URBAN IDENTITY
Highlighting the Landmarks - The Tale of One City

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Abstract

According to urban and environmental psychology studies, city residents are developing an attachment, a behaviour and an attitude towards the city they inhabit depending on physical elements present in the city space but also abstract elements related to the history, fame or cultural background of the city, of some events that took place in the city or personalities who lived in the space they travel, use and finally appropriate as "their city". The "silhouette" of the city is often recognized by visually identifying the silhouettes of the striking visual elements such as: historic buildings, structures made up of interesting, unique volumes and which are defined as an emblematic landmark for the respective city, as the Eiffel Tower is emblematic for the city of Paris, the CN Tower for Toronto, the Opera House for Sidney, the Romanian Athenaeum for Bucharest, the Parthenon Building for Athens, a.s.o. Such architectural landmarks give the city a unique urban identity and provide the inhabitants a sense of historical, cultural belonging and important international prestige. A city, however, has multiple striking visual accents, which, in addition to the importance given by their historical, cultural or architectural value, have also the role of visually contributing to the definition of the urban space itself, the cohesion of the urban fabric, being important landmarks for the orientation of the inhabitants and visitors in the urban space. As a result we can conclude that it is necessary for these urban landmarks to be extremely well highlighted from a visual point of view. We will see what are the modalities of insuring a good visual access to those landmarks by a correct design and management of the public outdoor circulation routes, correct artificial lighting, controlling the volume of the vegetation, and a well designed and accessible digital and physical informative platform.

Keywords: famous landmarks, monuments, city icons, emblematic buildings, famous structures.

1. Introduction

The perceived image of the urban area is essential for any city in the world. The aesthetics of exterior spaces, architecture, urban planning, integration into the natural landscape, the inclusion of natural elements are important both for the city's inhabitants and for the impression created to the visitors, tourists, even spectators who watch photographed or filmed images of the city without even ever having visited it.

In order to highlight all these aesthetic features of the city, several conditions related to access and visual comfort must be met:

- Care for the built heritage: clean, well-kept façades, renovated buildings, well-maintained parks and gardens;
- Correct exterior lighting, bearing in mind that during the night any element that does not benefit from artificial lighting is invisible, therefore non-existent in the nocturnal urban landscape;
- Implementation of an advertising policy that does not allow the superimposition of any type of image on any type of building, limiting the risk of blocking visual access to valuable architectural, cultural or artistic elements or diverting viewer's attention from them.

1.1. Physical elements that can block the perception of the city landmarks

According to urban and environmental psychology studies, city residents are developing an attachment, a behaviour and an attitude towards the city they inhabit depending on physical elements present in the city space but also abstract elements related to the history, fame or cultural background of the city, of some events that took place in the city or personalities who lived in the space they travel, use and finally appropriate as "their city" [1].

The "silhouette" of the city is often recognized by visually identifying the silhouettes of the striking visual elements such as: historic buildings, structures made up of interesting, unique volumes and which are defined as an emblematic landmark for the respective city, as the Eiffel Tower is emblematic for the city of Paris, the CN Tower for Toronto, the Opera House for Sidney, the Romanian Athenaeum for Bucharest, the Parthenon Building for Athens, a.s.o.

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The inhabitants of urban areas mentally build their "cognitive map of the city" with which they orient themselves, resonate and model a certain type of behaviour specific to it.

The mobile and internet applications positively influence smart city orientation for both the tech savvy and nontech savvy population, but nevertheless we need to be able to keep the old fashioned way of being able to navigate the urban environment by visually perception of the main landmarks of the city environment, and this is not possible if we are not able to visually spot easily those key points from the distance or even from the close proximity because of different elements that are able to hide those landmarks from our visual perception or distract our attention from them [2].

A city can have multiple striking visual accents, which, in addition to the importance given by their historical, cultural or architectural value, also having the role of a visual landmark that contributes to the definition of the urban space itself, the cohesion of the urban fabric, being important landmarks for the orientation of the inhabitants and visitors in the urban space.

