

Architectural Deterioration and Degradation of Cultural Heritage Typologies Along the Giráldez Avenue Thoroughfare in Huancayo

Adolfo Gustavo Concha Flores

¹Facultad de Arquitectura, Universidad Nacional del Centro del Perú, Perú.
aconcha@uncp.edu.pe, <https://orcid.org/0000-0001-6631-0632>

ABSTRACT

It was investigated posing the problem: What is the level of deterioration and architectural degradation in the cultural heritage typologies in the road axis of the avenue Giráldez de Huancayo? And the objective was to determine the levels that exist between the variables: deterioration and architectural degradation and the cultural heritage typologies in the road axis of the avenue Giráldez de Huancayo. The hypothesis was proposed that the level of deterioration and architectural degradation in the monumental heritage typologies is high in the road axis of the Giráldez avenue of Huancayo, for which two research scopes were developed, the first one was quantitative descriptive and the second Had a basic qualitative level, and was characterized as transverse and non-experimental. The research instrument that I used was the observation sheet, which was evaluated for validity with the Kappa Index of Fleiss, which determined a value for both variables of 0.79 (Acceptable agreement) and the reliability test detailed the Alpha Coefficient of Cronbach whose measure for both variables was 0.81 (High value). The sample used was intentional non-probabilistic, because 45 cultural heritage typologies were identified in the study area to operate the observation sheet. The results determined a high level of significance among the studied variables; Commercial and service use with 0.95; The contemporary constructive technologies with 0.96 and the regular state of conservation with 0.98. It was determined that there is a high level of significance between the system of the variables: deterioration and architectural degradation and monumental heritage typologies, and it was agreed that the use of land especially commercial and services, show a high level of significance with 0.95.

KEYWORD: architectural deterioration and degradation, architectural style, typologies cultural heritage

INTRODUCTION

The road axis of Giráldez Avenue, in recent years, has seen an increase in a continuity of contradictory architectural and urban processes, which began approximately in the 80s, and that in the current situation, have become much more latent, especially from the architectural context. In the same way, seen from the theory of historic centers, it was identified that some architectural typologies with monumental value are in the process of architectural deterioration and degradation, and others as a result of real estate dynamics, concretized their destruction and total extinction Percival, G. (1979). Within the gloomy framework described, it can be perceived that other typologies with monumental architectural value are being attacked in their nature, especially in their formal and symbolic aesthetic style, with interventions that clearly show the absence of restoration and conservation processes consistent with their preservation, and that have determined an

apparent "good" state of conservation. product of the real estate interest of investors who have facilitated the state of conservation in which Waisman, J. (1974) and Menéndez M. (2015) are found.



Figure 1

Architectural typology with monumental architectural value, which was in a clear process of deterioration and degradation, and as a result of the aggression of the economic dynamics of the real estate sector, concretized its destruction. (Mansion No. 500)

The impact of the investment dynamic translates, in the almost total set of these buildings and in a generalized way, in the change of land use, especially from residential to others of a commercial and institutional nature, where the investor's interest in achieving the highest profitability, has implied proposals that result in the morphological and spatial alteration of its original structure. in the same way, the anomalous addition of construction systems that are not at all consistent with the nature of these typologies



Figure 2

The impact of the dynamics of the investors have concretized the destruction of an architectural typology with monumental value, to which is added the negligence of the institutions and the population in general, and whose relevance was to express the language of the "U" House. (House No. 567)

The extensions, alterations, subdivisions, dismemberments, defragmentations, destructions or reconstructions in existing buildings with peculiarities of monumentality, manifest themselves as an endemic fact in this urban space and all of them with questionable intervention actions Concha, A. (1990).

To these facts is added the negligence of state and private institutions, as well as that of the population in general, which have determined that in the area of study, a dark panorama is glimpsed, which looms above all in the architectural typologies identified as monumental heritage. However, it is also possible to observe specific actions of intervention in the conservation of some typologies with the formal expression of "U", which are developed with actions consistent with the framework of monumental preservation.



