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Volume 11 (1); June 15, 2022

Research Paper

The iconography of Saint Denis in early French Gothic architecture

Akande A.

J. Art Arch. Stud., 11(1): 01-07, 2022; pii:S238315532200001-11

DOI: <https://dx.doi.org/10.54203/jaas.2022.1>

ABSTRACT

Of the many sculptures on the facades of cathedrals and churches all over France, the curious Head-carriers, also known as Cephalophores, are arguably some of the most thought-provoking sculptural pieces one will come across. This study is concerned mainly with the iconography of St Denis, the first Bishop of France, as articulated on the portals of the Basilica of St-Denis. The events that followed immediately after Denis' martyrdom by decapitation is mostly regarded as mere fable. Consequently, the symbolic meaning of the unusual movement has evaded scholarship. This work will discuss the symbolism of the Head-carriers and the meaning it gives to the architectural space of the Basilica of St Denis. This study argues that the emblematic ideology behind the sublime interaction between the living and the dead in the Basilica of St Denis, epitomised by the statue of the martyr, is a visual representation of a central message in Christianity which presents death, not as the end, but as a transitory and glorious beginning of oneness with Christ. Through critical visual analysis and metaphysical discussions, the study places Gothic art and architecture in the centre of the enunciation of 16th century Christian doctrine.

Keywords: St Denis, Cephalophore, Iconography, Gothic Art, Gothic Architecture, Symbolism.



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Research Paper

Designing and constructing universities with lecture hall and relevant regulations

Trung ND, Trang PhThH, Huy DTN, Diep NT.

J. Art Arch. Stud., 11(1): 08-13, 2022; pii:S238315532200002-11

DOI: <https://dx.doi.org/10.54203/jaas.2022.2>

ABSTRACT

Meyer et al. stated that personal qualities and abilities continually shift, and they exist not within the individual but in the intersection between the individual and their environment, in a vast, complex, ever-changing dynamic balance. The current study aims to investigate current regulations in the country related to constructing universities and also refer to related studies and framework, by using qualitative analysis, synthesis and inductive methods. The study results suggest that physical structures of universities and environment affecting much on learning spirit of learners. And finally authors suggest that Universal Design for Learning (UDL) is a framework for designing flexible instructional environments and proactively integrating supports that address learner variability and we need to follow Vietnamese standards – TCVN 3981:1985 on design of university lecture halls.

Keywords: UDL framework, TCVN, Lecture hall, Design, University.



Figure 1 - Century building of Hanoi in Hanoi city
Figure 2 - Architecture art of Hanoi
Figure 3 - VNUH International standards (source: internet)
Trung ND, Trang PhThH, Huy DTN, Diep NT (2022). Designing and constructing universities with lecture hall and relevant regulations. *J. Art Arch. Stud.*, 11 (1): 08-13. DOI: <https://dx.doi.org/10.54203/jaas.2022.2>

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Research Paper

Suggestions and regulations for designing, planning and constructing industrial parks, a case study of Vietnam

Trung ND, Han LTh, Thuy NTh, Diep NT, Yen LL.

J. Art Arch. Stud., 11(1): 14-18, 2022; pii:S238315532200003-11

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ABSTRACT

On the basis of experiences in designing, planning and constructing industrial zones in Vietnam, this paper aimed to give some suggestions and regulations for designing. The study used the qualitative method with synthesis and explanatory methods. Resources usage and environmental protection are more effective, while maximal economic and social benefits are simultaneously targeted. A concept of developing eco-industrial parks has established and evolved through time, and planning and constructing industrial zones based on current regulations in the nation. As a result, researches stated that we need to pay attention to network cloud service, big data service and investment management and meet some standards such as 100% of newly built industrial clusters have wastewater treatment stations that meet relevant national standards or technical regulations, etc. as well as certain principles such as 3R (Recycle, Reduce, Reuse). Operation services should include: cloud-based service operation providing basic cloud rental services, such as cloud hosting, cloud desktop, cloud disk, virtual data center, container services, collaborative development and Open API; SaaS Operation Service; APP Store; and space operation service to make full use of digital showrooms and free space resources, providing reservation and rental services, and demonstration services.

Keywords: Eco-Industrial Parks, Experiences, Designing and Constructing



Figure 2 – Industrial zones in Hanoi city (source: internet)



Figure 1 – 3R principle in gbs

Trung ND, Han LT, Thuy NTh, Diep NT, Yen LL (2022). Suggestions and regulations for designing, planning and constructing industrial parks, a case study of Vietnam. *J. Art Arch. Stud.*, 11 (1): 14-18. DOI: https://dx.doi.org/10.54203/jaas.2022_3

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Research Paper

Designing Sangalj neighborhood of Tehran using the revitalization approach

Rahimi B.

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ABSTRACT

The main goal of this research was to compile the design framework of Sangalaj neighborhood inside Tehran, Iran using the revitalization approach. The research method of this research is descriptive-analytical in terms of the theoretical-applicative goal and in terms of the field method. To collect the required information and data, document reviews, library studies, and field studies are used, and the tools needed to collect and analyze information are questionnaires, interviews, field observations and observations, information and documents of extra-hand plans. and satellite images. In the analysis and evaluation section, considering that each of the extracted indicators do not have the same importance for the revitalization of urban spaces; Therefore, it is necessary to measure their importance relative to each other and finally apply this measurement in the context of Sangalaj neighborhood. After identifying and investigating a passage in the neighborhood, analyzing each building and passages and its constituent parts, presenting its policies and strategies with the possibility of desirable revitalization based on the social, cultural, economic, physical structure, and attracting participation People can re-realize the historical identity of Sangalaj neighborhood and achieve a sustainable development in the direction of a lively neighborhood by preserving its historical identity.

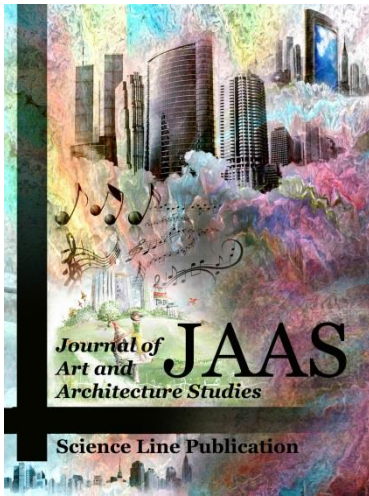
Keywords: Urban design, Economic aspects, Revitalization approach, Vibrant neighbourhood, Tehran.

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THE ICONOGRAPHY OF SAINT DENIS IN EARLY FRENCH GOTHIC ARCHITECTURE

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Research Article

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ABSTRACT: Of the many sculptures on the facades of cathedrals and churches all over France, the curious Head-carriers, also known as *Cephalophores*, are arguably some of the most thought-provoking sculptural pieces one will come across. This study is concerned mainly with the iconography of St Denis, the first Bishop of France, as articulated on the portals of the Basilica of St-Denis. The events that followed immediately after Denis' martyrdom by decapitation is mostly regarded as mere fable. Consequently, the symbolic meaning of the unusual movement has evaded scholarship. This work will discuss the symbolism of the Head-carriers and the meaning it gives to the architectural space of the Basilica of St Denis. This study argues that the ideology behind the sublime interaction between the living and the dead in the Basilica of St Denis, epitomised by the statue of the martyr, is a visual representation of a central message in Christianity. This ideology presents death, not as the end, but as a transitory and glorious beginning of oneness with Christ. Through critical visual analysis and metaphysical discussions, the study places Gothic art and architecture in the centre of the enunciation of 16th century Christian doctrine.

KEYWORDS: St Denis, Cephalophore, Iconography, Gothic Art, Gothic Architecture, Symbolism.

INTRODUCTION

The sum of the last days of Saint Denis presented to us through art, is a vivid account of the coarseness and crass realities of 3rd century Christianity. The singular statement visually celebrated in sculpture eloquently captures the mystery that has made Dionysius (Denis) even more potent in death, than alive. Nowhere is the idea behind this potency felt more than in the Basilica of Saint-Denis in France, a space that embodies a balance between the energies of life and death. Named in honour of the first Bishop of France, the basilica radiates a copious aura of importance and stateliness. In the Basilica of Saint Denis, the dead are metaphorically animated in sculpture and light.

Forty-two kings, thirty-two queens, sixty-three princes and princesses and ten great men of the realm lay there. As one walks amidst the remains of early French royals, one feels the palpable energy of significance and royalty. This paper is concerned with the symbolic meaning the many funerary effigies that lay about the interior of the abbey give to the architectural space. The study argues that the symbolic interaction between the living and the dead in the Basilica of Saint Denis is a visual metaphor that offers a narrative of transcendental continuity rather than terminal reality. Further, this paper will

argue that the killing and death of Dionysius, later Saint Denis, the perpetuation of the legend through church art, and the arrogation of his story as a *cephalophore*, is a principal example and confirmation of the use of art as a tool for the enunciation of the transcendental nature of death.

While the Basilica of Saint Denis in France boasts of the recumbent statues of many great individuals, one piece stands out even among kings, queens, princes, and princesses. It is that of the cleric - Saint Denis. According to his hagiography, after being incarcerated for a period because of the Decian persecution of Christians around 250 AD, Bishop Denis will eventually face a series of torturous acts that would ultimately end in his death by decapitation, making him a martyr in the mid-3rd century alongside two others, Eleutherus and Rusticus. The real story unfolds after Denis' beheading. The headless body is recorded to have risen immediately from its knees; it picked up the detached head and walked several kilometres. The account of [Jacobus and Ryan \[1\]](#) records that Saint Denis' mouth continued to preach while he walked with his head in his hands from Montmartre to his burial place, the present location of the basilica of Saint Denis. This will make him one of the earliest known *cephalophores* in church history. *Cephalophores* are generally individuals who were

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martyred by decapitation and are reported to have exhibited coherent post-decapitation movements and sometimes vocalisation, often with the severed head in their hands. The phenomenon is portrayed in art as headless figures carrying their severed heads in their hands. The word *cephalophore* is Greek for 'Head Carrier'.

METHODOLOGY

This study has employed qualitative methods for data gathering, interpretation and analysis. Data for this study was mainly collected through desk research, visual observations of photographic documents, and on-site analysis of relevant sculptural works at the Basilica of St Denis, France.

Church of St-Denis in literature

This study finds that literature on the Basilica of Saint Denis is extensive and varied, however, it mostly focuses on the architectural history of the structure and the significance of the basilica to the early gothic movement [2-9]. Ample investigation has also been offered on the structural and architectural merits of the Abbey. While the above focus holds the majority, some studies have indeed paid some attention to the rich array of recumbent sculptural pieces of past French royals housed in the abbey but minding only little for presenting an argument on the symbolic assembly [10]. This assembly of sculptural effigies resting rather lively in and around the transept and nave of the church, well among the living, is unmissable. The Basilica of St Denis is indeed the earliest experimentation and playground for what was then called *opus modernum* (modern architecture) and does exhibit significant artistry and craftsmanship worthy of distracting scholarship from the more intrinsic character of the building.