The best situation is if the city landmarks have sufficient free space around them in order to benefit of an optimal visual access from far away.

It is also advisable that the city landmarks should not be covered or have in their proximity tall vegetation (trees) that partially block the visual perception of the integrity of their volume from close by or from the distance.

It must be taken into account that it is preferable that they should be visually perceptible from great distances, so the possibility of their perception must be facilitated by removing as much as possible the obstacles that can prevent this on more generous surfaces in the urban space. Most of the major historical city monuments all over the world have already

been positioned in visually advantageous positions, such as on hills (Acropolis - Athens) or as focal point of important avenues or boulevards. But mistakes can still be made, such as planting tall trees or positioning water fountains with tall water jets in the middle areas of those boulevards, covering the view of the landmark placed at the end of that route.

Fig. 1. Polytechnic University of Bucharest by night
Source: arch. Monica-Mihaela Frangulea, November 6, 2022

In the image above we can see the impressive Rectorate building of the Polytechnic University of Bucharest that benefits of a spectacular lighting system, a beautiful view unfortunately partially blocked by the presence of some massive trees in the vicinity of the building.

1.2. The city landmarks by night

The cityscape by night is a major feature of any city. In order to preserve the urban recognizable silhouette the major landmarks must be present, which means during night time they must benefit of a generous and correctly designed lighting system that visually set them apart from the rest of the urban elements.

Fig. 2. Doha city by night (Qatar)
Source: Tom Archer

Before even starting a lighting project for a landmark, the specialist must study the visual influence of the surrounding existing environment, that can influence the perception of the targeted element with light, physicality blocking elements, reflective surfaces (horizontal - water surfaces or vertical - glazed walls), a.s.o. This environment surrounding a city landmark creates also the visual " background" of the iconic element.

Early 20-th century theorists such as Kurt Koffka, Max Wertheimer, and Wolfgang Köhler (students of Carl Stumpf) saw objects as perceived in an environment in conjunction with all component elements as a unitary whole. This gestalt or "whole form" approach sought to isolate the principles of perception—apparently innate mental "laws" that determined how objects are perceived by the observer.

The perception of any architectural object is undoubtedly linked, as I mentioned before, to the context in which it is located, and this context brings together a number of aspects of a visual, psychological, memory, historical value, a.s.o. The vast majority of these aspects are related to the image and daily life of this object, the active period of the communities and of every person in general unfolding in a much greater proportion during the day than at night. We know, can recognize or remember a particular building by correlating it with its image in natural daylight. At night, however, the entire urban or natural context around that building changes dramatically, both due to the darkness of the night and the artificial lights present in this environment, fundamentally different from the uniform light during the day.

We therefore observe an effect of decontextualization of the architectural object or landmark, which can suddenly become solitary, with an accentuated visual presence like a lone actor on a dark stage, unique protagonist under the spotlights. This object, however, can be in many other poses, up to the critical situation where the buildings or other surrounding elements are intensely or spectacularly lit while it remains "in the shadow", the lack of proper artificial lighting can minimize its presence and the complete lack of of a lighting system to make it effectively invisible, therefore non-existent. This is obviously an undesirable situation in the case of some architectural objects in the category of those that are the purpose of this study, important monuments or landmarks belonging to the national cultural heritage or unique natural features.

There are studies (David Stea, 1986, Canter apud Garcia Mira, 2002 apud Ilin, 2008) in which researchers analysed the meaning attributed by citizens to the constituent elements of the urban framework, especially the architectural ones, in the process of perceiving the meaning attributed to these elements, and the conclusion was that this process is eminently social. This study allows an analysis of the individual experience related to the built space or structure, its symbolic value and the emotions related to the meaning of the urban space and the architectural object. This shared meaning of the built environment is the subject of extensive studies that have highlighted the major importance of emotional meaning for certain places or architectural objectives valued especially in environmental representation, the emotional meaning for urban space in relation to public art, the evaluation of symbolism and the role of public art in urban regeneration [3].