Figure 3

The expressions of monumental architectural valuation of this typology, with the language of the "U" House, so peculiar in the Mantaro Valley, determine its monumental value, and whose preservation corresponds to the interest of the owner or the real estate consultant. (Mansion No. 789)

Taking a position of critically describing the atypical situation raised, the following general problem was formulated: What is the level of architectural deterioration and degradation in the cultural heritage typologies on the road axis of Giráldez Avenue in Huancayo? The absence of joint institutional actions and intervention programs in the study area have concretized the degradation and deterioration in the study area, which urgently requires a coherent preservation program, with the aim of safeguarding these cultural heritage typologies, and whose projection is to establish dialogic relationships between community and architectural identity. so diminished in recent years in the ideology of the citizens of Huancayo.

THEORETICAL BASES OF ARCHITECTURAL DETERIORATION AND DEGRADATION

Analysing the practice on the preservation of cultural heritage, we turn to Garre, F. (2010) who states that: "the importance of the preservation of our heritage – in this case urban architecture – arises from its value as a testimony of different cultural phenomena, and its action as an element that maintains the cohesion of a group". Also on this subject, Azkarate, A. (2003) declares "the values developed over time as valid actions of a historical process, and that can still be so in the future. In this sense, reference works (buildings, houses, monuments, ruins) acquire museum value, understood as the value of objects or goods – in this case real estate – considered cultural heritage".

Under the influence of the previous concept, Santamaría, J. (2013) established degrees of deterioration and degradation as these: material deterioration. There are deteriorated and empty homes, obsolete spaces, sewage networks, lighting, etc., which do not respond to the current needs of the population or their well-being. Historical residential typologies have undergone numerous transformations, occupying courtyards and galleries, increasing the number of dwellings, little or no maintenance, physical degradation, loss of habitability, which causes an emigration of the native population.

Similarly, social degradation occurs in the sense of loss of social mix. In the historic centers, the social mix tends to disappear, producing a phenomenon of social polarization. This phenomenon is the result of social degradation, and on the other hand, in certain areas of the historic centres there are groups of high incomes that occupy the places of highest urban quality.



Figure 4

The language of this architectural work with monumental value was conceived under the dominant influence of the social and the economic, and whose formal relations determine that expression. The gold section is inherent in the relevance of its composition; (Mansion No. 201)

Benévolo, L. (1997) emphasizes the excessive weight of tertiary activities. In the commitment to the recovery of historic centres, dependence on commercial and tertiary activities has meant that sometimes these centres appear mono-specialised in this use, losing others that are just as important as residential, etc.



Figure 5

The peculiar expressions of this architectural typology offer a monumental value, which determines its valuation, and translate into an eminently political conception. Where formalist relations express the spatial hierarchy that it once showed. (Electro Centro Mansion)

The Latin American experience, in reference to deterioration and degradation, has two substantial causes: natural disasters, e.g. that of Cusco in 1950 and part of Nicaragua in 1974; and public and private negligence or negligence, which without legislation that protects the architectural cultural heritage, has given free rein to the destruction of significant works. To these facts, we should add the socio-economic pressures that these areas exert in the local, extra-regional and even international context, which have resulted in the destruction of important buildings categorized as cultural heritage Hardoy, J. and dos Santos, M. (1983).

THEORETICAL BASES OF CULTURAL HERITAGE TYPOLOGIES

In this theoretical context, the formalist perspective of interpreting architecture was put on the table according to Orellana and Sato (2002), who stated: "the form and substance of the expression of architecture would be the form of buildings, and meaning can be

expressed through form, style, color, texture (it can be a cubic form, but of glass or wood, in both cases it is a form, but the substance changes). With this you already have a structure of architectural expression. In architecture everything is styles, architectural figures. There are many structures in expressive architecture, architecture is expressed through many forms, and architecture can also be divided into forms and substances at the level of signifier (what it means, not the signified).

It is important to look for the foundations that may have significance with respect to architectural typology as a theoretical basis; in this regard, the thought of Martín (1984), in the Doctoral Thesis, entitled "Typology in Architecture" states that: "he understands typology in architecture as the discipline that studies architectural types, mediating between Architecture and Society". Then he continues "... that architectural typology is a rational construct contained in certain elements of reality, whose regulatory laws it explains theoretically, and certain conventional elements, acquired in a specific historical culture, which as a structure subject to transformations, allows the analysis and classification of real architectural objects, at any cognitive level, or the modification of that reality, once known, to the extent that it becomes a project instrument".