Bork [11] has dealt with the geometrics of Saint Denis Basilica in great detail. In an earlier study by the same author, he suggests that the rotation of polygons was the key to the proportioning strategy in Gothic architecture, stating that squares or quadratures are the most common examples [12]. He further alludes that other shapes such as hexagons, octagons, and dodecagon also lend themselves rather easily to such manipulations in gothic geometry. Through a determinative study of Altenberg Cistercian Church, Bork [11] identifies a reoccurring sequence and angle of rotation common in many Gothic cathedrals around Europe. The study recognises St-Denis' geometric principle as a forerunner in gothic formulas, and this is not as a

result of being the earliest gothic articulation in architecture as Bork argues, but on the sheer ingenuity of Abbott Suger. Suger was the mastermind behind the transformation of the abbey into a pristine specimen of early gothic form and character. The Altenberg Cistercian Church, which Bork studies as a comparative model to St-Denis, belongs to a tradition that can be traced from St-Denis to the choir of Amiens, Beauvais, and Cologne Cathedrals. This confirms St-Denis as a geometric standard for gothic churches. Having reviewed the past works of Kidson [5] and Crosby [13] on the geometrics of St-Denis, and finding meaningful correlations, Bork [11] opines that the evidence for such continuity of geometrical knowledge is made apparent in the relationship between St-Denis and Altenberg. Altenberg, as he puts it, after all, shares not only the seven-chapel layout with St-Denis, but also the unusual optical alignment of its chevet piers. Similarly, Altenberg's overall scale matches that of St-Denis to an uncanny degree. Further Bork suggests that it will not be totally unimaginable that the designer of Altenberg spoke with someone in the St-Denis workshop about techniques of aligning certain elements of the architecture before deciding to replicate such.

Boorstin [14] puts light in the centre of the discussions about church architecture. He explores the early beginnings of gothic expressions in the Abbey of St Denis through the skill and dedication of the statesman and master builder Suger who was born ca. 1081 to a peasant family near Paris. Boorstin [14] ascribes the excellence of the articulation, and what one might call the persuasion of light as a building element, to Suger's insight and unabashed taste for the gorgeous. He states that Suger embodies the anagogic--which is "the Upward Leading" as interpreted in theology--of the building, as he, Suger, did with light in St-Denis what God did with it in the world.

Leschot [10] on the other hand turns to the royal heritage of St-Denis as the framework for the construction of meaning in the abbey which has been the prime temple for the coronation of French Kings since Pepin the Short. Though this work focuses largely on the historical legacies of regal coronation in the context of two main locations; Reims and St-Denis, one is able to see in Leschot's study; the core significance of art as the centre of sacred persuasion and a point of spirituality in church architecture. Leschot [10] spends some detail on the reconstruction of the Basilica of St-Denis and the key role of Suger in the process stating that the driving force behind Suger's

enterprise is one of liturgical importance crystallised through art. The article underscores the use of art in architecture as the embodiment of power and significance in religious spaces. As [Leschot \[10\]](#) dealt with the historical legacy of the reconstruction and structural adjustments to St-Denis over the years, [Boström \[15\]](#) focuses on the legacy of Gothic sculpture as seen on St-Denis and other cathedrals of repute in France. In a simple but well scripted-piece, [Boström \[15\]](#) discusses figural sculpture in the context of church architecture. The piece takes a chronological approach to explaining the metamorphosis of style from the Romanesque period, through the earliest era of Gothic era, to the High Gothic period of 1140-1300. We are greeted with explicate examples from St-Denis to Charters to Senlis, Reims and so forth. The piece however identifies the Abbey church of St-Denis as the centre point where the true characteristic structure of the gothic sculptured portal was established. Again, St-Denis is featured as a prime example of the ideals of gothic pronunciations. Boström further asserts that the construction of complex iconographic programs on church facades made Christian teaching accessible to a broad and socially diverse public, while the high degree of naturalism in individual figures triggered the identification and empathetic engagement that allowed the figures to assume personal meaning for their beholders. This is a clear indication of the conscious use of sculptural art in not only aesthetic matters of the church, but in more central issues such as indoctrination and evangelism. This declaration is pivotal to this current study.

Some pro-modernists may challenge a study into ancient church symbolism and question the relevance of such inquiry. This concern is valid and similar to the concerns we have when we think generally of the relevance of the study of the past. To what purpose do we study history – particularly that of religion, art, and architecture? Why is it important for this study, for instance, to confirm that art remains a central tool in the enunciation of certain religious ideals. What need is there for us in the postmodern world to belabour our minds with the art of medieval beautification? What wisdom does this ancient knowledge offer us?

These questions serve as a conscience and compass that guide our inquiry. They present us with the multivariate options that help us navigate our path through the maze of inquiries in the humanities. This study agrees with the words from

John Ruskin as quoted in [Connelly \[16\]](#) as a kind of commission:

“Go forth again to gaze upon the old cathedrals front, where you have smiled so often at the fantastic ignorance of the old sculptors: examine once more those ugly goblins, and formless monsters, and stern statues...; but do not mock at them, for they are signs of the life and liberty of every workman who struck the stone; a freedom of thought, and rank in scale of being, such as no laws, no charters, no charities can secure; but which it must be the first aim of all Europe at this day to regain for her children”.

Perhaps this whole venture is to redirect our attention to freedom in architecture.

The basilica, the builder

The Abbey of Saint-Denis-en-France is the most famous and glorious among all the notable abbeys and cathedrals of the Kingdom of France. It is foremost among the abbeys of all Gaul and perhaps of all Europe [\[17\]](#). It was Suger however, who took this already venerated Benedictine abbey from its late Romanesque character to opus modernum, starting a new era of the Gothic movement, and making himself a key figure in the development of Gothic architecture in France. The basilica that emerged from the tireless work of Suger served as a burial place for French monarchs from the Merovingian era of 447 – 751 AD through to the Bourbon era up till the early 19th century. Suger chronicled the renovation of the Abbey Church dating 1137 – 1144 and the work is said to be one of the most important documents of the middle age on account of the details [\[18\]](#).

While it may be seen as a detour from the main interest of this paper, it will be expedient to draw some attention to Abbot Suger here through a summary. He was in every way a builder, statesman and masterful patron. He dedicated his life to the revitalisation of the old abbey and as his account will show, he turned it into a magnificent piece of art worthy of kings both heavenly and temporal. One will probably best describe Suger’s dedication in the words of [Lee \[19\]](#), who writes that in the past, Christians gladly served as patrons of church architecture because it proclaimed their faith and affirmed their world views. In every word, this is true of Suger. He gloried in his lowly origins stating, “I, the beggar, whom the strong hand of the Lord has lifted up from the dunghill”. Self-ascribing as an adopted child of St-Denis, he felt that as he

belonged to the Church, so the church belonged to him [14].

The need for Suger to work on the Abbey came as a pragmatic one. By 1122 when Suger became abbot of Saint Denis, the Abbey was already incapable of holding the crowds that came to worship particularly on feast days. The endless crowds came to Saint-Denis to adore the many sacred relics and to participate in spectacular celebrations and processions of all kinds. The congestion in the church often became unbearable; as Ostoia [17] wrote, sometimes people were crushed to death because of huge gathering. Suger decided to enlarge the basilica to accommodate these crowds and make the abbey worthy of its position. With this expansion came several innovations that will set the trend for gothic expressions throughout all of France. An example is a former oculus on the west façade that served as a precursor of the later popular rose windows.

Today, the basilica remains a vivid example of the beginnings of the Gothic movement and a laboratory to study the careful and brilliant transition from late Romanesque to Gothic style. Many of the features we see today are borrowed branches from the Romanesque style but have evolved into a clear gothic identity. For the whole of France and its gothic legacy, we have Suger to thank but it will be utterly lopsided if one fails to mention the name of another ‘disciple’ who felt called to preserve the gothic legacy that was falling into ruins – it is Voilett-le-Duc; the one who in the 19th century made extensive renovations and study on the gothic inheritance of France. It is only on such shoulders that later research is to stand and flourish. Without their efforts, there may be nothing left to wonder about the early gothic age, nothing to build on, certainly nothing as magnificent as the glorious works of the late gothic era. Further, the impact of the study and preservation work by Voilett-le-Duc’s revitalisation of French Gothic ideas becomes mostly apparent in the evaluation of how gothic forms were integral tools in the behest of the church to evangelise and instruct the populace of the time. Voilett-le-Duc’s core architectural philosophy may probably be best seen in his drawings and construction of the Saint-Denis-de-l’Estrée. The space is enigmatic and presents an energy that seems as though time walked backwards, making the presence of history palpable and experiential. Indeed, the space idealises the concept of feeling the weight of time on one’s shoulders. In the context of space as represented in religious architecture, time, is truly a heavy mass,

particularly when one considers the many layers of events that have occurred in the space in question.

Cephalophores; a metaphor for resilience in Christian doctrine

Marcel Hebert, the French philosopher is credited with the first use of the word *cephalophore* in his 1914 in article “Les Martyrs Cephalophore Euchaire, Elophe et Libaire” published in the nineteenth volume of the University of Bruxelles’ *Revue de l’Université de Bruxelles*. The term “*Cephalophore*”, mostly common in Judeo-Christian art. As earlier stated, it is generally used to describe individuals (later saints) reported to have exhibited coherent post-decapitation movements and sometimes vocalization, often with the severed head in their hands. It is perhaps expected of anyone who is to write about *cephalophores*--at least as far as the Western Europe is concerned--to start with, and possibly pivot the discourse on Saint Denis, the first Bishop of France. This paper will not deviate from this expectation and the reason is nothing academic but the fact that Saint Denis is perceived to be the most popular *cephalophore* ever recorded and as such gathers such importance and reverence, though there are several other *cephalophores* as recorded in the hagiographic literature. All through medieval writings, one is confronted with the accounts of several other ‘head carriers’ exhibiting the same inconceivable act of coherent post-decapitation locomotion. St Nicasius, the 5th century Bishop of Reims is one of the more well-known examples.

The present site of the Reims Cathedral was chosen by Bishop Nicasius (later Saint) who built a basilica in honour of the Virgin Mary in the 5th century. Like St-Denis and Notre Dame Cathedral of Paris, Reims Cathedral presents no less of a wonder to observe. The current Reims Cathedral, like the Notre Dame Cathedral in Paris and many other religious buildings of the world, sits on the site of two former basilicas. The cathedral boasts of hosting the coronation ceremony of twenty-five kings of France, from Louis VIII the Lion in 1223 to Charles X in 1825 [20] – that is a span of six hundred years. Nicasius was recorded to have been reciting Psalm 119 when he was brutally executed alongside two faithful (very much like Saint Denis) Florentius and Jucundus, by marauders at the doorstep of the church. It is recorded that at the instance he reached verse 25 of the Psalm ‘*my soul clings to the dust*’ his head was severed by the slayer’s cleaver. Picking the detached head up, vocalisation continued from the head saying –

'revive me according to thy word', how terrified his killers would have been at such bizarre sight. There is a very emotive sculpture of the founding Bishop and Saint, Nicasius strategically placed between angels on the reverse side of the front façade of Reims Cathedral. The figure shows the decapitated bishop with his mitered head in his hands. This symbolic icon of a *cephalophore* articulates the early history of the foundations of the cathedral and presents a touchpoint for the discussion of the duality and concurrent self-existence of death and life.

On the west end, just behind the figure of Saint Nicasius, are two rose windows. The one that sets as backdrop for Saint Nicasius' statue is known as the Small Rose Window - The Litanies of Mary, while atop that is the Great Rose. The Great Rose window feature a brilliant array of representations that include the twelve apostles, the 24 angels, cherubim, and seraphim, six kings of Israel and a centre piece on Mary. Soft light passing through the coloured glass before noon presents the interior west end in a symphony of pleasing light.

