Video Projection Mapping as a Visual Urban Art Performance on Architectural Facade

Ali Devrim Işıkkaya

Faculty of Architecture and Design, Bahçeşehir University, 34022 Istanbul, Turkey E-Mail: devrim.isikkaya@arc.bau.edu.tr, devrim.isikkaya@gmail.com

Abstract

Video projection mapping as a contemporary visual public art today is the representative of interactive communication and media-architectural complexity in which the gathering of fiction and reality is observable. Video projection mapping (urban screenings), which transforms the facade into an interactive interface between the interior and exterior, provides also the conditions of a shared, creative, perceptual public atmosphere by triggering the reconstruction of the relations between art, games and the public spaces. This article inspects firstly about how public space / architectural facade relation is dialectically reconstructed and experienced throughout the video projection mapping implementations on architectural facades as a kind of conceptual collaboration – composition of physical public space, and virtual - perceptual space assembled in their specific epochs and contextually discusses their influences on urban society. This paper interprets the video projection mapping performances and tries to define the impact of this new public art, which is framed with space and time, on the city-dwellers. This article also aims to make a discussion on virtual urban reality, in terms of performative – virtual 'surface' architecture, or media-architecture. In conclusion, the future of video projection mapping as a visual art and architectural implementation in terms of public space - facade relation is speculated within the traces of current works and trends in the conclusion of the article.

Keywords

architectural façade; video projection mapping; media-architecture; virtual space; urban screen

1. Introduction

"To present construction or to construct representation?" Paul Virilio (1998)

'Facciata' as a word with a Latin origin used to define that a building was in good condition in Italy during the Renaissance of the 16th Century evolved into the word 'façade' in France, which became the leading country for architectural production towards the end of the same century (Braun, 2008). The word was used to define the entrance side, front side or the side of a building which overlooks a street or a square. During the Renaissance period, facade was recognized as a mask, dressing or as an optical illusion of lively urban square, and a powerful reference / complement to public space intertextuality. According to the Economic Encyclopedia Notes completed by Krunitz (Braun, 2008), architectural facade was perceived by the end of the 19th century as a vertical surface independent from the public space, which is sensed as a frozen picture, watched and assessed from a garden, street, road or avenue; that is from outside. At the same time, the architectural facade became dependent on the functional arrangement in the interior and should show this on the outside of the building as best possible. The modern period urban planning and architecture during the 20th century, including the vanishing of alive public space as place for socializing, political and poetic discourse and confrontation, reduced the urban morphology into a transportation / circulation network, and defined architectural public facades with the structural codes and



Figure 1. Hologram, Hoi Sang Duong, Phnom Penh, Cambodia, 2015 (open source).

diagrams made up of certain geometrical repetitions and abstract codes of perfect combination of proportions.

In the contemporary context of the rediscovery, reconstruction of the livable, peaceful and fruitful public sphere promoting integration, interaction and reflection of well-being of urban society (Struppek, 2009), today's cities supporting conscious participation is required for the maintenance of the social and physical sustainability. Accordingly, today's architecture and urban planning are asked to function as a medium, telling narratives about the city of crystallized memories; they should also represent the structure of the society. Moreover, new balanced alliances are needed that challenge urban authorities to shape a cooperative, sustainable future of today's cities struggling against the feeling of place-less-ness (Struppek, 2006). In terms of reinvention of public sphere, transforming the place into a moderator and multilayered communication medium was an unavoidable fact. By asking for a new creative urban language and making the inhabitants active citizens, living in an interactive urban morphology, suitable for spectacle society and their event culture (Debord, 2010), various new digital display technologies are being introduced (see Figure 1). Contextually, new virtual space compositions are being implemented into the physical urban landscape (Struppek, 2009).

Today, not only the architectural object as a hard- and software outcome itself, but also the signals and meanings of physical and perceptual space embarked on the objects are recognizable. So, the political economics are organizing the superposition of physical and virtual space signals, by implementing the architectural synchronization which causes to a spatial gathering and a hybrid habitat. This duality constructs new time based affiliations and creates four dimensional space and its '4D' social guests (Bullivant, 2007) who become the pieces of the virtual space. The contemporary, digital, common space or the cyberspace is a kind of alternative orientation to the physical environment and represents the multi-media which also contains games and artistic performances where the citizens gather. Already mentioned digital media brings on the augmentation of the information and communications but causes also the annihilation of the internality by composing a multilayered hyper reality. It is obvious to mention that the digital space is an ambiance for the architecture without any building bereft of the physical share and physical creative production. Contextually, during the digital age starting up at the end of twenties, the contemporary city is open to get to be evaluated as a deconstructed reality, a perceptive backyard for the interactive activities. In this sense, with regard to the quality and quantity of the signs they have, late modern architectural facades, particularly the urban screens including various digital display implementations, seem to be the candidate remaining in much more relations with the public area and people. Multi-layered media facades as visual communication surfaces are able to change the social and physical structure or transform publicity as Habermas (2005) expressed. This situation has resulted in various experiments with new types of relations, supported by developing new media tools (Struppek, 2009). The new pervasive architectural style of urban screens such as LED billboards, plasma screens, media - canvas, holographic screen projections and video mapping projected surfaces are covering public building's facades as the representatives of electronic gothic (Virilio, 1998). Today's urban screens media facades as experimental visualization zones or fusion surfaces of virtual reality, are situated in the physical urban space (Struppek, 2009).