He concludes his theoretical position by stating: "I have tried to defend for typology a place in architectural creation. In this way, I have said that types mediate between the *idea* and architecture: society elaborates an idea of architecture and the discipline offers *types* for approval. For this it is important to specify that the theory of types is presided over by an ontology of construction, it allows a discussion on architecture beyond stylistic schemes. Thus, in the face of a nineteenth-century coincidence between *type* and *character*, I prefer to speak now of a relationship between *typology* and *semiology* (or *semiotics*) insofar as both disciplines seek to define invariants. In this field, the contribution of Gutiérrez, R. (1980) is important, who identifies a typology of cultural heritage based on the "Casa Cusqueña", and explores identity with semantics and syntax of traditional or vernacular architecture. Similarly, there are other arguments such as that of Battista (1980), who states in his book: *Arquitectura, ideología y ciencia*, Blume, Madrid and in "La tipología, entendida como estudio de los tipos constructivos" (1999). Likewise, Vittorio (1972), in his publication: *The territory of architecture*, G. Gili, Barcelona, states that "Typology, a discipline that deals with the discussion, classification and foundation of types, is constituted in the set of its results and methods as an important subject for architecture". Panerai (1980), in his treatise: "Tipologie" in AA.VV.: *Elements d'Analyse urbaine*, AAM, Brussels, argues: "It is this system, that is, the set of types and their relations that we call typology".

MATERIAL AND METHODS

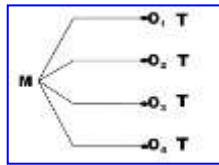
Type of scientific research:

The peculiarities of the research work have determined that due to the scope of the research it was descriptive and quantitative, because the objective was to describe, analyze and interpret the properties that exist between the variables $V_x =$ Architectural deterioration and degradation and $V_y =$ Cultural heritage typologies, so that at the Basic level of research with a qualitative approach, it was to produce theoretical conceptual bases about the reality under study Hernández, Fernández and Batista (2010).

Research Design

The research design was non-experimental, because it was determined that there was no causal relationship between the variables V_x and V_y , nor was the proposed variables intentionally manipulated. Likewise, it was of a cross-sectional nature, because it described,

analyzed, and interpreted the properties and qualities of the variables, specifically in 2015 Fernández et al. (2015). The design model that was applied for the research was as follows:



Where:

(M) = This is the selected sample and represents the total set of buildings determined as monumental heritage buildings.

(O) = I represent the observations made when applying the Evaluation Sheet instrument. The following method was used:

- **O1** = (Architectural deterioration and degradation / Land use in cultural heritage typologies. Quantitative approach),
- **O2** = (Architectural deterioration and degradation / Construction technologies of cultural heritage typologies Quantitative approach),
- **O3** = (Architectural deterioration and degradation / State of conservation of cultural heritage typologies Quantitative approach).
- **O4** (Architectural deterioration and degradation / Spatial and formal structure of cultural heritage typologies. Qualitative approach).

The purpose was to process, measure and conceive information or concepts regarding V_x and V_y.

(T) = Means that the application of the tests was operated between February 10, 2015 and September 10, 2015.

Level of measurement of variables

The measurement of the quantitative variables and subsystems for the objective of the statistical treatment was: nominal, which for the study that is carried out these will acquire the value of Theoretical Categories Triola, M. (2010).



Figure 6

Structure of the level of measurement of the variables. Elaboration: Author's own. (2014)

Determination of the study area

The criteria that were applied in the delimitation of the research area were based on the following concept: "It comes to represent an urban sector, where the socio-economic forces of the real estate sector acting when interacting with the architectural deterioration and degradation and the typologies of cultural heritage, together with the urban functions that it performs in the context of the historic area, district, province, region and country,

have originated a diverse range of contradictory actions on land use, construction technologies, spatial structures, state of conservation and diverse cultural valuations, which required to be focused with mixed research (quantitative and qualitative at the same time).

