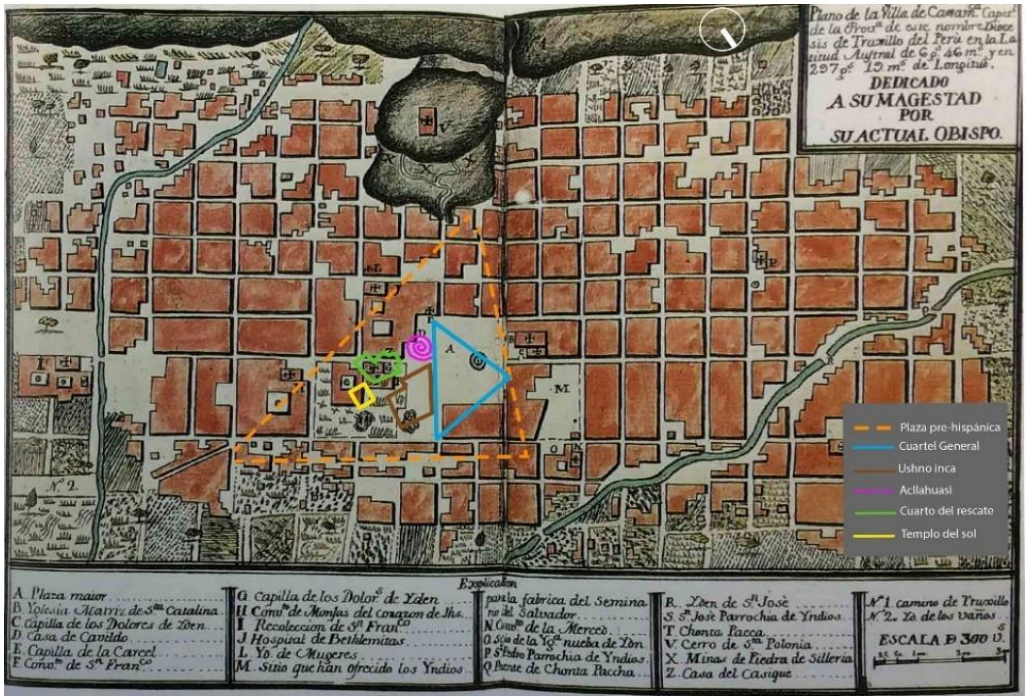


Fig. 2 Cajamarca current and hypothesis of pre-Hispanic urban forms.

Source: Graphs of the author on plan of Cajamarca elaborated in times of Baltasar Martínez Compañon (Biblioteca Palacio Real Madrid, 112, TI).

[11] Natural hill frequently visited, is the most attractive viewpoint of the city

[12] Natural spa of hot springs.

[13] Archaeological investigations have not been carried out to corroborate this information; however, in the reference cited there is the description of Juan Ruiz de Arce, a close observer who was present in Cajamarca, who describes it in terms of: "The town of Caxamarca it is in this way: it is between the rooms where we retired and the fortress, were three rooms, each room would be two hundred steps; were in triangles. Between the room and the room, a street in the village was used to enter the square", as well as that of Hernando Pizarro (pp. 37-39).

[14] Estimated figure, National Institute of Statistics (INEI), capital district, census year 2015.

[15] The first Spanish conquistador who arrived at Jauja was Hernando Pizarro in March of 1533, followed that of Francisco Pizarro in October of 1533 who founded it provisionally during the stop in its march towards the Cuzco. On his return he made the definitive foundation on April 25, 1534.



Fig. 3 Pre-Hispanic Xauxa (right side) and actual Jauja (left side).
Source: Author's elaboration.



Fig. 4 Jauja, Panoramic view towards the lagoon and surrounding mountains.
Source: Author, May 2009.

have originated the continuity of its fabric towards the other areas of growth that is evidenced in a predominance orthogonal across the city. The streets of its historic center maintain an average section of 7 meters that offers a pleasing scale and proportion. The vestiges of the pre-Hispanic nucleus of Xauxa are close to its historical center at a distance of 2.4 km (Fig. 3).