In this context, we note the fact that an alteration of the way of perception of an architectural object through an inadequate lighting system or due to random lighting diffusing from the environment towards this object can lead to an effect of alienating the respective object from the urban context in which it is integrated and of non-recognition of it by the observer or of a negative reaction, of rejection of the perceived image, which can ultimately cause the alteration of the identity and value of that architectural object.

When we formulate the term "background" we are obviously aware of its ephemerality, because from different observation positions of an architectural objective we will perceive another background image behind it.

The analysis of the site, of the existing environment, are essential to analyse before proceeding with the design of a lighting system. We will therefore have to visit and observe very carefully what exists and is perceived on the spot, identify which are the main observation routes of the landmark in question, which are the positions from which the object will be observed and make a synthesis of the data obtained that we will have to take into account when the lighting project begins to take shape, even before we outline the basic concept that will give the main characteristics of the lighting project that we want to realize.

The background is a component part of the environment that surrounds the objective, substantiating the spirit of the place, that genius loci that makes its presence visually but also the unseen but still present elements. We will have to give special importance to the study of this external environment of our intended objective, our key element, because its influence on the perception of the object by the viewer but also on the intrinsic existence of the object itself is an important one, as Alexander Pope advises us to take into account this spirit of the place in these famous lines from Epistle IV to Richard Boyle, Earl of Burlington:

"Consult the genius of the place in all;
That tells the waters to rise, or fall;
Or helps th' ambitious hill the heav'ns to scale,
Or scoops in circling theatres the vale;
Calls in the country, catches opening glades,
Joins willing woods, and varies shades from shades,
Now breaks, or now directs, th' intending lines;
Paints as you plant, and, as you work, designs."

The fact that brightly lit areas automatically attract our attention is obvious. Using an appropriate distribution of the brightness of the component objects makes it possible to order the multitude of information contained in an environment. Areas containing essential information can be highlighted by accent lighting, while secondary elements can be softened by applying a lower level of lighting. This facilitates a fast and accurate flow of information, whereby the visual environment is easily recognizable in terms of its shapes and the meaning of the objects it contains. Our desire is obviously to emphasize the important, valuable elements in the built environment (the landmarks), placing the other

elements in the background. However, this is not easy to achieve, taking into account the fact that the lighting projects of different architectural objects located in the same area are not designed at the same time nor by the same lighting designer. We have monuments that have a functional lighting system made many years ago, perhaps already with deficiencies (missing lights, sources replacing some damaged light sources with other new sources with a different light color, a.s.o.) , with older types of light sources, extremely poor systems with only a few sources of general light from a distance, alongside architectural objectives newly renovated benefiting of a generous or perhaps even excessively bright lighting system (with an increased light intensity per unit of facade surface).

We can also observe from the reality that surrounds us that the current built environment in Romania at night is a Babylon of colors, a random amalgam of bright elements, with dynamic lights interspersed with extensive areas of low brightness or total darkness. The old areas of our cities with a high density of buildings of historical value are by no means an exception, an overwhelming majority of these valuable architectural objects being illuminated by the diffuse light seeping from the public street lighting system that sometimes manages to reach some portions of the façades in question.

So let's start our discussion with the situation in which the elements surrounding the architectural object in question do not have too much brightness (artificial, at night), so our environment is a dark one.

Such a situation can occur in several circumstances, and here are the most common ones: the lack of other architectural objects around, the presence of architectural objects in the vicinity that are insufficiently lit or of the place, the existence of a large distance from other such objects, the presence of tall vegetation (trees) that are blocking the visibility of other illuminated architectural objects in the vicinity, a.s.o.
The targeted architectural object located in such an environment will, after highlighting it through an artificial lighting project at night, be the unique, central protagonist of an observed environment.