Geographical area

Department: Junín

Province : Huancayo

District : Huancayo Cercado

Zone : Historic area

The population and study sample

The macro object of analysis was represented by the Historical Area of the Cercado District of Huancayo and the determination of the representative sample by the common and homogeneous characteristics denoted by the population, was carried out in the urban sector of Giráldez Avenue. This sample used was Non-Probabilistic or in the opinion of the researcher, because it was adapted to the scope of the descriptive research and the basic level of the study that was carried out Sierra, R. (2015).

Urban sample of blocks

Degree of representativeness was made up of 17 blocks, categorized with alphanumeric assessment.

Urban sample of lots

Degree of representativeness was made up of 45 lots or properties, categorized with the assessment of architectural typologies of cultural heritage.



Figure 7

Delimitation of the study area, which is made up of 17 blocks and 45 architectural typologies of cultural heritage.

RESULTS

System of the level of significance of architectural deterioration and degradation and the typologies of cultural heritage Bertalanffy, L. (2010).

General hypothesis: The level of architectural deterioration and degradation in the monumental heritage typologies is high on the road axis of Giráldez Avenue in Huancayo. The level of significance that was determined for this study was a minimum of 0.05, for and n=45 cases of the sample of lots or typologies of cultural heritage were used. The statistic that was operated was by Kruskal-Wallis, for non-parametric data and nominal variables Hernández, et al (2015).

The data in Table 1 and Figure 8 established that the level of significance of land use, especially commercial and services, manifests a high level of significance with 0.95; while for the construction technologies of the contemporary types (concrete) it specified a level of significance of 0.96 and for the state of conservation of regular it was 0.98. On the other hand, the standard deviation shows homogeneous precision of measurements that fall within the reasonable ranges of the projected medians, which showed that among the study variables there are concordances of high agreements.

Table 1: Levels of significance between architectural deterioration and degradation, and cultural heritage typologies.

	N	Nivel de significancia		Media		Desviación estándar
		Estadístico	Estadístico	Estadístico	Error típico	Estadístico
Uso del suelo	45	0.95	3.5800	.06287	.41433	
Tecnologías constructivas	45	0.96	3.4880	.06171	.40857	
Estado de conservación regular	45	0.98	3.5410	.06702	.43509	
N válido (según lista)	45					

Source: Author's own. (2014)

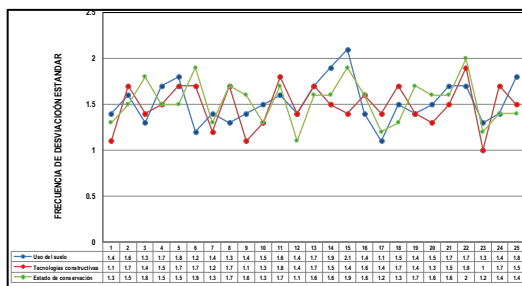


Figure 8: Standard deviation between architectural deterioration and degradation, and cultural heritage typologies.

The general hypothesis test, Sierra, R. (2005).

a. Formulate the null and alternate hypotheses according to the problem

Hipótesis de trabajo	Hipótesis nula (H ₀)	Hipótesis alterna (H ₁)
ENUNCIADOS:	No existe un nivel alto de correlación entre el deterioro y degradación arquitectónica y las tipologías patrimoniales monumentales en el eje vital de la avenida Gálvez de Huancayo.	Existe un nivel alto de correlación entre el deterioro y degradación arquitectónica y las tipologías patrimoniales monumentales en el eje vital de la avenida Gálvez de Huancayo.

b. Set the statistical condition

LA PRUEBA ESTADÍSTICA ES (R DE PEARSON) MINIMO ACEPTABLE 0.8	
Si la correlación resultante es	Si $r_{exp}^2 < r_a^2 \Rightarrow$ Se acepta H ₀
Si la correlación resultante es	Si $r_{exp}^2 \geq r_a^2 \Rightarrow$ Se rechaza H ₀

c. Performing the Spearman's Rho statistical test (r_s)

	Statistic	Sesgo	Tip. Error	Intervalo de confianza al 95.5%	
				Inferior	Superior
Deterioro y degradación arquitectónica	Media	3.5800	-.0018	.1014	3.3520 - 3.7400
	Desviación típica	.41433	-.01803	.06361	.29034 - .53835
	N	45	0	0	45 - 45
Tipologías patrimoniales monumentales	Media	3.4880	.0181	.0702	3.3641 - 3.6620
	Desviación típica	.40857	-.01285	.07434	.28028 - .52901
	N	45	0	0	45 - 45

a. Unless otherwise noted, bootstrap results are based on 45 bootstrap samples

Table 2: Levels of significance between architectural deterioration and degradation, and cultural heritage typologies.