The relationship built space and free space is low density with predominant heights of two and three floors with tendency to more intense uses. Its first floors show a predominance of commercial activity that gives dynamism to its streets. In its historical center, there is a certain unity in its volumetries within which stand sloped roofs with tiles, balconies and vertical spans.

Its important public spaces such as the main square, Junín[16] and Grau shreds organize the city center; some malls and parks draw a peaceful and mythical[17] urban profile with mountains and archaeological remains as background (Fig. 4).

[16] Hypothetically axis of the Inca royal road in a north-west direction south-east.

[17] Coincident with the descriptions of the first stories of the conquest that served to Lope de Rueda (playwright sevillano, 1510-1566) to publish in his Comedies and Steps "Land of Jauja" from which the legend of the "Country of Jauja" or expressions like "This is Jauja!"

It has important nuclei of interest materialized in a set of civil and religious buildings of the colonial-republican era of about thirty houses, a natural lagoon of 21.4 km² and other historical events of interest[18] that make it unmistakable within the genesis of mestizaje in Peru.

8. Cusco, Ancient City and Capital of the Inca State

Cusco, capital of the Department of the same name is located in the south sierra at an altitude of 3,400 m.s.n.m. Former capital of the Inca empire whose colonial foundation was realized the 23 of March of 1534; political nucleus of thirteen provinces with 108,798 inhabitants (capital district, estimated to 2012), within an area of 116.22 km² projecting a density of 936.1 hab./km². It has been a World Heritage Site since 1983.

9. Palimpsests Identification

The tracing of its historical nucleus is in the form of a trapezoidal reticule that becomes of the Inca city, adapted to its topography and relief that was adapted to the difficulties of the land. The main axes of streets that started in the incanate towards the "cuatrosuyos"[19] (Fig. 5) are maintained and have generated the continuity of their weaving towards the recent areas of growth within an extraordinary syncretism between the pre-Hispanic "Cancha" and the "Plaza", whose adaptation of the new forms was probably facilitated by the sharpness found in the Inca line, as well as by a certain conceptual similarity of plaza, apple and street.

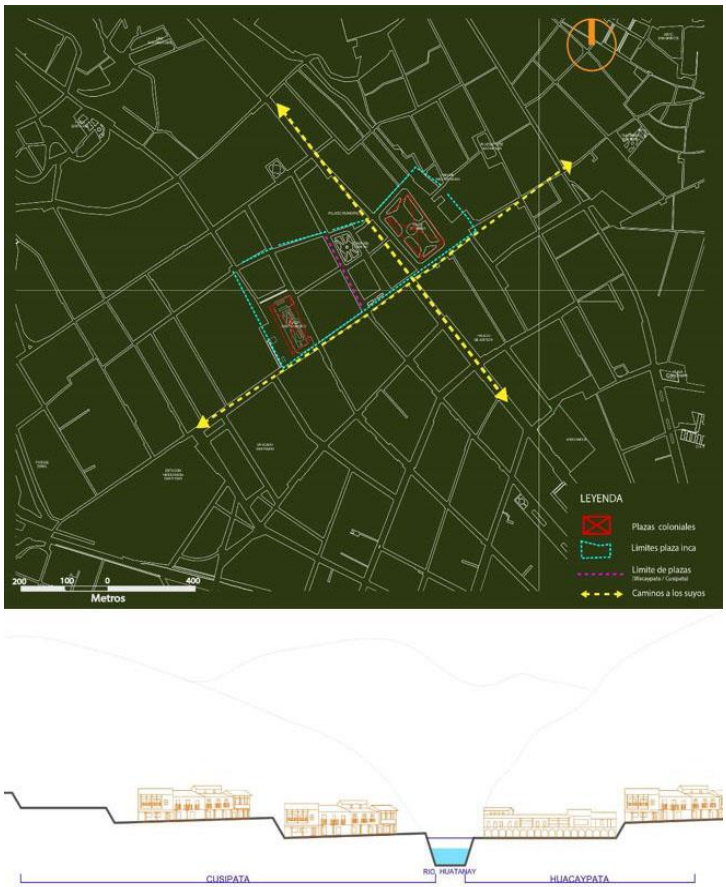


Fig. 5 Cusco, main square, juxtaposing pre-Hispanic and Hispanic spaces.
Source: Author based on review of cited sources.