This situation therefore implies an increased responsibility on several levels regarding the realization of a correct artificial lighting project. But it is also an advantageous situation at the same time, because the object will be visible and well outlined also by applying a lighting project with a low brightness. Of course, this approach is preferable only in the situation where we are absolutely sure that in the future the area around our objective will remain in terms of artificial lighting in the same situation, so relatively dark, because the emergence of light sources or illuminated objects in this ambient will be able to alter the perception of our landmark on which we have chosen to apply a lower luminance.

Another advantage would be of course the fact that a lighting system with a lower average intensity index will consume less electricity, being therefore more economical.

However, the current situation of a relatively extensive area with a low level of brightness presents the risk of not providing the necessary safety for pedestrian traffic in the area, so when we refer to an area around the target objective that is darker, of course we will have

to take measures to place safety lights and public lighting systems in this environment in accordance with the imposed regulations, and if they do not exist at the time of the analysis of the existing situation, it must be taken into account that they will probably be required and installed in the future.

A relevant example for this situation would be the Palace of the Parliament in Bucharest, located in its extremely advantageous location from a visual point of view at the urban level as a focal point of some major traffic arteries in the center of the capital city and on the elevated area of Dealul Arsenalului (Arsenalului Hill) which limits the access to the premises through the perimeter fence located at the base of the hill. Even if the Palace of Parliament is not catalogued as part of the Romanian architectural heritage of historical and cultural value, we will mention it as a striking example of the situation of excessive lighting of an architectural object located in a dark environment . The Arsenalului Hill is currently a green park area (inaccessible to the public) with minimal lighting. The massive building of the former "People's House", however, benefits from a generous night lighting system of high intensity, which is put into operation at full capacity quite often, the building becoming a bright beacon and a sharply visible landmark from a very long distance . Even on nights when the lighting system is only partially switched on, the building remains highly visible due to its location in the large dark area around it (Arsenal Hill) but also due to the size of the building itself. Obviously, if the lighting system were completely non-functional, the building would remain completely invisible, the accidental light from its surroundings not being nearly enough to make it even remotely visible. In this situation, if we choose a variant in which the volume receives minimal light from a few general lighting fixtures located at a distance, we will see that the structure will suddenly become visible even from a distance precisely because it is located in - a dark environment.

A similar solution was adopted at this moment for the Romanian Athenaeum, a representative icon for Bucharest.

Fig. 3. Romanian Athenaeum by night, Bucharest
Source: arch. Monica-Mihaela Frangulea, February 20, 2022

Located in George Enescu Square in the heart of Bucharest, the emblematic building of the capital town currently benefits from an external lighting system consisting of four reflectors placed at a distance that provide minimal light to the monument. Although obviously insufficiently highlighted by a much too simplistic lighting system, the main façade of the Romanian Athenaeum becomes visible at night due to the fact that the environment surrounding it is one with extremely poor brightness. The park in front of the building benefits from a minimal lighting that is blocked by the rich vegetation of the green area and the volumetric massiveness is silhouetted against the night sky without having a nearby building that surpasses it in height and stands out in the background. We therefore see how the architectural object benefiting from a reduced light intensity is still visible, silhouetted against a dark background. Since we are talking about the main landmark of the city, it would certainly not be an exaggeration to highlight it with a much more generous lighting system, which would bring out both the volume and the architectural details, the dark background bringing an extra element to visually enhance and emphasize the valuable monument without fear of exaggerating its importance. We can also notice how the presence of tall trees from the green area in front of the monument is blocking the visual perception of the entire façade from the distance.

The opposite situation, however, in which the environment surrounding the landmark is bright (or generously lit), is a more special situation that will require increased attention in terms of the options we have in order to solve the problem of highlighting the targeted architectural object.