		Interpretación arquitectónica	Tipologías patrimonio monumental		
Deterioro y degradación arquitectónica	Correlación de Pearson	1	0,609		
	Sig. (bilateral)		133		
	Bases de cuadros y productos cruzados	4 108	1 254		
	Covarianza	192	562		
	N	26	26		
	Bicronograma	Índice	2	-073	
		Fija Error	2	173	
		Intervalo de confianza al 82.5%	Inferior	-1	-231
			Superior	1	217
		Tipologías patrimonio monumental	Correlación de Pearson	0,609	1
Sig. (bilateral)	133				
Bases de cuadros y productos cruzados	1 254		4 108		
Covarianza	562		192		
N	26		26		
Bicronograma	Índice		-073	2	
	Fija Error		173	2	
	Intervalo de confianza al 82.5%		Inferior	-231	-1
			Superior	217	1

Elaboration: Author's own. (2014)

a. Interpret the result and determine the decision making

As shown in the previous tables, and especially in the correlation table, determines the correlation of 0.609 between architectural deterioration and degradation and monumental heritage typologies, then the alternative hypothesis H1 is accepted, and it is concluded that: "There is a high level of correlation between the study variables, architectural deterioration and degradation and cultural heritage typologies in the road axis of Giráldez Avenue in Huancayo"; a proposition that is based on the conceptual argument Hernández et al. (2010).

Sub systems of land use in architectural deterioration and degradation and cultural heritage typologies Bertalanffy, L. (2010a).

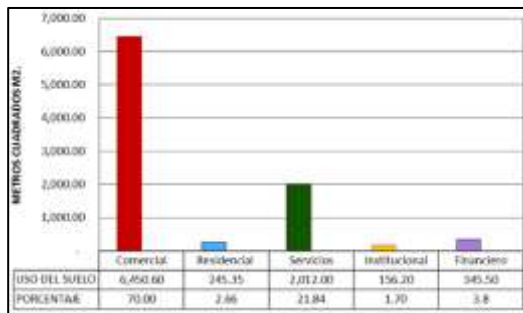
Specific hypothesis: The deterioration and degradation of architectural land use in the first levels manifest a high level among the cultural heritage typologies in the road axis of Giráldez Avenue in Huancayo. The data in Table 3 and Figure 9 indicated that the land use habitat that is manifested in the first floors, obtained scores whose values of commercial land use, especially of a computer nature, determined a high level with 70% or 6,450 M2.; while for the use of land of services, especially computer services, it was 21.84% or 2,012 M2.; these data have allowed to describe the high level of interaction between the variables exposed and the confirmation that the land use that was manifested in the study area is mainly due to the urban function that this urban sector fulfills at the regional and even extra-regional level, which is to offer and demand computer products and services; on the contrary, a low level of interaction was observed in residential use, whose peculiarity is that they are homes of the guardians.

Table 3: Land uses at the first levels.

USOS DEL SUELO	M2.	%
Comercial	6,450	70.00
Residencial	245	2.66
Servicios	2,012	21.84
Institucional	156	1.70
Financiero	345	3.80
Total	9,208	100

Elaboration: Author's own. (2014)

Figure 9: Land uses at the first levels.



Elaboration: Author's own. (2014)

Sub systems of construction technologies in architectural deterioration and degradation and typologies cultural heritage Bertalanffy, L. (2010b).