Another case is that of Saint Aphrodisius of (Alexandria) Bezier. He was attacked by pagans and beheaded while preaching the gospel. He is recorded to have retrieved his head in the presence of his slayers and carried it to a nearby church he had recently consecrated. At this place, the body finally rested. The story of Osyth is similar – she picked up her head after decapitation and walked a considerable distance with it in her hands to a convent, where she finally collapsed and rested. Saint Gemolo is reported to have carried his detached head and mounted a horse. He rode on horseback with his head to meet a Bishop in the nearby mountains before he finally buckled and passed on. Many more *cephalophores* were recorded, they include Saint Minias, Saint Valerie, Saint Firmin, Saint Maxien, Sibling Saints Felix and Regula, Saint Maurice, Saint Alban, Saint Lambert of Saragosse, Saint Gaines of Nantes, Saint Solange, Saint Winefride and so on. There is in fact an exhaustive list of about 134 names in French hagiographic literature [21]. The *cephalophoric* phenomenon is not limited to Roman Christian cultures alone. They have also been recorded in other cultures. A popular example is *Chinnamasta* – a Hindu goddess. Always depicted nude, headless and usually standing over a copulating couple with her severed head in one hand and a scimitar in another. Broadly speaking, it was relatively common to be killed for faith during the early Christian era.

The times were harsh for those who professed Christianity. Besides decapitation, many Saints met their end in the most brutal ways. Saint Erasmus of Formia (ca. 303AD) was disembowelled, Saint Hippolytus of Rome was pulled apart by horses, Saint Bartholomew the Apostle was said to be flayed alive, Saint Agatha's breasts were cut off, Saint Apollonia's teeth were removed forcefully, and Saint Lucy's eyes plucked out.

RESULTS AND DISCUSSION

The iconography of a headless body carrying his or her head is a curious and powerful imagery to behold, but what message does this symbolic spectacle hold and how is this relevant to us today? In this study's view, the visual statement captured by these body of works stand for defiance to death, resilience, and commitment to purpose in the face of challenges. The 'Head Carrier' icon presents the unassailable nature of an idea or belief even in the face of death. The icon symbolises the mystery of life in death as professed by the Christian faith. The *cephalophore* imagery articulates the knowledge that encourages an idea or belief to thrive beyond the limits of the individual host.

This study aligns with the submission of Cirlot [22] in his brilliant introduction to the work *The Dictionary of Symbols* where he submits to the argument of Marius Schneider that there is no such thing as 'ideas or beliefs', only 'ideas and beliefs'. This is to say that in one, there is always at least something of the other. Because of the power and interactivity between ideas and belief, there is some reason in the notion that while it may be relatively easy to eliminate an idea's carrier, it is more demanding altogether to suppress the ideology itself. The iconographies of *cephalophores* thus become a commanding statement or euphemism for continued hope and a reawakening even in the face of death.

Thus, this study opines that the sculptural ensemble of funeral effigies strategically placed within the space of worship in St-Denis, symbolises the triumph of life over death as understood by Judeo-Christian belief. The art presents an example of the transition from earthly to heavenly life in Christ. The broad reverence and admonitions given to *cephalophores* through art in church architecture, suggest that the works speak to a central doctrine of the church which directs all to find life in Christ even in death. The continued role of art as a vehicle through which the Christian faith

preserves legacy is thus underscored. Sculptural arts and ornamentation on religious buildings offer us a type of collective awareness and in many cases, an identity that subsumes social or racial difference and is immune to the trials of changing times. Further, sculptural art and ornamentation is steadfast in its message and encourages mental consciousness of simple images or visual symbols that instructs us.

Architecture, through the parsing of art, presents itself here as a most viable template for the capture and preservation of the enigmatic story of martyrdom. Art is an effective language that maintains the meaning and influence of the narrative through changing times. The simple iconographic image of Denis as a *cephalophore* brings such immense attention to the idea that the act stands for perhaps even more than the story of the act itself. We are drawn to the stories today not by the text in record or the telling by a minstrel, but by the visual oration that drives us to ask questions. And in asking we may find answers that will move us to a place of knowledge, or at least a place of awareness of not just the phenomenon but the message encapsulate therein. The knowing of a thing then empowers us to live out the meaning for which the initial message was intended. The visual prose offered several hundred years ago in sculpture and hosted by architecture still resonates with us today. The works bring with them the courage to face our utmost fears. They give a renewed sense of freedom albeit from death.

This study further argues that the plainness--or if one must be more critical in phrasing--the barrenness of an architectural surface does not necessarily suggest high beauty as positioned by modernist and post modernists theorists. In fact, it may very well be a miss-opportunity in religious design. The craft of integrating symbolic art into architectural skin and spaces is indeed an opportunity to exercise freedom from repression and honesty of expression, for the consumption of all who is to come across it in space and time. In his 1908 treatise of the Viennese architect, Adolf Loos, who is famously credited with the construct 'ornament is crime', Loos presents ornaments as an invention of the primitive man; an invention he believes must ultimately give in to the superiority of the emerging machine age. This ideology falls short of humanism in architectural expressions.

It presents a form of sterility of thought and the strangulation of the organic nature of life. There is a clarity that comes with visual language which speaks to human inward sensibilities. It remains

constant in message and purpose despite the years. It is this critical nature of art that has endeared art to religion and perhaps, religion to arts. Religion, more than any other aspect of man's existence, has engaged the inexplicable power of art in the evangelisation of its central message. This study submits that this is palpable and deliberate in cephalophoric art. The idea of cutting the head carrier in stone is seen as an image of triumph and inspiration to followers much the same way Christianity uses the very symbol of the cross as its universal representation; the same cross on which the Christian messiah was crucified. An act deemed necessary in Christendom for the fullness of the glory of the messiah to be actualised in the eye of men.

CONCLUSION

This study concludes that the iconography of the *cephalophore* is a representation of the message of Christianity which presents death, not as the end, but a transitory beginning of a higher existence as represented by the Christian doctrine. This gives credence to the long-standing position that the early church engaged sculpture, as seen on gothic architecture, as a medium for the instruction of adherents. Further, this position supports the argument that church art transcends the spheres of aesthetics, rather, it carries on a utilitarian dimension when viewed from the point of its role in liturgy and rituals. Therefore, in so far as a structure is related to or concerned with worship of any type, the continued integration and use of figural arts as a language in the propagation of ideal or philosophies of a group must be encouraged in architecture. In context, architecture's role is to provide a platform for the enunciation of philosophies necessary for the transmission of ideas. As the head-carrying headless icon pervades many parts of France, and Europe, the covert message which presents an idea in life, and carry it unto death, is sublimely reinforced by the continued presence of these sculptures.

DECLARATIONS

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Competing interests

The author declares that there are no competing interests.

REFERENCES

- [1] Jacobus (de Voragine) and Ryan WG (1993). *The Golden Legend: Readings on the Saints*. Princeton, NJ: Princeton University Press; 1993. [Google Scholar](#)
- [2] Panofsky E. (1946). *Abbott Suger on the Abbey Church of Saint Denis and Its Treasures*. Princeton: Princeton University Press. [Google Scholar](#)
- [3] Walters A. (1985). The reconstruction of the abbey church at St-Denis (1231–81): The interplay of music and ceremony with architecture and politics. *Early Music History*, 5, 187-238. DOI: <https://doi.org/10.1017/S026112790000070X>
- [4] Bruzelius C. (1985). *The 13th-century Church of St-Denis*. New Haven: Yale University Press. [Google Scholar](#)
- [5] Kidson P. (1987). Panofsky, Suger and St Denis. *Journal of the Warburg and Courtauld Institutes*, 50(1): 1-17. [Link](#) ; [Google Scholar](#)
- [6] Crosby S. (1987). *The Royal Abbey of Saint Denis from its Beginnings to the Death of Suger*. New Haven: Yale. [Link](#) ; [Google Scholar](#)
- [7] Rudolph C. (1990). *Artistic Change at St-Denis: Abbot Suger's Program and the Early Twelfth-Century Controversy over Art*. Princeton: Princeton University Press. [Google Scholar](#)
- [8] Blum P. (1992). *Early Gothic Saint-Denis: Restoration and Survivals*. Berkeley: University of California Press. [Google Scholar](#)
- [9] Brown E. (2020). Suger and the Abbey Church of Saint Denis. *Gesta*, 59(1): 43-72. [Google Scholar](#)
- [10] Leschot E. (2020). The Abbey of Saint-Denis and the Coronation of the King of France. *Arts*, 9(4):111. DOI: <https://doi.org/10.3390/arts9040111>
- [11] Bork R. (2013). Ground Plan Geometries in Suger's St-Denis: In: Lang, A and Jachmann, J (eds) *Aufmass und Diskurs. A Prototype for Altenberg*. Berlin: Lukas Verlag. pp. 55–68. [Google Scholar](#)
- [12] Bork R. (2011). *The Geometry of Creation: Architectural Drawing and the Dynamics of Gothic Design*. Farnham: Ashgate. [Google Scholar](#)
- [13] Crosby S. (1966). Crypt and Choir Plans at Saint Denis, *Gesta*. 5, 4-8. [Google Scholar](#)
- [14] Boorstin DJ. (1992). *The Creators: The History of Heroes of The Imagination*. New-York: Random House. [Google Scholar](#)
- [15] Boström A. (2004). Gothic Sculpture In: *The Encyclopedia of Sculpture*. Vol 2, New-York: Fitzroy Dearbon. pp. 694-698. [Google Scholar](#)
- [16] Connelly S. (2015). John Ruskin and the Savage Gothic. *Journal of Historiography*, 12(6): 12-28. [Link](#) ; [Google Scholar](#)
- [17] Ostoia V. (1955). A Statue from Saint Denis. *The Metropolitan Museum of Art Bulletin*, 13(10): 298-304. DOI: <https://doi.org/10.2307/3257658>
- [18] *Athena Review*. (2005). Architecture and Sculpture at the Abbey Church of Saint-Denis, 2019. <http://www.athenapub.com/AR/14saint-denis.htm> Accessed 19 May 2021
- [19] Lee D. (1998). Christian Architecture from a Protestant Perspective. *Sacred Architecture Journal*, 1(5). [Article link](#)
- [20] Demouy P. (2015). *Reims Cathedral*. Paris: La Goélette. [Google Scholar](#)
- [21] Saintyves P. (1929). Les saints céphalophores: étude de folklore hagiographique. *Revue de l'histoire des religions*. 99:158-231. [Google Scholar](#)
- [22] Cirlot J.E. (1971). *The Dictionary of Symbols*. Trans. Sage J. Abingdon: Routledge & Kegan Paul. [Google Scholar](#)

DESIGNING AND CONSTRUCTING UNIVERSITIES WITH LECTURE HALL AND RELEVANT REGULATIONS

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ABSTRACT: Meyer et al. stated that personal qualities and abilities continually shift, and they exist not within the individual but in the intersection between the individual and their environment, in a vast, complex, ever-changing dynamic balance. The current study aims to investigate current regulations in the country related to constructing universities and also refer to related studies and framework, by using qualitative analysis, synthesis and inductive methods. The study results suggest that physical structures of universities and environment affecting much on learning spirit of learners. And finally authors suggest that Universal Design for Learning (UDL) is a framework for designing flexible instructional environments and proactively integrating supports that address learner variability and we need to follow Vietnamese standards - TCVN 3981:1985 on design of university lecture halls.

KEYWORDS: UDL framework, TCVN, Lecture hall, Design, University.

INTRODUCTION

According to current regulations, what are the conditions for establishing a public university?