The situation in which our objective is in front of a generously or excessively lit monument which will constitute the background on which the targeted architectural object stands out, the landmark can become visible precisely due to the fact that an element located on a background contrasting with it will implicitly produce a visual effect of highlighting the targeted object. The situation in which the three-dimensional light environment around our objective is very bright is not much different and it can occur for several reasons: the existence of a large number of street lighting sources nearby or street lighting sources located at higher heights large or of a higher intensity (for example in the case of major road intersections), the existence of a large number of buildings in the vicinity that benefit from lighting with a high luminous intensity, the existence nearby of large illuminated advertising banners (sometimes even colorful or dynamic).

But let's imagine how we would proceed if we were asked to create a lighting project for an objective located in such an environment, with a multitude of neighbouring buildings benefiting from generous lighting to which is added a street lighting of maximum intensity, in a highly trafficked urban area.

We will give as an eloquent example for this situation the well-known San Marco Square in Venice, where, as we can see in the next image, all the façades surrounding the square benefit from generous lighting both in terms of surface and intensity. On the sides, we notice on the left the façade of the Old Procurator's Palace and the right the façade of the Procurattie Nuove Palace, both illuminated at night with proximity sources mounted on the buildings, all horizontal registers and each individual frame being well accentuated with

light. In the background we see how the Basilica of St. Marco benefits from flood lighting (from the distance), also generous in terms of intensity, the façade having a brightness comparable to that of the other perimeter buildings. In this enchanting landscape with light coming from all sides, it was chosen that the imposing silhouette of the famous tall Campanile building does not have an artificial lighting system. The building receives enough incident light from the environment that surrounds it (the neighbouring buildings) which rends it very visible even though it does not shine and at the same time it creates a balance from a light point of view, soberly compensating the abundance of light that the other objectives are giving off.

Fig. 4. San Marco Square, Venice
Source:
https://s1.1zoom.me/b5050/209/Italy_Piazza_San_Marco_Night_Venice_Town_square_550057_3840x2160.jpg

This is undoubtedly an admirable solution from all points of view: chromatic (we notice also the use of the same color of light throughout the entire Square), sizing of the light intensity, the distance between the sources, the play of light and shadow, emphasizing the architectural details and highlighting both The Basilica by using a different type of lighting (general / from a distance) as well as the Campanile by refraining from adding light to it.

We should bring now into discussion the reverse phenomenon : the ambient light produced by the artificially lit landmark, the beacon effect that this one has on the city landscape.
An architectural object that benefits from a correct lighting system will certainly dissipate light in the area around it. However, this light can be very useful, bringing benefits to the safety of the traffic around it. However, in the situation where we are dealing with an excessively lit objective or a landmark that has lighting fixtures that are oriented or installed incorrectly, we will already notice negative effects such as the dissipation of strong light in the environment that becomes incident light for other surrounding architectural elements, the blinding of passers-by or road traffic participants, so the appearance of the light pollution effect with all its effects that we have already mentioned. The architectural object practically "illuminates", becomes a light source in itself and attract the attention of the observer from very long distances.

In the example below we can see how the excessive brightness of the large billboards that cover a large part of the façades of the Creditul Minier Block on Nicolae Bălcescu Boulevard corner with Batiștei Street in Bucharest diffuses light towards the Intercontinental Hotel building located at a considerable distance. The lighting fixtures installed on a series of metal structures located on the fragile façade of the unrenovated building not only bring a high risk of further damaging the façade, it creates a high degree of danger for the passers-by safety (the lights can fall, being of course quite heavy structures), but their orientation also produces a blinding effect in the entire adjacent area, easily observable in the photographic image.
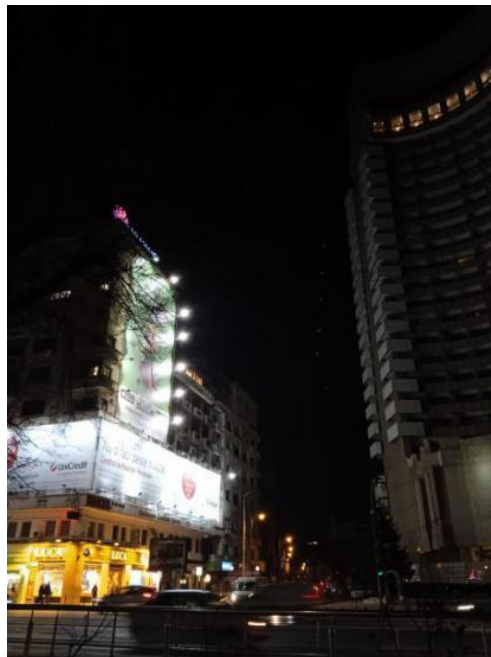