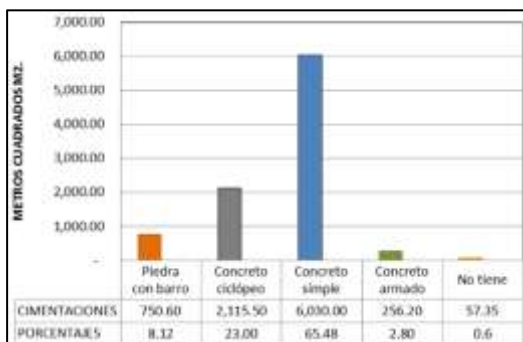
Specific hypothesis: The deterioration and degradation of the construction technologies of the foundations are manifested at a high level among the typologies of cultural heritage in the road axis of Giráldez Avenue in Huancayo. The data in Table 4 and Figure 10 indicated that the construction technology of the habitat that is manifested in the buildings under study, obtained scores whose values determined a high level with 65.48% or 6,030.00 M2.; for simple concrete foundations; followed by the use of cyclopean concrete foundations that concretized 23.00% or 2,115.50 M2.; These data allowed us to describe the high level of interaction between the exposed variables and the confirmation that the construction technologies of the foundations were used generically in the Cultural Heritage typologies, which determined the architectural monumental value in a preponderant way.

Table 4: Construction technologies of foundations.

CIMENTACIONES	M2.	%
Piedra con barro	750.60	8.12
Concreto ciclópeo	2,115.50	23.00
Concreto simple	6,030.00	65.48
Concreto armado	256.20	2.80
No tiene	57.35	0.6
Total	9,209.65	100.00

Elaboration: Author's own. (2014)

Figure 10: Construction technologies of foundations.



Elaboration: Author's own. (2014)

Sub systems of the state of conservation in architectural deterioration and degradation and cultural heritage typologies Bertalanffy, L. (2010c).

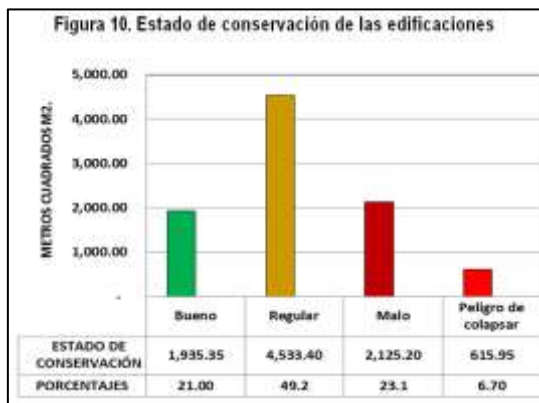
Specific hypothesis: The deterioration and degradation of the state of conservation are manifested at a high level among the typologies of cultural heritage in the road axis of Giráldez Avenue in Huancayo. The data in Table 5 and Figure 11 indicated that the state of conservation of the habitat that is manifested in the buildings under study, obtained scores whose values determined a high level with 49.20% or 4,533.40 M2. for buildings in a state of conservation of regular; followed by the state of conservation of bad that materialized 23.10% or 2,125.20 M2.; These data allowed us to describe the high level of interaction between the exposed variables and the confirmation that the state of conservation of the buildings in their first levels have a tendency towards a non-optimal conservation of their construction systems, which determine that the architectural monumental heritage is in danger of conservation.

Table 5: State of conservation of the buildings.

ESTADO DE CONSERVACIÓN	M2.	%
Bueno	1,935.35	21.00
Regular	4,533.40	49.2
Malo	2,125.20	23.1
Peligro de colapsar	615.95	6.70
Total	9,209.65	100.00

Elaboration: Author's own. (2014)

Figure 11: State of conservation of the buildings.



Elaboration: Author's own. (2014)

Sub systems of deterioration and degradation of spatial and formal structure in cultural heritage typologies Bertalanffy, L. (2010d).

Specific hypothesis: The deterioration and degradation of the spatial and formal structure manifest a high level among the cultural heritage typologies in the road axis of Giráldez Avenue in Huancayo.

The inductive inference applied to the study area, from the factual perspective, highlighted the values of the cultural heritage that each of the typologies classified as cultural heritage have and that are determined in the urban sample of lots. This diversified range of architectural typologies presents the peculiarity of being categorized as monuments, because they are architectural cultural expressions of the recent past partially modified and that they are the heritage of the culture of a people to future generations, to expose the

architectural expression of an era inserted in the context of the historical genesis of the city of Huancayo. and that today are unfortunately in a clear process of deterioration and degradation due to multiple factors.