According to Article 87 of Decree 46/2017/ND-CP stipulating conditions for investment and operation in the field of education (amended by Clause 33, Article 1 of Decree 135/2018/ND-CP), there are specific provisions: The conditions for establishing a public university are as follows:

"Article 87. Conditions for establishing public universities, permitting the establishment of private universities

1. Having a university establishment project compatible with the socio-economic development planning and university network planning approved by the competent state management agency. The content of the school establishment project should clearly state: Name; sectors, occupations, training scale; objectives, contents, programs; financial resource; land; infrastructure; lecturers and administrators; functions, tasks, organizational structure, management; school construction and development plan in each period; time limit and progress of investment project implementation; economic and social efficiency. For public universities, upon establishment, they must commit to operate according to the autonomy mechanism of public non-business units prescribed by the

Government. For private universities, it is advisable to establish a not-for-profit institution.

2. There is a written approval of the establishment of the school in the province or centrally run city by the People's Committee of the province where the school's head office is located (except for the case where the school is affiliated to the provincial People's Committee).

4. For public schools, there must be an investment project to build the school approved by the governing body, clearly identifying the source of capital to implement the plan, and for private schools, it must have a minimum investment capital. is 1000 billion VND (excluding the value of land for construction of the school); investment capital is determined in cash and assets prepared for investment and certified in writing by a competent authority; By the time of appraisal to allow the establishment of a private university, the investment value must be over VND 500 billion.

5. There is a specific expectation on the number and structure of the contingent of managers and permanent lecturers, meeting the standards of quality and training qualifications according to current regulations of the Ministry of Education and Training, in line with the roadmap to open majors and enroll training students in the school establishment project."

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Research questions

Question 1: Present previous relevant studies?

Question 2: What are relevant regulations in university construction?

Table 1 shows analyse of related studies.

So, this study aimed to investigate the current regulations in the country related to constructing universities and also refer to related studies and framework.

METHODOLOGY

Place, time, research object and design

National Economics University (NEU) in Hanoi Vietnam is an example case for relevant regulations on building, constructing and designing universities via a descriptive study. Data was prepared from real regulations of building/constructing universities and method was mainly qualitative analysis and a synthesis method was used.

Table 1 - Summary of previous studies

Authors	Content, results
Meyer et al. (2014) [1]	Noted that “personal qualities and abilities continually shift, and they exist not within the individual but in the intersection between the individual and their environment, in a vast, complex, ever-changing dynamic balance”. The existence of learner variability in any given classroom poses a complex set of factors for teachers to consider as they design instruction to meet the needs of all students. Developing lessons that align with grade-level academic standards while taking into account the varied needs of students is a common challenge for teachers.
Rao and Meo (2016) [2]	The Universal Design for Learning (UDL) framework can be used to proactively design lessons that address learner variability. Using UDL guidelines, teachers can integrate flexible options and supports that ensure that standards-based lessons are accessible to a range of learners in their classrooms. This article presents a process that teachers can use as they develop standards-based lesson plans. By “unwrapping” academic standards and applying UDL during the lesson planning process, teachers can identify clear goals aligned with an academic standard and develop flexible methods, assessments, and materials that address the needs and preferences of varied learners. General educators and special educators can use this process to develop inclusive lesson plans that address all learners, with and without disabilities.
Meyer and Norman (2020) [3]	Designers are entrusted with increasingly complex and impactful challenges. However, the current system of design education does not always prepare students for these challenges. When we examine what and how our system teaches young designers, we discover that the most valuable elements of the designer’s perspective and process are seldom taught. Instead, some designers grow beyond their education through their experience working in industry, essentially learning by accident. Many design programs still maintain an insular perspective and an inefficient mechanism of tacit knowledge transfer. Meanwhile, skills for developing creative solutions to complex problems are increasingly essential. Organizations are starting to recognize that designers bring something special to this type of work, a rational belief based upon numerous studies that link commercial success to a design-driven approach.
Aqel (2021) [4]	They aimed to design learning environment based on ISTE standards for students and computer science educators. For answering the questions of the study, the researchers adopted the descriptive approach, they Identified the ISTE standards and analyzed the content of instructional technology course based on ISTE standards for students and for computer science educators, then they designed learning environment based on this standard. The sample of the study consists of all students enrolled for an instructional technology course at the first semester 2017 in faculty of education in the Islamic University; the tool of the study was a content analysis to analyze and design the learning environment based on ISTE standards. The study recommended Integrate ISTE standards in academic preparation programs for teachers of faculty of education and Hold training courses for students and teachers in universities to introduce ISTE standards, and motivate teachers and students to embrace these standards

*source: author synthesis; Beside, Huy [5] paid attention to risk management in construction activities and confirmed by Ha et al. [6] and Dat and Huy [7].

RESULTS AND DISCUSSION

Building NEU University in Hanoi Vietnam

Up to now, NEU University in Hanoi Vietnam is designed with modern style and decorations and (super modern) so called century building. Planned since the end of 2003 but can easily be seen, the design

of the "building of the century" is extremely modern and beautiful. If you just look at the photo and don't know anything about it, you might even think this is a shopping mall. Hey, different from the outside which is completely installed with glass, the architecture inside the new building really makes people overwhelmed.



Figure 1. Century building of Neu in Hanoi city ([Source link](#))

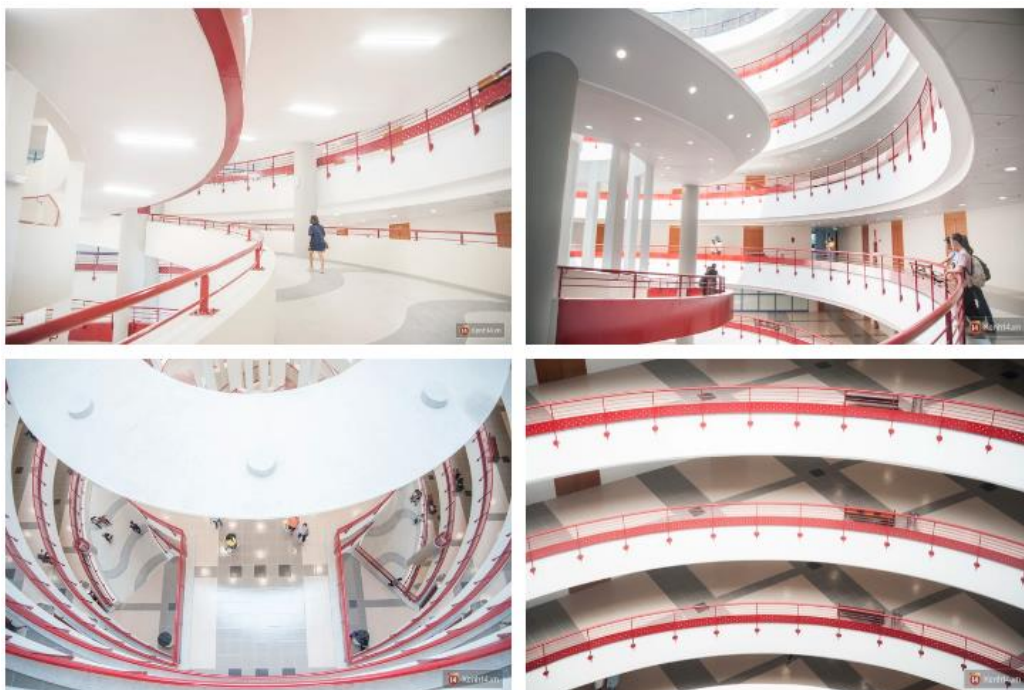


Figure 2. Architecture art of NEU in Hanoi ([Source link](#))

Relevant regulations in university design and construction

Regarding the construction land and the overall premises of the university, it must comply with Section 2 of the National Standard TCVN 3981:1985 on Universities - Design standards with the following provisions:

Requirements on construction land and overall ground

1. The arrangement of locations for construction of universities must take into account the future development of the university, and the land use must be carried out in phases according to the construction plan, to avoid occupying the land too soon.

2. When building many universities in the same city, they must focus on one area or form university clusters, form training centers, support each other in learning, and combine and use common facilities. activities and public services, physical training and sports.

3. General and Polytechnic schools should be located outside the residential areas of the city, while Agriculture schools should be located in the suburbs or outside the city.

4. A university consists of the following areas:

- Study areas and scientific research facilities;
- Sports and Exercises area;
- Student dormitories include housing and living facilities;
- Housing area for teaching staff and staff;
- Technical works area includes pumping station, transformer station, repair workshop, warehouse and garage for cars and bicycles.

Note:

a) The sports area should be arranged in direct contact with the study area and student living area.

b) For universities built far from residential areas, if it is allowed to build staff quarters in the school land, it must be arranged into a separate area according to current standards.

5. The land area for construction of the university must satisfy the following requirements:

- Quiet for study and research, free from vibrations, electrical disturbances from smoke and toxic vapors, etc., affecting the health of staff, students and experimental and research equipment.

- Having convenient roads, ensuring the travel of officials and students, the transportation of materials, technical equipment and school activities.

- Convenient for supplying electricity, water, steam, telecommunications, etc. from the general

supply network of the city and residential areas, reducing the cost of pipes and lines.

- The land area must be open, dry, low cost in terms of foundation treatment or regional drainage.

Next, we see Design standards for university lecture halls

The lecture hall is a large room, performing the teaching and learning functions of universities and colleges. Therefore, must be very careful when designing this space.

Standards for lecture space

The ground conditions and specialized standards of each university are not the same, but basically the design of the lecture hall should meet the following general requirements:

Firstly, the space is spacious, with more than 1 entrance. The reason is because: Lecture halls usually have a large capacity, there are rooms equivalent to a large hall. The number of people is large, if the space is cramped, it will make students feel tired, causing the room to have problems with sound, the ability to absorb is reduced, the quality of the lesson is not good.

Second, the arrangement of tables and chairs: Tables and chairs in the lecture hall can be arranged in two ways: straight line or arc style. They can lie on a flat surface or arranged in a ladder style, each floor gradually increases.

According to Vietnamese standards-TCVN 3981:1985 on design of university lecture halls, the maximum number of each row is 12-14 seats (with 2 entrances) or 6-8 seats (if there is only one entrance).

Standards for interior design of lecture halls

The design of classrooms and lecture halls for the University to meet the standards must fully meet: hall chairs, study tables, lecturers' desks, podiums, tables, etc.

a. Lecture tables and chairs:

Modern lecture hall design is now popular with two models of classroom and hall [8]. Each style has a different arrangement, and the standards for area and distance are not the same.

Library design standards of universities and colleges

Library is one of the mandatory conditions that must be met when designing a school and if you want to build a university of national or even international standards.

According to regulations from the Competent

Authority, university libraries must design the number of students to meet 100% of the total number of students, 100% of long-term PhD students, professors, teaching staff and faculty members [9].

Administrative building design standards

The administrative buildings of the university include: Rector's office, social organizations, departments, reception rooms, faculty offices. In these spaces, you should pay attention to:

1) Department rooms and faculty offices must have a separate room for the Dean or Dean with an area of 18 m².

2) The working room of teaching staff must have a minimum area of 4 m².

3) The teaching method room has a large area, up to 54 m².

4) Rooms of administrative departments such as enrollment, accounting, training, etc. have a minimum area of 25 m².

Sports facilities

1) Gymnastics room standard area 36×18×8 m

2) Medium-sized gymnasium 24×14×7 m

3) In addition, there must be basic outdoor sports fields such as: football field with 400 m long running track, volleyball court, basketball court, tennis court, outdoor swimming pool 50×21 m, etc.