Fig. 5. Creditul Minier Building and the Intercontinental Hotel, Bucharest
Source: arch. Monica-Mihaela Frangulea, March 15, 2022

The Creditul Minier building, built in 1937, is a representative building of the modernist and art deco avant-garde from the 1930's on the Universitate-Romană axis. Still not renovated and presenting a great risk of irreparable damage in the event of an earthquake, the block is covered over a large area with unsightly sheets of advertisements (a situation we find in many neighbouring buildings in the same area, along Nicolae Bălcescu Boulevard), which, in addition to hiding the special architecture of the building, also benefits from this excessive lighting system that highlights them along the entire height, length and width of the building.

The Intercontinental Hotel, designed by architects Dinu Hariton, Gheorghe Nădrag, Ion Moscu and Romeo Belea, was put into use in 1971, and although it is not classified as a heritage objective, it is still one of the emblematic buildings of the capital city. However, the massive silhouette of the hotel is not illuminated at night, being visible mainly due to

the incidence of ambient light such as the one coming from the Mining Credit Block in the image or the light that diffuses from the inside through the windows of the rooms occupied by guests with an incidence obviously random on the façades (not all rooms are occupied or not all guests keep the lights on).

This example represents an unfortunate situation in which, in addition to the effect of the light influence that an over-lit urban object exerts around it, other factors (listed above) overlap that should not exist and even less should not be visually emphasized through a high intensity lighting system.

A valuable architectural objective located in a context without other constructive elements around it or as a focal point of an urban perspective benefiting from a generous lighting system can become a spectacular visual landmark, visible from the distance, emblematic for the night silhouette of a city, justifying the approach of applying a light surplus.
As an example for this situation, we will bring the Monument to the Heroes of the Air located in the center of Aviatorilor Square, in the axis of Aviatorilor Boulevard in Bucharest.

Fig. 6.The Monument to the Heroes of the Air, Aviatorilor Square, Bucharest
Source: arch. Monica-Mihaela Frangulea, April 2, 2022

The monument, dating from 1935 dedicated to the military and civil Romanian pilots that contributed to the development of Romanian aviation is 20 meters high and is a perspective point from Aviatorilor Boulevard from both directions. Illuminated upwards from the ground level from two diametrically opposite sources, from a short distance, the statue benefits of excellent lighting that highlights it well and adds monumentality. The statue is the focal point for Aviatorilor Boulevard towards Victoriei Square for a distance of 690 m in a straight line, in the other direction - for Charles de Gaulle Square for a distance of 650 m and from the side for architect Ion Mincu Street for a distance of 670 m , until the intersection with Ion Mihalache Boulevard.

Another example with a remarkable solution in terms of night lighting and which falls into this situation of a major visual landmark highlighted by light and transformed into the focal center of the scenography of an extended area is the facade of the majestic Academie Nationale de Musique, center of perspective for the Opera Square (Place de l'Opéra) in Paris.

Fig. 7. Academie Nationale de Musique, Place de l'Opéra, Paris
Source: Mariana Sebe, March 3, 2022

The Parisian architectural monument receives artificial light from a suite of flood lights placed far apart that create an increased, spectacular brightness.