[18] In this city was born Francisca Pizarro, the first mestiza of Peru.

[19] Each of the territorialities towards four cardinal points (SE, NO, NE and O).



Fig. 6 Cusco, Hispanic arcades and Inca walls in main square.
Source: Author, October 2011.

The relationship built space and free space is of medium density with predominant heights of two and three floors in the outline of the main square[20] once surrounded by important palaces built in stone. It is to emphasize the commercial use in the first levels protected by the forceful presence of arcades[21] as elements favorable to the dynamism and perception of its spaces in dialogue with the climate of the place since they configure spaces that "extend" the street or square (Fig. 6).

Its historical center has interesting centers and houses monumental civil and religious buildings of both cultures in which on the pre-Hispanic places of worship were erected the western churches as the one of the "Coricancha" or enclosure of gold.

In short, this city maintains its Inca urban conformation on which European culture superimposed new architectural forms that evoked the places of origin of its new inhabitants and which now house interesting ways of social life in its streets, where it is still possible "to find people at the doors of their homes" [4][22] along with an important survival of their traditional neighborhoods.[23]

10. Urban form Synthesis—Palimpsests

The following table shows a summary of the urban form in relation to the configuration of palimpsests in the three cities.

[20] The Inca Square (450 x 150 meters approximately) was subdivided into the colony (Fig. 5).
[21] Elements of Roman origin, reminiscent of Extremadura. In Old Panama a whole flank of his square was built with this language.
[22] Richard Rogers, on a visit to this city, interview in extenso in reference mentioned, pp. 14-17.
[23] Approximately fifteen Inca neighborhoods were merged and then merged into seven.

Table 1 Typological comparison of urban palimpsests: morphology of three Hispanic-Andean colonial foundations.

Clasification			Urbanform—Palimpsests			
			Territoriality	Layout	Public/private space	Vital nuclei
1	New plant or ex-novo	Cajamarca	- Inca road network of QapacÑan, is part of the present city - Immediate urban space-rural connection	Hispanic urban fabric on pre-Hispanic fabric to be discovered - Regular apples - Straight streets	- Extensive main square (2.13 Ha.) - Homogeneous urban profile in its historical center	- Colonial/republican mestizo buildings - Inca and Hispanic architecture milestones - Buildings under foot - Important presence of neighborhoods (barracks)
2	In forcé Preexistences	Jauja	- Inca road network of QapacÑan is a vital element of the city - Immediate urban space-rural connection	- Hispanic fabric city current and footprints pre-Hispanic city - Regular apples - Walking straight streets	- Hispanic main square and backward prehispanic spaces - Heterogeneous urban profile in monumental area	- Colonial/republican mestizo buildings - Buildings under foot - Important presence of neighborhoods (barracks)
3	Juxtaposed shapes	Cusco	- Inca road network and prime capital, vital element of the city - Symbiosis cultural landscape and topographical relief	- Syncretism urban Andean Hispanic fabric - Apples predominantly trapezoidal - Inca-Spanish urban plot - Straight streets	- Inca urbanism readable and visible Homogeneous urban profile in the historic center - Presence of unique squares and squares	- Hybrid civil and religious architecture (Hispanic-Andean) - Visible Inca architecture - Important presence of neighborhoods (07) - Possible as an extension or "extension" of squares and streets

11. Conclusion

The urban form of these cities, the result of two socio-cultural aspects (European and indigenous), remained intact from the founding stage for almost five centuries, a process in which important urban qualities (urban fabric, scale, proportionality, etc.) which denote a potential capable of contributing to the regeneration of its unpublished tissues.

The three cities contain typologies of medieval matrix whose architectural scale contains palimpsests socio-cultural ones refined by the specific conditions of place and materialized in great part of "topological" way giving like result unique architectonic urban expressions interesting for the current urbanism.

The research suggests topics on the identification of palimpsests as an important aspect within the urban analysis that can contribute to ponder the urban qualities of the cities in their interrelations with the local and universal culture.

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