Figure 2. VINUNI international standards (source: internet)

CONCLUSION

Universal Design for Learning (UDL) is a framework for designing flexible instructional environments and proactively integrating supports that address learner variability. UDL is based on the premise that instruction can be accessible to a wider range of learners when lessons are intentionally designed to include multiple means for accessing, processing, and internalizing information [10].

Next, UDL focuses on the reduction of barriers in the learning environments to make lessons more inclusive for all students. Teachers can start by

considering what the existing barriers are within a lesson and then develop an instructional plan that reduces those barriers by giving students various ways to access and engage with instructional activities. By considering what the barriers are, teachers can build in supports from the outset rather than modifying lessons after the fact to address the needs of learners. General educators and special educators can use UDL to create standards-based lessons for inclusive classroom settings [11].

In addition to the important standards presented above, you must also pay close attention to the conditions of hygiene, safety, fire prevention

(fire protection), electricity, water and light, ... in accordance with TCXDVN (Vietnamese construction standards).

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Authors' Contributions

All the authors have equally contributed in this work.

Research limitation

Authors can expand study for other lecture hall service quality.



Conflicts of interest

There is no conflict of interest.

REFERENCES

- [1] Meyer, A., Rose, D. H., Gordon, D. (2014). Universal design for learning: Theory and practice. Wakefield, MA: Center for Applied Special Technology. Retrieved from <http://udltheorypractice.cast.org/login>
- [2] Rao, K., & Meo, G. (2016). Using Universal Design for Learning to Design Standards-Based Lessons, Sage Open. 6(4):2158244016680688. DOI: <https://doi.org/10.1177%2F2158244016680688>
- [3] Meyer MW, Norman D (2020). Changing design education for the 21st century. *She Ji: The Journal of Design, Economics, and Innovation*, 6(1):13-49. DOI: <https://doi.org/10.1016/j.sheji.2019.12.002>
- [4] Aqel, M.S. (2021). Design Learning Environment Based on ISTE Standards. *International Journal of Information and Communication Technology Education (IJICTE)*. 17(4):1-10. <https://www.igi-global.com/article/design-learning-environment-based-on-iste-standards/273893>
- [5] Huy DTN. (2012). Estimating Beta of Viet Nam listed construction companies groups during the crisis, *Journal of Integration and Development* 15 (1), 57-71 .
- [6] Ha TTH, NB Khoa, DTN Huy, VK Nhan, DH Nhung, PT Anh, PK Duy. (2019). Modern corporate governance standards and role of auditing-cases in some Western European countries after financial crisis, corporate scandals and manipulation, *International Journal of Entrepreneurship* 23:1S. <http://digital.lib.ueh.edu.vn/handle/UEH/61754>
- [7] Dat PM, Huy DTN. (2021). Management Issues in Medical Industry in Vietnam. *Management* 25 (1), 141-154. DOI: <http://dx.doi.org/10.2478/manment-2019-0063>
- [8] LaBrake C (2019). Active Learning in the Large Lecture Hall Format. In *Active Learning in General Chemistry: Whole-Class Solutions 2019* (pp. 87-112). American Chemical Society, USA. <https://pubs.acs.org/doi/abs/10.1021/bk-2019-1322.ch006>
- [9] Click AB, Wiley CW, Houlihan M (2017). The internationalization of the academic library: A systematic review of 25 years of literature on international students. *College & Research Libraries*, 78(3):328. DOI: <https://doi.org/10.5860/crl.78.3.328>
- [10] Rose DH, and Gravel JW. (2009). Getting from here to there: UDL, global positioning systems, and lessons for improving education. In Gordon, D. T., Gravel, J. W., Schifter, L. A. (Eds.), *A policy reader in universal design for learning* (pp. 5-18). Cambridge, MA: Harvard Education Press. https://www.iadclaw.org/assets/1/7/2.4-_GPS_Article.pdf
- [11] Meo G. (2008). Curriculum planning for all learners: Applying universal design for learning (UDL) to a high school reading comprehension program. *Preventing School Failure: Alternative Education for Children and Youth*, 52(2): 21-30. DOI: <https://doi.org/10.3200/PSFL.52.2.21-30>

SUGGESTIONS AND REGULATIONS FOR DESIGNING, PLANNING AND CONSTRUCTING INDUSTRIAL PARKS; A CASE STUDY OF VIETNAM

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ABSTRACT: On the basis of experiences in designing, planning and constructing industrial zones in Vietnam, this paper aimed to give some suggestions and regulations for designing. The study used the qualitative method with synthesis and explanatory methods. Resources usage and environmental protection are more effective, while maximal economic and social benefits are simultaneously targeted. A concept of developing eco-industrial parks has established and evolved through time, and planning and constructing industrial zones based on current regulations in the nation. As a result of different researches, there is a need to pay attention to network cloud service, big data service and investment management and meet some standards such as 100% of newly built industrial clusters have wastewater treatment stations that meet relevant national standards or technical regulations, etc. as well as certain principles such as 3R (Recycle, Reduce, Reuse). Operation services should include: cloud-based service operation providing basic cloud rental services, such as cloud hosting, cloud desktop, cloud disk, virtual data center, container services, collaborative development and Open API; SaaS Operation Service; APP Store; and space operation service to make full use of digital showrooms and free space resources, providing reservation and rental services, and demonstration services.

KEYWORDS: Eco-Industrial Parks, Experiences, Designing and Constructing

INTRODUCTION

Until now, according to PLAN no. 85/KH-UBND related to management, investment and development of industrial clusters in Hanoi city in 2022:

Deploy investment in construction of technical infrastructure of industrial clusters that have already been established

- Organize the start of construction and completion of technical infrastructure; attract secondary investment projects in production and business activities in 45 industrial clusters that have already been established, including:

- + 02 industrial clusters established according to Joint Circular No. 31/2012/TTLT-BCT-BKHĐT dated October 10, 2012 of the Inter-Ministry: Industry and Trade - Planning and Investment guiding the handling of formed industrial clusters before the Regulation on management of industrial clusters promulgated together with Decision No. 105/2009/QĐ-TTg dated August 19, 2009 of the Prime Minister took effect (Binh Minh - Cao Vien

industrial cluster, Thanh Oai district, CN3 industrial cluster, Soc Son district);

- + 43 industrial clusters were established in the period of 2018 - 2020.

- Focus on implementing solutions to remove difficulties and obstacles, create the most favorable conditions for investors to shorten the time to carry out investment procedures, speed up the progress of construction, and start construction to build technical infrastructure and put into operation industrial clusters in the city.

- 4. Development and establishment of new industrial clusters

- Promote investment promotion and advertising activities.

- Completing the appraisal and deciding on the establishment and expansion of 15-20 new industrial clusters.

Research questions

Question 1: What are current regulations in constructing industrial parks in the nation?

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Question 2: What are experiences and references of other countries in the world?

This study aimed to draw out lessons from other countries in constructing industrial parks for emerging economies such as Vietnam, based on their current situation analysis.

Previous studies

Firstly Huy [1] pointed we need risk management standards and Ha et al. [2] and Dat et al. [3] confirmed. Next, Table 1 shows summary of related studies.

Table 1 - Summary of previous studies

Authors	Content, results
Breschi and Malerba in 2001 [4]	Brought a type of economic agglomeration, clusters are formed by firms that conduct activities in the same field and in which innovation is an important force that fuels the competition and the firm's development.
Morosini in 2004 [5]	Gave another definition by describing the cluster as –socioeconomic entity characterized by a social community of people and a population of economic agents localized in close proximity in a specific geographic region
Xing et al. in 2017 [6]	Stated that a 7R framework that provides an updated base to assess, develop and compare Eco-Industrial Parks (EIPs) was developed and preliminarily checked with secondary data from the Suzhou Industrial Park, which enables relevant benchmarking among EIPs all over the world. Secondly, different typologies of industrial parks in China provinces were analysed and related role changes were described. The 13th Five-Year Plan on National Economic and Social Development, called for the third generation of EIPs, as enablers of sustainability and balanced development of urbanization in an eco-city that combines industrial growth with city development. Therefore, corporate, consumer and citizen social responsibility (coined as 3CSR) are attached to pursuing economic growth, social progress, and environmental sustainability. This research sets the scene for significant CE future developments, by leveraging the role of modern eco-cities through EIPs guided by a new conceptual model (7R)
Zong et al. in 2018 [7]	Discussed the application services for industrial park digitalization including operation service, property service, corporate service and life service, and explains the management of park digitalization such as safety and security of industrial park digitalization discusses the application services for industrial park digitalization including operation service, property service, corporate service and life service, and explains the management of park digitalization such as safety and security of industrial park digitalization discusses the application services for industrial park digitalization including operation service, property service, corporate service and life service, and explains the management of park digitalization such as safety and security of industrial park digitalization discusses the application services for industrial park digitalization including operation service, property service, corporate service and life service, and explains the management of park digitalization such as safety and security of industrial park digitalization This paper also discusses the application services for industrial park digitalization including operation service, property service, corporate service and life service, and explains the management of park digitalization such as safety and security of industrial park digitalization Mention application services for industrial parks digitalization including operation service, property service, corporate service and life service, safety and security.
Thach et al. in 2021 [8]	They stated that roles of banks need to be enhanced to support such economic activities. They paid attention to technology quality management of the industry 4.0 and cybersecurity risk management on current banking activities

*source: author analysis

METHODOLOGY

Here authors will use analysis, experiences, observations, practical situation with cases studies of industrial clusters in Hanoi, Vietnam, but it also uses will use qualitative, analysis, synthesis research

methods. Relevant regulations and plans of clusters in Hanoi also researched.

Data was prepared from real cases and regulations of industrial zones in Hanoi city (Figure 1) and method will be mainly qualitative analysis and synthesis method used.



Figure 1. Industrial zones in Hanoi city (source: internet)

RESULTS AND DISCUSSION

Construction regulations of the State's industrial parks

First issue: Fully meeting the standards and regulations of the State is a prerequisite for the construction of an industrial park. These contents are based on the national technical regulation on construction planning - QCVN 01:2019/BXD. Accordingly, the industrial park must ensure:

Requirements on environmental protection and safety, minimizing adverse effects on the urban environment

For production facilities and warehouses with hazardous levels of level I and level II, they must be located far from civil areas. Toxic level and environmental safety distance (ATMT) comply with the regulations of the Ministry of Science and Technology; or must be determined by an environmental impact assessment tool, or based on similar projects. Within the ATMT distance, at least 50% of the land area must be planted with trees. Not more than 40% of the land area will be arranged for parking, pumping stations, wastewater treatment stations, and solid waste transfer stations. Construction land must be planned in accordance with the potential for industrial development, the master plan for socio-economic development and relevant development strategies of each urban area. The ratio of land types in an industrial park depends on the type and nature of the industrial park, the area module of the land lots for the construction of factories and warehouses. The maximum net construction density in the land lot for building factories and warehouses is 60%.

All areas subject to planning such as industrial parks (industrial clusters), high-tech parks, and export processing zones must meet safety and environmental protection requirements. Minimize

the negative impact on the surrounding environment.

Planning must be carried out outside the construction area of factories, production facilities and warehouses with hazardous levels of grade I or grade II. The determination of the hazardous level and the safe distance must absolutely comply with the regulations of the Ministry of Science and Technology.

NOTE: For cases where there is no environmental impact assessment or similar projects as a standard, the values listed in Appendix 3 of TCVN 4449:1987 can be used for reference.