The Academie Nationale de Musique is located at the northern end of the Opera Square and stands alone, detached in terms of volume on both sides from other buildings. We notice also the lack of tress or any other elements around it that could block the view of the building. The building dominates the open area of the square through its monumentality during the day and through the light accentuation the same visual effect is achieved at night time in a masterful way through this general lighting from a distance which manages to highlight the entire façade with all its elements, offering and a play of shadows and lights necessary to highlight decorative details and volumetric play.

The building radiates light around it, dominating the scene of the square which is 65 m wide by 150 m long and which continues with the Boulevard of the Opera (Avenue de l'Opéra) which for a length of 860 m in a straight line has as focal view this monumental landmark.

As a final example, we will bring the Arcul de Triumf monument from Bucharest, a major historical and visual landmark of the city.

Fig. 1. Fig. 8. Arcul de Triumf, Bucharest
Source: arch. Vlad Bină, April 18, 2022

The majestic silhouette of the Triumphal Arch, 27 m high, located in the middle of the square that bears its name, is the focal point of five major traffic arteries that intersect in the generous intersection in the centre of which the monument is located. The lighting project made by architect Adrian Bălășoiu with iGuzzini lighting technology accentuates its visual presence, so that the Arc de Triumf is visible from long distances: 1.3 km in a straight line from Piața Presei Libere and obviously from the building of the House of the Free Press (" Casa Scânteii"), located 1.5 km away, 1.8 km in a straight line from the road Pavel D. Kiseleff to Victoriei Square. Placed in the centre of the circular space of the square, the Arc de Triomphe has an empty space of 60 m all around it, so it stands up alone and it does not influence any architectural object in the vicinity with its light. The lighting system transforms it into a luminous beacon that radiates light into the empty space, giving off at the same time an air of solemnity, magnificent by its mere presence.

However, since it is a road intersection with an extremely large area, the presence of too many public lighting poles required in such spaces could have brought a degree of traffic danger, blinding the drivers. The triumphal arch illuminated in this way releases a sufficient amount of reflected light around it that can help increase the illumination index of the roundabout of the giant intersection. We therefore see the beneficial role played by any architectural object that, being illuminated, becomes a source of light in its turn, thus bringing benefits to urban security and the safety of pedestrian or motorized traffic in its immediate vicinity.

1.3. The flashing digital advertising banners and the city
In 1898, the British chemist William Ramsay (1852–1916) together with Morris Travers (1872–1961) discovered neon, an inert gas that has the property of emitting a red light if

an electric discharge passes through it, in a closed container. Neon is obtained through a process of liquefying air by cooling, then capturing the component gases through controlled reheating. The French engineer Georges Claude, the owner of the Air Liquide company, had significant amounts of neon resulting (as a by-product) from the technological process of air liquefaction that was carried out in his factory. Starting from 1910, Claude produces the first neon light tubes, trying to target customers interested in interior lighting, the new light device having a special light intensity. The intense red color of the light of the neon tubes, however, did not have the expected success on the market. Two years later, Claude's associate re-launches the neon tubes on the market, this time with the intention of being used as advertising banners with luminous writing, an initiative that this time was proved to be a great success on the French market. The product came to the attention of the American public in 1923 when the Packard car dealership in Los Angeles ordered two such banners, paying for them the excessive price of 2,500 dollars. Some news sources of the time even claim that the amount paid for the two neon light banners was actually $25,000, which would represent a fabulous price even for the 1920's America, years of economic and financial glory [4]. The red shining banner with the company's name written by the curved lines of the neon tubes, however, has a considerable visual, public and commercial impact, this new type of advertising being different from everything that existed at that time. We are witnessing an important moment that marks the emergence of "electro-graphic architecture", the American public getting excited about the new technology that allows them to visually mark an era of economic boom that transforms cities at night into a show of light and color [5].