These factors would be the prevailing social, economic and contemporary urbanization processes, to which we should add the factors commented on in the introduction of this article, whose repercussions have been translated into negative actions that are influencing cultural heritage typologies, however, there is also cultural heritage within this range of typologies, some that are being safeguards from the mercantilist maelstrom of real estate companies, but uncertainty is still latent and concern is still in force; it only remains to ask some questions in a redundant way: How long will these typologies be safeguarded?

To better visualize these actions, let's look at some examples.

The alteration of land uses; The study area has undergone a dynamic process of alterations in its formal expressions due to the new land uses, the result of which was the decrease in residential use at the first levels generated by the pressures of tertiary activities, especially commercial, financial and service uses, due to the urban function it fulfills at the city level. region and even at the national level, which has concretized its deterioration and degradation as a monumental architectural heritage.



Figure 6: The change of use to which this monumental typology is subjected is evident; determined a process of deterioration and degradation in its formal expression. (Mansion No. 258)

Physical deterioration of its buildings; Traditional construction technologies are being replaced by contemporary technologies such as reinforced concrete and the use of earth-fired clay brick or concrete, which has produced anomalous and dissimilar scenographic proposals to the context of this area, which contradictorily is deteriorating the monumental urban image and its spatial structure, and whose cause is mainly due to the new tertiary activities that act at the city level. regional and extra-regional.



Figure 7: The change of use to which this urban framework is subjected is evident; which have determined a process of deterioration and degradation in their formal expression of

this context, due to the insertion of alien typologies. (ScotiaBank Case No. 216 and Chifa Wang No. 208)

Alterations of the architectural valuation; The valuations of buildings with a monumental character, whether they are important or modest, are very diversified and heterogeneous due to the fact that they suffered alterations in their historical, cultural and artistic values, to which socioeconomic valuations are juxtaposed, causing in some cases alterations due to the contemporaneity of the new buildings that have not managed to insert themselves in a harmonious way to this context. which has brought with it the degradation of the monumental architectural heritage.

Alterations of the aesthetic-formal structures of architectural typologies; the insertion of architectural typologies with formal aesthetic peculiarities of uneven and hybrid character in the time of production, due to the cultural penetration and influence of architectural patterns, which has contradictory modified the contextual structure of the monumental area, due to the growing and complex urban role it fulfills.



Figure 6: The insertion of contemporary architectural typologies damaged the urban image in this sector, in the formal aspect. (Mansion No. 789)

Specific intervention actions in the conservation of some typologies with patterns of expression formal space in "U", which are developed with actions consistent with the framework of monumental preservation;

the expressions formal space of these "U" buildings, are peculiar in the reality of the Mantaro Valley, whose influence of the architecture of the Mannerism of Andrea Palladio, sought to insert itself in the decades of the 30s and 40s of the last century, achieving that purpose and today it can be manifested that these typologies are identifiable in the context of the reality of study and it can be stated that the architecture of Huancáína has adopted it as an architecture that identifies this region. The architectural identity of the Huanca House or the "U" House, so called by this author, is in itself, a typology of cultural heritage.



Classic "U" shaped typology. (Mansion No. 789)



Another typology in the shape of a "U". (Mansion No. 789)



The classic "U" shape, in good condition. (Mansion No. 789)

And others are in the process of deterioration and degradation, as a result of the real estate maelstrom.



U-shaped typology in a state of deterioration (No. 789)

DISCUSSION

For the system of the variables architectural deterioration and degradation and typologies of monumental heritage, the high level of significance that exists between them was confirmed. (See Table 1 and Figure 8) The results showed that commercial and service land uses are those that have a prevalent presence in the architectural typologies identified as monumental heritage; in this same sense, the construction technologies of the contemporary system are an inherent part of these architectural typologies of monumental character, this means that the interaction of the concept of cultural heritage, it is immersed in each of the typologies studied and moreover, the importance of the preservation of our

heritage – in this case urban architecture – arises from its value as a testimony of different cultural phenomena, as pointed out by Azkarate, A. (2003). This allows us to respond to the hypothesis and state that: "the level of architectural deterioration and degradation in the monumental heritage typologies is high in the road axis of Giráldez de Huancayo Avenue" which confirms the hypothesis raised.