Second issue: Clean, green and safe industrial park planning

QCXDVN 01:2008/BXD emphasized the requirement to: "Arrange the works in accordance with topographical, geological and landscape conditions, in harmony with other architectural ensembles in the urban area". Also in it are clear regulations on the arrangement of groups of public trees in the form of parks, flower gardens, water surfaces, groups of trees along the route that mainly create shade, prevent dust and noise, and groups of trees isolated from the surrounding areas of different specific standards.

When the trend of sustainable development is recognized by the whole world, the planning of green, clean, safe and humane industrial parks is inevitable. The density of trees in each industrial land lot, the treatment of wastewater, industrial waste and sludge, and the criteria for measuring pollution levels need to be clarified and detailed. The environmental monitoring unit is responsible for accurate measurements while the Ministry of Natural Resources and Environment in conjunction with the Ministry of Construction facilitates and encourages green and clean industrial parks to develop across the country.

Third issue: Building factories, whether large or small, on land owned by enterprises or the state, must apply for a construction permit. This is stipulated in Clause 1, Article 89 of the Law on Construction (amended in 2020) as follows: "Before starting work construction, the investor must obtain a construction permit issued by a competent state agency. Rights granted in accordance with this Law."

The process of applying for a permit to build a factory in an industrial park

After preparing all the papers, documents, and procedures to apply for a factory construction permit, the process of applying for a construction

permit will be carried out as follows:

Step 1: Prepare the required documents.

Step 2: Submit the application file at the Receipt and Return Department of the People's Committee of the commune or ward.

Step 3: The City's Urban Management Division receives the dossier and conducts verification, and submits it to the City People's Committee for licensing.

Step 4: Organizations and individuals receive permits at the Department of receiving and returning results of the City People's Committee. Time to appraise and receive permits is from 10 to 15 working days.

References to constructing industrial parks in the world

Firstly, [Cote and Rosenthal \[9\]](#) mentioned Sustainability requires a consideration of the social or community dimension as well as ecological integrity and economic efficiency. Further, ecological systems emphasize interaction and interdependence. Definitions of eco-industrial parks have begun to address this by referring to them as communities of business. The paper describes a number of initiatives, particularly in the United States and Canada. The types of interactions among businesses and between businesses and the community are described and initiatives are categorized as engineering or self-designing.

Secondly, [Zong et al. \[7\]](#) pointed:

Network cloud service

Build and operate a public service platform for enterprises and individuals in the park to provide full-service for SaaS service providers.

Individuals in the park, provide full-service for SaaS service providers

Operation services should include: cloud-based service operation providing basic cloud rental services, such as cloud hosting, cloud desktop, cloud disk, virtual data center, container services, collaborative development and Open

API; SaaS Operation Service; APP Store; and space operation service to make full use of digital showrooms and free space resources, providing reservation and rental services, and demonstration services individuals in the park to provide full-service for SaaS service providers. Operation services should include: cloud-based service operation providing basic cloud rental services, such as cloud hosting, cloud desktop, cloud disk, virtual data center, container services, collaborative development and Open API; SaaS Operation Service; APP Store; and space operation service to make full

use of digital showrooms and free space resources, providing reservation and rental services, and demonstration services.

Big data service

Organize and integrate different industries in the park, and provide a complete product system for the planning, decision-making, supervision, and servicing of these industries.

Investment management

Manage the entire life cycle of investment promotion activities, with main functions including customer management, investment contract management and rent management.

Main functions including customer management, investment contract management, and rent management product system for the planning, decision-making, supervision, and servicing of these industries.

Big data services should include: collection of data related to industrial big data, including basic data in various fields, domestic and foreign industrial development information, industrial chain development data, regional economic data, corporate data, subject matter data, and supporting data; general supporting platform services for industrial big data; and various types of software services for users such as all levels of government, parks, and enterprise. And third, an Industrial Park can be classified as an Eco-Industrial Park (EIP) if the community of businesses cooperate with each other, sharing resources [\[10\]](#) and, leading to economic gains, gains in environmental quality and equitable enhancement of human resources for the business and local community" [\[11\]](#). So, these businesses seek enhanced environmental, economic, and social performance through collaboration in managing environmental and resource issues, including energy, water, and materials.

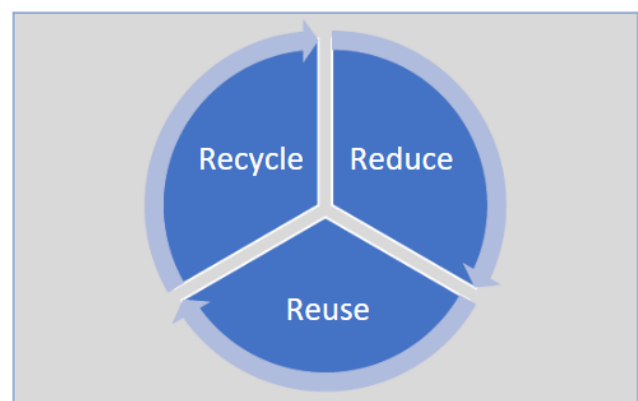


Figure 2. 3R principle in Ips

CONCLUSION

The results of the Plan No. 85/KH-UBND dated 16/3/2022 to MANAGEMENT, INVESTMENT AND DEVELOPMENT OF INDUSTRIAL Clusters IN HANOI CITY IN 2022; are used to build, complete and upgrade the technical infrastructure system of industrial clusters in operation (including: internal traffic, sidewalks, trees, water supply, drainage, wastewater and waste treatment. solid, power supply, public lighting, internal communication, operator, protective fence and other works serving the operation of industrial clusters) in the fence of industrial clusters to meet the requirements Decree No. 68/2017/ND-CP dated May 25, 2017 of the Government on management and development of industrial clusters;

- Continue to organize the start of construction of technical infrastructure for 41 industrial clusters that have been decided to establish in the period of 2019 - 2020;

- Decide on the establishment and expansion of 15-20 new industrial clusters;

- Adding 04 new industrial clusters to the master plan on development of industrial clusters up to 2020, with a vision to 2030;

- 100% of industrial clusters in operation are managed and operated in accordance with the law on management and development of industrial clusters;

- 100% of newly built industrial clusters have wastewater treatment stations that meet relevant national standards or technical regulations;

- 100% of industrial clusters, industrial clusters of craft villages that have been put into operation have wastewater treatment stations that meet relevant national standards or technical regulations.

DECLARATIONS

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Authors' Contributions

Conceptualization done by Nguyen Dinh Trung, Le Thi Han; Formal analysis done by Nguyen Trong Diep, Nguyen Dinh Trung; and Project administration done by Le Thi Han.

Research limitation

Authors may analyse in details experiences from Singapore and European countries

Conflicts of interest

There is no conflict of interest.

REFERENCES

- [1] Huy DTN. (2015). The critical analysis of limited south Asian corporate governance standards after financial crisis. *International Journal for Quality Research* 9 (4): 741–764. <http://www.ijqr.net/journal/v9-n4/12.pdf>
- [2] Ha TTH, NB Khoa, DTN Huy, VK Nhan, DH Nhung, PT Anh, PK Duy. (2019). Modern corporate governance standards and role of auditing-cases in some Western European countries after financial crisis, corporate scandals and manipulation, *International Journal of Entrepreneurship* 23 (1S). <http://digital.lib.ueh.edu.vn/handle/UEH/61754>
- [3] Dat PM, ND Mau, BTT Loan, DTN Huy. (2020). Comparative china corporate governance standards after financial crisis, corporate scandals and manipulation. *Journal of security & sustainability issues* 9 (3) : 931-941. [Article link](#)
- [4] Breschi S, Malerba F (2001). The Geography of Innovation and Economic Clustering: Some Introductory Notes. *Industrial and Corporate Change*. 10(4):817-33. [Article link](#)
- [5] Morosini, P. (2004). Industrial Clusters. *Knowledge Integration and Performance, World Development*, 32 (2): 305-326. DOI: <https://doi.org/10.1016/j.worlddev.2002.12.001>
- [6] Xing J, Silva JB, De Almeida ID (2017). Interest, design and assessment of Eco-Industrial Parks in China within a circular economy paradigm. Interest, design and assessment of eco-Industrial parks in China within a circular economy paradigm. <https://repositorio.iscte-iul.pt/handle/10071/17990> .
- [7] Zong, J, Chen L, Li Q, Liu Z (2018). The construction and management of industrial park digitalization and its application services, *IOP Conference Series Earth and Environmental Science* 153(3):032019. DOI: [10.1088/1755-1315/153/3/032019](https://doi.org/10.1088/1755-1315/153/3/032019)
- [8] Thach NN, HT Hanh, DTN Huy, QN Vu. (2021). Technology Quality Management of the industry 4.0 and Cybersecurity Risk Management on Current Banking Activities in Emerging Markets-the Case in Vietnam. *International Journal for Quality Research* 15 (3): 845–856. <http://ijqr.net/journal/v15-n3/10.pdf>
- [9] Côté RP, Cohen-Rosenthal E. (1998). Designing eco-industrial parks: a synthesis of some experiences. *Journal of cleaner production*. 6(3-4):181-8. DOI: [https://doi.org/10.1016/S0959-6526\(98\)00029-8](https://doi.org/10.1016/S0959-6526(98)00029-8)
- [10] Valenzuela-Venegas G, Salgado JC, Díaz-Alvarado FA (2016). Sustainability indicators for the assessment of eco-industrial parks: classification and criteria for selection. *Journal of Cleaner Production*, 133: 99-116. <https://doi.org/10.1016/j.jclepro.2016.05.113>
- [11] Popescu, R., 2008. *Industrial Ecology and Eco-Industrial Parks: Principles and Practice*, DOI: <https://dx.doi.org/10.2139/ssrn.1317231>

DESIGNING SANGALJ NEIGHBORHOOD OF TEHRAN USING THE REVITALIZATION APPROACH

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ABSTRACT: The main goal of this research was to compile the design framework of Sangalaj neighborhood inside Tehran, Iran using the revitalization approach. The research method of this research is descriptive-analytical in terms of the theoretical-applicative goal and in terms of the field method. To collect the required information and data, document reviews, library studies, and field studies are used, and the tools needed to collect and analyze information are questionnaires, interviews, field observations and observations, information and documents of extra-hand plans. and satellite images. In the analysis and evaluation section, considering that each of the extracted indicators do not have the same importance for the revitalization of urban spaces; Therefore, it is necessary to measure their importance relative to each other and finally apply this measurement in the context of Sangalaj neighborhood. After identifying and investigating a passage in the neighborhood, analyzing each building and passages and its constituent parts, presenting its policies and strategies with the possibility of desirable revitalization based on the social, cultural, economic, physical structure, and attracting participation People can re-realize the historical identity of Sangalaj neighborhood and achieve a sustainable development in the direction of a lively neighborhood by preserving its historical identity.

KEYWORDS: Urban design, Economic aspects, Revitalization approach, Vibrant neighbourhood, Tehran.

INTRODUCTION

The industrial revolution and the resulting technological advances accelerated the slow population changes and increased the population. This increase in population was more concentrated in the urban centers and caused social and environmental balances to be disturbed. According to the report of the United Nations Population Fund, the year 2008 is an important turning point in the history of the world, because for the first time in history, more than half of the world's population, about three billion and three hundred million people, will live in urban areas, and it is predicted that this figure will increase to about five billion people by 2030 [1]. Today's city is one of the greatest achievements of culture and civilization and one of the most pervasive social phenomena of the present age. In the period of new developments of urbanization and the problems caused by it, urban areas have been exposed to the adverse effects of urban development more than other places; As the consequences of this issue can be clearly seen in the face of most of the world's cities and especially the cities of Iran [2]. The degeneration of citizenship ethics and the widespread migration of rural people to cities, especially in developing countries, has caused the cities to grow indiscriminately towards the periphery or the scattered growth of cities. This

is in parallel with the horizontal growth of the city towards the suburbs and the destruction of the lands and the natural environment around the city, the main spaces and valuable urban neighborhoods within the city have been and are left behind from the desirable urban development process [3, 4].