In 1925, the first neon tubes with blue light appear in the centre of London, a color obtained by adding argon and mercury to the glass tubes, and then green neons appear, a color obtained in a simple manner by using yellow bottles for neon tubes that produced blue light. The era in which colored light tubes visually dominated American cities happens between the 1920 and 1960. The streets are visually overwhelmed with illuminated banners promoting shops, restaurants, businesses and services.

Fig. 9.„Las Vegas Strip" - Fremont Street, Las Vegas, 1952
Source : https://www.northamericansigns.com/golden-age-neon/

To diversify the colors, the method used was to add color to the neon tube, and with the evolution and improvement of this technology, the chromatic range has widened significantly.

This excess of bright colors and advertising graphics due to the crowding of street advertisements is visually overwhelming, the street is perceived as a show on its own, the architectural forms and volumes become secondary elements in the background although they are visible due to the light diffused from the light sources, the viewer being practically mesmerized by the highly visible and attractive shapes of neon tubes. We can say that this type of nocturnal advertising lighting has the ability to totally alter the way of perception of the city at night, even the shape, the volume of the buildings as well as the urban visual landmarks. For example, a tall, imposing building in a privileged position from a visual point of view (focal point of a street, location in an open area - park, square or intersection) will of course have a marked presence during the day . But if at night it is not lit enough or even left in the dark, it becomes invisible, and any large illuminated banner in its vicinity, which does not stand out too much during daytime, will be a focal point of great visual appeal during the night, eclipsing the importance and prestige of the adjacent landmark building in question.

Fig. 10. Times Square, New York, 2013
Source: Wikimedia, Chensiyuan, Creative Commons 4.0

The image of a city full of bright publicity banners, although spectacular and generally accepted by the vast majority of the population who perceive it as a proof of the technologic evolution and the prosperity of the city, lately comes more and more to the attention of specialists because it is a generator of light pollution, a negative phenomenon with major implications in terms of traffic safety, disruption of the human biological clock, negative impact on the biological environment and many others.

In the image below is an aerial view of the centre of Bucharest where we can spot in the middle the impressive Palace of the National Bank of Romania with a beautiful lighting system that highlights the historic monument in a very elegant manner. Underneath in the image we can see the massive volume of the Oscar Maugsch Palace from Universității Square, under renovation, covered by a large advertising banner strongly visible due to a

lighting system placed on the top and on the bottom. As we can see the banner covered palace has an almost equal visual impact as the National Bank Palace.

Fig. 11. Aerial view of the historic center of Bucharest
Source: arch. Monica-Mihaela Frangulea, November 21, 2022

Images of the night cityscape full of colored lights and animated by heavy traffic, giant dynamic advertising banners and many passers-by in the centers of the world's great cities are already part of the world photographic culture and are even in high demand for display as art in office spaces , homes, restaurants, etc. But walking through such spaces in reality is much different than admiring them in a static poster, framed and placed in a quiet space with a pleasant atmosphere. The noise, the temperature, the smell, the vibration of such a space, but especially the dynamic play of the blinding lights create in many of these places an overwhelming, obviously memorable sensations, creates psychological stress, but nevertheless turning the place into a top tourist and business destination.

Fig. 12. A visual hodge-podge in the narrow shopping streets of Japan
Source: Akshaya Murali Kumar, "The love-hate relationship between Advertising and Built Environment",
https://www.re-thinkingthefuture.com/

The presence of a multitude of digital light banners in the urban space, especially the high-traffic central areas, is a phenomenon we encounter often these days, for the same reason as in the early years of the XX-th century on the American continent - the desire for financial gain through enhanced visual impact advertising of products, companies or services. This phenomenon must be viewed and treated seriously, because it can negatively impact the city from a visual point of view, eclipsing the prestige of the image of some important architectural monuments and landmarks that bring cultural, touristic, and social fame and glory to the city.

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