- With regard to the subsystem of the variables: architectural deterioration and degradation and land use, there were manifest trends at a high level of significance that exist between them and the confirmation that the land use that is manifested in the study area is mainly due to the urban function that this urban sector fulfills at the regional and even extra-regional level. and that is to offer and demand computer products and services; on the contrary, a low level of interaction was observed in residential use, whose peculiarity is that they are homes of the guardians. (see Table 3 and Figures 9) This finding is considered congruent with almost all theoretical approaches that deal with historic centers, as pointed out by Martín (1984) and other bibliographic references. This argument allows us to respond to the hypothesis and propose that between: "the deterioration and degradation of the use of architectural land in the first levels manifest a high level among the typologies of cultural heritage in the road axis of Giráldez de Huancayo Avenue", confirming the assumption raised.

- In the subsystem of the variables: architectural deterioration and degradation and construction technologies (foundations, walls, floors, cladding, among others), the high level of significance that exists between these and the monumental heritage typologies was observed, whose effects are of the monumental value of the buildings studied. (see table 4 and figure 10) The results allow us to discern that from the formalist perspective of interpreting architecture and as stated by Orellana and Sato, (2002) that: "The form and substance of the expression of architecture would be the form of buildings, and meaning can be expressed through form, by style, color, texture (it can be a cubic form, but glass or wood, in both cases it is a shape, but the substance changes. This fact allows to concretize the hypothesis that: the deterioration and degradation of the construction technologies of the foundations are manifested at a high level among the typologies of cultural heritage in the road axis of Giráldez de Huancayo Avenue" which confirms the hypothesis raised.

- And for the subsystem of the variables: architectural deterioration and degradation and the state of conservation in the monumental heritage typologies, the high level of significance that exists between them was determined. (see Table 5 and Figure 11) The results are somewhat consistent with what is expressed in this regard by the thought of Martín, M. (1984) who understands a state of conservation as a rational construct that contains certain elements of reality, and certain conventional elements, acquired in a specific historical culture that, as a structure subject to transformations, allows the analysis and classification of real architectural objects. and give them a certain state of conservation. A situation that determines the hypothesis that: "the deterioration and degradation of the state of conservation manifest a high level among the typologies of cultural heritage in the road axis of Giráldez Avenue in Huancayo" confirming the hypothesis raised.

And, from the qualitative approach of the research, which was applied to the deterioration and degradation of the spatial and formal structure in cultural heritage typologies, the following results were found:

- The alteration of land uses,
- The physical deterioration of its buildings,
- The alteration of the aesthetic-formal structures of architectural typologies, and

- Specific intervention actions in the conservation of some typologies with patterns of expression formal space in "U", whose particularity is inherent, belonging to the Mantaro Valley and especially to the city of Huancayo.

These concepts were elucidated in a broad way in the respective item.

- It was determined that there is a high level of significance between the system of variables: architectural deterioration and degradation and the typologies of monumental heritage, and it was established that the use of the land, especially commercial and services, manifest a high level of significance with 0.95; while for the construction technologies of the traditional types a level of significance of 0.96 was specified and for the state of conservation of regular it was of 0.98. These results are corroborated with the hypothesis test that established the correlation of 0.609 between architectural deterioration and degradation and monumental heritage typologies; accepting the alternative hypothesis H1.

- The deterioration and degradation of architecture and land use shows the trends at a high level of significance and the confirmation that the land use that is materialized in the study area is mainly due to the urban function that this urban sector fulfills at the regional and even extra-regional level.

- Architectural deterioration and degradation and construction technologies (foundations, walls, floors, cladding, among others) were also observed at a high level of significance, the effects of which are of the importance of the construction of the buildings studied.

- Finally, between the architectural deterioration and degradation and the state of conservation in the monumental heritage typologies, the high level of significance that exists between them, due to their age of life, was confirmed.

These atypical situations determine that a preservation management program must be urgently conceived, with the aim of safeguarding the typologies of cultural heritage, and of projecting dialogic relations between community and architectural identity, so diminished in recent years in the ideology of the citizens of Huancayo.

The typologies of cultural heritage must also be rescued with spatial and formal expressions in "U" or the "Huancina House", whose identity belongs to the Mantaro Valley and especially to the city of Huancayo.

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