In this research, an attempt is made to take a new look at urban development plans and by using the approach of revitalizing urban spaces, to consider a new idea for urban neighborhoods with historical value and identity. According to the needs of the research, the statement of the problem and the importance of addressing it, the background of the research, the goals and questions of the research, the method of conducting the research and the introduction of the study's scope are discussed. Sangalaj neighborhood, which was chosen as the study sample of this research, is located in the middle context of Tehran city. The renovations that have taken place in this neighborhood over many years have been done without considering the identity of its historical context and cultural values, and from the physical, socio-cultural and economic point of view, there are inappropriate conditions in this neighbourhood [4]. The constructions carried out in the Sangalaj neighborhood of Tehran, regardless of the social and economic characteristics of the residents, led to the migration of the old and authentic residents of this neighborhood, as well as

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the dimming of social life and the sense of belonging and trust between the residents on the one hand and On the other hand, residents and existing institutions in the neighborhood have become; which reveals the necessity of paying attention to the development planning of the local community in order to achieve sustainable development.

Samiei and Sayafzadeh [5] in their research focused on the need to pay attention to worn-out urban tissues with an emphasis on the regeneration approach and finally provided solutions to revive these tissues. Rafiyan et al. [6] in the article "Designing valuable localities with emphasis on the approaches of organizing worn-out fabrics, (2012)" with a descriptive-analytical approach and using field and library study methods and using the SWAT model to investigate different dimensions of the fabric. He has paid for worn-out urban areas in Akhund neighborhood of Qazvin city. The findings from the analysis of the studies have led to pioneering strategies to improve and improve the worn-out urban fabric in Qazvin [4].

Izadi et al. [7] in their research entitled "urban design in the organization of traditional neighborhoods with a development-stimulating approach", with the aim of investigating how the development-stimulating approach affects urban regeneration in traditional neighborhoods in the document studies section, tried to review important and outstanding documents. It has been in the field of urban regeneration and development drivers [8], and the obtained information has been analyzed in a survey method by distributing questionnaires in line with the research objectives. The results of the research showed that considering that the driving dimensions of development include socio-cultural, economic, physical-spatial and environmental dimensions; Based on this, the socio-cultural dimension in Golpai neighborhood of Hamedan has been assigned the first priority and paying attention to social issues is the main issue of the driving approach of development in this neighborhood. In a research, Jamakloo et al. [9] focused on the need to pay attention to worn-out urban neighborhoods, and by presenting a design framework for Evin neighborhood inside Tehran, they are trying to solve the problems in the context, especially in residential spaces. The study and investigation of people's behavior patterns in order to respond to their needs within the framework of the laws is considered, as well as the designer's proposal to introduce patterns in the design of residential complexes with an approach to preserving the native architecture of the region, paying attention to the shape and topography of the land and designing neighborhood units with The use of the ecological potentials of Evin neighborhood has been investigated [9]. Saberi Naseri [10] in his dissertation entitled "Organization of worn-out fabric (a case study of Imamzadeh Yahya neighborhood)" was studied and researched in order to organize Imamzadeh Yahya neighborhood with a systematic approach, the main

axes of which are improving the physical appearance, improving the traffic situation, improving Environmental conditions are reducing density and concentration, maintaining and reviving economic prosperity, improving the social and cultural environment, strengthening and creating visual and identity values [10]. Kalharnia [11] in his article entitled "Reconstruction of Qasr Shirin from narrative to reality", using qualitative and content research methods and interviews with related people, reached the conclusion that the theoretical content of the process of fabric organization begins with the discourse between the stakeholders and is formed. It recognizes the needs of reconstruction and public interest, turns the opinions of stakeholders into executive decisions, reduces the distance between decision-making and implementation, and draws the future vision of the city. The main issue in the theoretical debates of urban planning is the recognition of "public interest", which can be a set of demands and finally reaches the final result with social participation. Hernandez and Jones [12] in the article "Changing Attitudes of Beneficiaries and Communities in Chua Orange", point out the vital role of social participation in the protection of historical heritage with valuable ancient textures [13]. Informing the stakeholders - both those who live in the context and those who are decision-makers and beneficiaries of the valuable historical heritage - is one of the basic requirements for decision-making and planning for the ancient context. The success of historical heritage protection projects depends on the correct performance of the role of each of the beneficiaries and their maximum participation.

METHODOLOGY

This research is theoretical-applicative in terms of its purpose and descriptive-analytical in terms of its method. To collect the required information and data, document reviews, library studies, and field studies are used, and the tools needed to collect and analyze information are questionnaires, interviews, field observations and observations, information and documents of extra-hand plans. and satellite images. In the documentary method to review the research literature and statistics and the required information, from the most important researches that are related to the subject in question, in the form of authentic scientific articles, books and reports of consulting engineers, theses and statistics offices of the Statistics Center, Municipality and ... Used. After studying the theoretical foundations and statistics of the indicators, the study sample is recognized and analyzed. As mentioned before, Sangalaj neighborhood of Dozahde district of Tehran municipality was chosen as the study sample of the research. In the analysis and evaluation section, considering that each of the extracted indicators do not have the same importance for the revitalization of urban spaces; Therefore, it is necessary to

measure their importance relative to each other and finally apply this measurement in the context of Sangalaj neighborhood. In other words, once the relative importance of the indicators is measured using AHP technique in the Expert Choice software, and then these indicators are evaluated using the questionnaire method in the study sample and using the Likert scale.

In this section, AHP technique, Likert scale and SWOT analysis model are introduced.

The Likert scale is one of the most common measurement scales in questionnaire-based research and was invented by Rensis Likert (1903-198). In this scale or spectrum, according to the subject of his research, the researcher provides a number of items to the participants to determine their tendency based on multiple items and answers. The answers are in the form of multiple options, for example, in the 5-point mode, the options include "completely disagree, disagree, have no opinion, agree and completely agree".

In making the Likert spectrum, the following steps should be followed:

- 1- Selecting items that make up the measurement scale and compiling suitable and inappropriate items related to the subject
- 2- Carrying out a prototype of items in a random sample of respondents
- 3- Valuing and calculating the total score for each respondent
- 4- Determining the differential power of items
- 5- Selection of selected subjects
- 6- Determining the reliability coefficient of the scale

Usually, questionnaires based on the Likert scale use the mentioned five modes, but many psychometricians also use seven and nine modes. Although recent studies show that the 5 and 7 point scale have more valid results than the 10 point scale. Then each item is valued numerically. The numerical sum of these values gives the score in this scale, which expresses the tendency of the respondents; For this reason, this scale is also called the total score scale. Usually, because the respondents are not influenced by the numbers, the evaluation of the items is not written. In other words, instead of numbers, appropriate words and expressions are used in the options. Also, the evaluation of the items is done arbitrarily, and for example, on a 5-part scale, a score of 1 can be assigned to the totally agreeable option and 5 to the totally opposed option, where 0 can be used instead of 1. Usually, the number of respondents in this scale is at least 100 people.

In the science of decision-making, in which the choice of a solution from among the existing solutions or the prioritization of solutions is discussed, it has been several years that "MADM" decision-making methods with multiple indicators have opened their place. Among these, Analytical Hierarchy (AHP) method has been used more than

other methods in management science. Hierarchical analysis process is one of the most famous multi-objective decision-making techniques, which was first introduced by Thomas L [5]. An original Iraqi watch was invented in the 1970s. Hierarchical analysis process reflects natural behavior and human thinking. This technique examines complex problems based on their interactions and turns them into a simple form and solves them.

Hierarchical analysis process can be used when the decision-making process is faced with several competing options and decision-making criteria. The proposed criteria can be quantitative and qualitative. The basis of this decision-making method lies in pairwise comparisons. The decision maker starts by creating a hierarchical decision tree. The decision hierarchy tree shows the factors compared and the competing options evaluated in the decision. Then a series of pairwise comparisons is done. These comparisons show the weight of each of the factors in line with the competing options evaluated in the decision. Finally, the logic of the hierarchical analysis process combines the matrices resulting from pairwise comparisons with each other so that the optimal decision is obtained.

Thomas (the founder of this method) stated the following four principles as the principles of the hierarchical analysis process and based all the calculations, rules and regulations on these principles. These principles are:

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{n} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

Inverse condition: if the preference of element A over element B is equal to n, then the preference of element B over element A will be equal. Principle of homogeneity: element A and element B must be homogeneous and comparable. In other words, the superiority of element A over element B cannot be infinite or zero.

Dependency: Each hierarchical element can be dependent on its higher level element and linearly this dependency can continue up to the highest level.

Expectations: Whenever there is a change in the hierarchical structure, the evaluation process must be done again.

RESULTS AND DISCUSSION

Based on the location and form of the city core, the combination of the central cores along the basic working axis has turned it into a row, this row consists of three cores. In addition, the Ahadi Mahdovian axis (Ab Anbar) has also become a central axis due to the establishment of commercial and religious elements (mosque-school).

The main ossification of the space is based on the main order of the basic worker and the house,

which connects most of the body of the historical fabric in two directions, north-south and east-west. What should be mentioned in the meantime is that a small part of this ossification in the south of Baft has not recovered its regularity well due to historical reasons [14, 15].

According to the collected questionnaires and interviews with the people of the neighborhood, the favorite places of the people are: Dr. Hasabi Park, Darkhungah shops, Meir and Tarkhani bazaar, Seyed Nasreddin Imamzadeh, Irani Farhang House, residents of the neighborhood expressed their concern about excessive motor traffic. They are dissatisfied and consider the operation of the municipality to destroy the water streams as the cause of more traffic of motorcyclists at a higher speed. However, some shop owners, especially shoe wholesalers, welcomed this trend and wanted to widen the passages. Most of the women expressed dissatisfaction with the lack of suitable public spaces and public places such as parks.

The scope of the project in its current state consists of a compact mass of buildings, mostly 1 to 2 stories. In addition, in some parts of the space, there have been sporadic renovation movements by the owners who have settled next to this old mass. Such an order has led to the formation of a volumetric system, from the establishment of disharmony, which generally lacks the necessary proportions in the formed compositions.

In the historical part of the space and within the context, the parts where the renovation movements have not taken place are 2 and 1 story buildings, and most of the time the skyline is uniform and with little changes. Due to the small and variable width of the passageways, as well as their organic nature, in some cases the enclosure rises and it is not possible for passers-by to see the skyline. have had a uniform skyline and in the vicinity of the old building, they have created a jagged and inappropriate skyline within the historical context that can be seen in the picture.

The mass and space system within the scope of the plan clearly indicates the dominance of the mass over the space and the least amount of space opening in the target area, such a system that includes the scope of the plan as well as its immediate scope, due to its historical antiquity. And the system of filling and emptying the tissue has been within the scope of the design and also following the environmental requirements in this space.

In the scope of the study, small collective spaces that concentrate the presence of citizens due to spatial qualities or activity system in the direction of social and economic interactions can be identified [16, 17]. Due to its historical age and proximity to the market, this area had a better quality of space in the past than it does now, and the rest of these spaces are still playing their historical role with a decline in quality compared to the past. Spaces such as the area under the arches and junctions, valuable spaces such

as Imamzadeh Seydan Nasreddin (in the east of the area), Dr. Hasabi's house and the church (in the west of the area) as well as in the immediate area that adds to the number of these places, such as the stretch of the street Meir, which ended in Bazarche Shapur, shows an example of this space, including arenas.

The presence of religious places such as Imamzadeh, Hosseiniyehs, Saqaqhanas and religious affiliations, proximity to Shahpur Bazaar and Bazarcheh, vaults and valuable old houses such as Dr. Hasabi's house, have been among the positive aspects of the citizens' perception of the scope of the project. The effect of the market performance on the scope of the plan has caused the edge of the main passages in the space to have a performance greater than the local level.

Passage of Qoli, Bagh Meir, Karken Esasi, and Passage Darkhungah (Maghfori) within the scope of the plan are spaces where various activities are carried out more concentratedly than in other parts of the site. Especially the basic and standard worker, which are considered the most important behavioral domain. that people or a group of people use it in a regular and sustainable manner and defend it against disturbing people and outsiders because of the sense of belonging and ownership they have towards the space.

Elements and places that are memorable and with identity, the formation of a place in urban areas is realized when the defining elements of the space have an effect on the different dimensions of human existence and being (in the material, mental and spiritual spheres) and the scope of its effect in relation to time has continuity. Based on the findings of this consultant (from the environmental perception questionnaire distributed at the area level) from the residents' point of view, some of the existing elements and spaces such as religious spaces, arches and historical elements, as well as activity nodes and bazaars in the area or in the area They are among the points of identity in the space that are the circle of collective memories.

In order to identify the citizens' perception of the space under investigation, a number of perceptual questionnaires were selectively distributed and completed among the citizens (both residents, workers and passers-by). The results of extracting the answers to the questions are as follows:

- In many cases, the general mentality of the citizens about the studied space does not have a positive direction. This is mainly due to the low permeability of the fabric, excessive traffic of motorcyclists in the crossings, wear and tear of the fabric, lack of public space or suitable green space in the area under study.

- The presence of religious places such as Imamzadeh, Hosseiniyehs, Saqaqhanas and religious belongings, proximity to Shahpur Bazaar and Bazarcheh, vaults and valuable old houses such as Dr. Hasabi's house, have been among the positive

aspects of the citizens' perception of the scope of the project.

- The effect of the market performance on the scope of the plan has caused the edge of the main crossings in space to have a performance greater than the local level, and this itself has caused the creation of motor traffic in these narrow crossings and reduced pedestrian safety. It did not affect the mentality of the respondents.

- The effects of the market have caused many of the old and large residential houses of Baft to turn into warehouses or production workshops (mostly shoes and bags), and this has caused the residential identity of Baft to decrease in the eyes of the residents.

In order to qualitatively analyze the visual sequence at the range level, macroscopic analysis method is used, and in this way successive views of the axes are evaluated. In this framework, qualities such as enclosure, oneness (difference and contrast of Serial Vision) (spatial) being a sign or the possibility of having the role of signs, qualitative characteristics of walls (advancement or retreat from the edge) and... are desired. The set of qualities referred to when it leads to spatial integration of the axis and follows the objective and subjective continuity of the landscape in space and time, it will follow the desirability of the urban space.

Considering that the analysis of the space arrangement deals with the body and physical part as well as urban trips. As a result, it is necessary to provide a more detailed analysis of the problems and the existing situation of the area. For this reason, SWAT analysis was chosen for a detailed investigation of the scope, which will be analyzed in the form of a table and matrix as well as in the form of detailed maps. First, a visual SWAT analysis is presented, and then we analyze the strengths, weaknesses, threats, and opportunities in the form of a matrix. And finally, the detailed analysis of the current situation of Sangalj neighborhood will be done in analytical maps.

CONCLUSION

The lack of suitable public spaces with desirable physical quality throughout the area, which is the cause of ignoring the social dimension of sustainable development, environmental sustainability and lack of attention to the health of the environment and public spaces of the neighborhood, the narrow width of the roads, the low quality of urban space design at the level of roads and spaces General, the low quality of lighting in the space, the low level of security, which leads to the rejection of the space and the reduction of the presence of residents in it; Among the basic problems and challenges of Sangalj neighborhood, it is necessary to pay extra attention to these issues in the design of the neighborhood. After analyzing and evaluating the questionnaires, based on the knowledge obtained from the studied

area, to evaluate it based on the SWAT analytical technique in the sections of urban facilities and equipment, movement and access, use and functional zones, activity system and public spaces, spatial organization and environmental has been discussed.

Competing interests

The authors declare that they have no competing interests.

REFERENCES

- [1] Cohen B (2006). Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. *Technology in society*. 28(1-2):63-80. DOI: <https://doi.org/10.1016/j.techsoc.2005.10.005>
- [2] Lang, John; creation of architectural theory; Translation: Alireza Einifar, University of Tehran Press, first edition, 2011.
- [3] Faraji MM, Taleghani EM, Faraji MM. (2016). The role of sustainable architecture in valuable historical districts of tehran (a case study of sustainable residential development in Sanglaj district). *The Turkish Online Journal of Design, Art and Communication*. 6(AGSE): 1860-9. http://tojdac.org/tojdac/VOLUME6-AGUSPCL_files/tojdac_vo60AGSE168.pdf
- [4] Foruzandeh. M., Dadashpour. H., Rafieian. M., (2013). The Realization of Neighborhood Planning in Urbanized Urban Textiles Case Study of Sangalj Neighborhood Tehran. *Journal of Urban and Regional Studies and Research*, No. 18, 89-106. [In Persian]. https://urs.ui.ac.ir/article_20055.html ; [Google Scholar](#)
- [5] Samiei, A. and Sayafzadeh, A., 2016. Analysis of the worn-out tissues characteristics and providing of intervention pattern, case study: Eslamshahr city, Tehran. *Current Urban Studies*, 4(03), p.267. https://www.scirp.org/html/2-1150190_69802.htm
- [6] Sajjadzadeh and Zulfi Gol (2013) Sarvari, H., Mehrabi, A., Chan, D.W. and Cristofaro, M., 2021. Evaluating urban housing development patterns in developing countries: Case study of Worn-out Urban Fabrics in Iran. *Sustainable Cities and Society*, 70, p.102941.
- [7] Izadi, M.S., Moshaver, M.K., Sajjadzadeh, H. and Tavassoli, M., 2018. Locating urban catalyst projects in inefficient urban textures with the regeneration approach: A case study on Tehran. *Journal of History Culture and Art Research*, 7(3), pp.136-151. DOI: <https://doi.org/10.7596/taksad.v7i3.1708>
- [8] Patricios NN. Urban design principles of the original neighbourhood concepts. *Urban morphology*. 2002 Jan 1;6(1):21-36. http://www.urbanform.org/online_unlimited/pdf20_02/200261_21-32.pdf
- [9] Jamakloo, T., Hosseini, S.B., ABBAS Yazdanfar, S. and Japalagh, G., 2015. Designing Context-Oriented Housing in Distressed Area "Case Study: Evin Neighborhood in Tehran". *Current World Environ*, 10, pp.438-47. [Google Scholar](#)

- [10] Saberi Naseri T. (2012). An upgrading approach to urban conservation in the historic fabric of Tehran, Oudlajan (case study: Imamzade Yahyah area, Tehran), master degree Thesis. restoration and revitalization of historic buildings and fabric Tehran University. [Google Scholar](#)
- [11] Kalhornia, B. (2013). Reconstruction of the city of Ghasr-e- Shirin, from tale to reality; a research to attain the theoretical content of Ghasr-e-Shirin recon (in Persian). Honar-Ha-Ye Ziba Memari -va - Shahrsazi 17, 71–80.
- [12] Hernandez, T. and Jones, K. (2005). Downtowns in transition: Emerging business improvement area strategies. *International Journal of Retail & Distribution Management*, 33(11), pp.789-805. <https://doi.org/10.1108/09590550510629392>
- [13] Azizi, Mohammad Mehdi, the evolution of intervention policies in ancient urban contexts in Iran Varupa, Municipalities, 4th year of 2013 (49).
- [14] Ahmadpour, A, Khalilabad, H (2004) Patterns and techniques of planning for the restoration of the historical fabric of cities, the chapter of the geography of the land (5)
- [15] Binqing, Z. (2009). Urban regeneration of China's historical district in a transitional economy. Case Study of the Drum Tower Muslim District, Xi'an city, P.R.China, Ph.D. Candidate, Department of Urban Planning and Design, University of Hong Kong, Retrieved July 2010
- Carmon, Naomi.1999. Three generations of urban renewal polices, Faculty of Architecture and Town planning. Techion, Israel, vol. 30.
- [16] Hoyt, L. 2001. Business improvement districts: Untold stories and substantiated impacts. Ph.D. dissertation, University of Pennsylvania Hoyt, L. 2004. Collecting private funds for safer public spaces: An empirical examination of the business improvement district concept *Journal of Environment and Planning*, vol.31.
- [17] Hoyt, L. 2005. Do business improvement district organizations make a difference? Crime in and around commercial areas in Philadelphia. *Journal of Planning Education and Research*, vol. 25.

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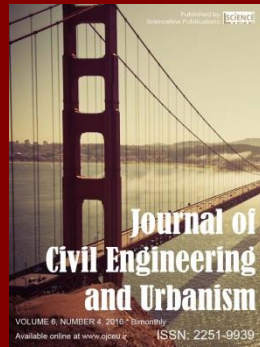
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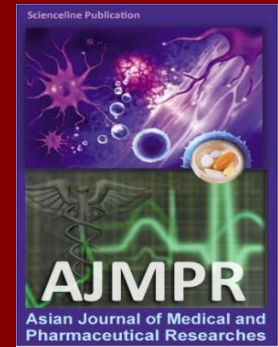
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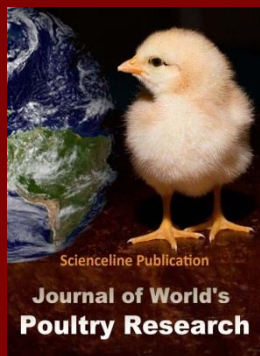
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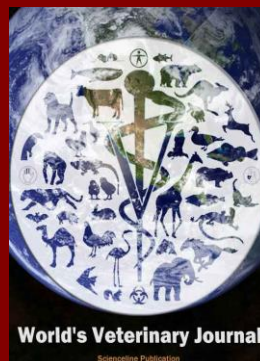
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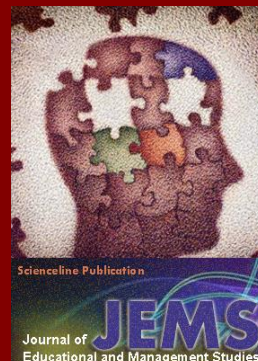
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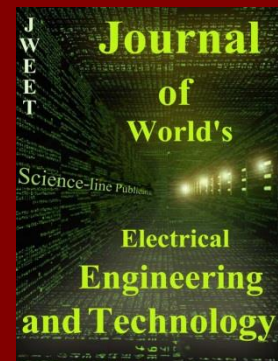
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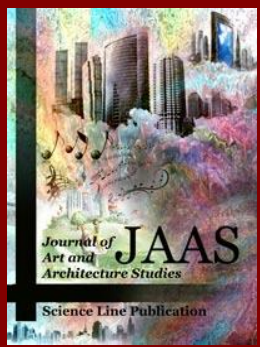
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