Having literally turned into a cinematographic performance in the 21st century, the media-architectural facade as a new digital vertical layer of the city, is situated in a fusion of material and immaterial space. This multi-layered interface has become independent, broken off from the structure or group of structures that it belongs, and turned into a narrator once more. In this case, contemporary 'media-architectural' public facade, owing to its multi-facial, multipurpose character, has evolved from a static sign to a dynamic group of signs. It is like it is loaded with information and spectacle for entertainment. Particularly during the last three decades, the video projection mapping as the extension of media-architectural cyberspace, kind of a new public art / visual communication and activities accomplished on public building's facades, are the nominees which would give rise to the reconstruction of the interactive open air spaces in cities as the new hybrid dreamlands (Gökçen, 2016). Video Projection Mapping activities as augmented reality shows (Manovich 2006) prepared the new postmodern conditions of the fake space by accomplishing projections (projecting movies on the facade either depending on the structure and deconstructing the facade, or projecting independent films in order to use the facade as a tabula rasa) on building surfaces. In other words, they trigger the abstract concepts of postmodern perception of space. Video projection mapping as a soft 'medi(a)rchitecture' or 'mediatecture' (Balaran, 2016) of visual images (Pallasmaa, 2007), organizes the abstract - digital materiality, which changes facades infinitely and creates four dimensional architectural surfaces. This new visual art can be recognized as hybrid / surface / diagram architecture, fluid or virtual - blob architecture or architecture of potentials. It deconstructs the unique, frozen and perfect existence of modern architectural culture and its products by composing the facade as an independent piece of construction.

As Rem Koolhaas mentioned (1994) that the contemporary facades of the mega-structures / public buildings are becoming independent from the interior organization. They are the products of dematerialized architecture today, usually related interactively to their urban environment and enable to manipulate the events surrounding (Ranaulo, 2001). Accordingly, the video projection mapped facade and urban space contextually, become a symbol of multi layered hyper-reality, which is a new reality, constructed by changes (Marx, 2003). The video projected building becomes a landmark for the city (Jahn, 2004), a focus point for the public, as much as it will be transformed into an abstract curtain, a media-texture. This interactive media screen tells new stories, as the medieval architectural facade and public spaces did the same in the ancient times. Video projection mapping today brings on new connections and gives rise to the new potentials of relations between the citizens while they are watching the newly and

Public spaces on the East



Figure 2. Lumiere Fest, Media-N, Lyon, France, 2016 (author's archive).

digitally mapped facade. Its new architecture is engaged on the process which composed by the appearances and disappearances, an architecture of time referred to four dimensional space (see Figure 2).

1.1. Hypothesis of the Article

Video projection mapping as a contemporary visual public art today is the representative of interactive communication and media-architectural complexity in which the gathering of fiction and reality is observable. Video projection mapping (urban screenings), which transforms the facade into an interactive interface between the interior and exterior, provides also the conditions of a shared, creative, perceptual public atmosphere by triggering the reconstruction of the relations between art, games and the public spaces experienced once in the medieval city of carnival.

1.2. Aim of the Article

This article analyzes firstly the dialectic relation between the urban space and architectural facade reconstructed by the video projection mapping implementations on building's front skins, as a kind of composition of physical and virtual space assembled in their specific periods and contextually discusses their influences on daily urban life. The evaluation of multi-layered architectural facade continues with the detailed research on video projection mapping, from its early days since the first quarter of twentieth century till its latest cinematographic performances. Moreover, this paper interprets the video projection mapping operations from the angle of architectural performance and tries to define the impact of this new public art, which is framed with space and time, on the city-dwellers in a perceptual, social and architectural manner. This article also aims to make a discussion on potential / kinetic energy of video projection mapping in terms of performative - virtual surface architecture, or media-architecture. The future of video projection mapping and the 'augmented façade' as a new baroque urban and architectural implementation is speculated within the traces of current works (see Figure 3) and trends in the conclusion of the article.

1.3. Methodological Strategy and Structure of the Article

This article follows a qualitative research methodology based on literature reviews, on site observations and interviews with the 3rd generation video projection mappers. This article starts with a dialectic and historical description of video projection mapping and continues with a detailed analysis of design process, technology and a typological classification. The conclusion part covers the evaluation of video projection mapping as a contemporary visual urban art, which transforms the facade into an interactive interface between the interior and exterior, and provides a discussion on the multi-layered, augmented, virtual urban space of public open air interactivities supported by media facades.

2. Video Projection Mapping: Description, History and Analysis

Video projection mapping performance is a hybrid visual digital art activity combining architectural and communicative aspects, through the digital architectural visualizations in the field of experimental motion graphics and new media (Dempsey, 2002). Mapping enables the deconstruction and / or the reconstruction of the building's facade by projecting a special designed video on the surface and creates a media facade independent from the existing construction, which characterizes the urban spaces. Digital mapping as an architectural facade related animation is one of the newest video projection techniques, used to turn almost any static object into a dynamic video display, often during the events such as concerts, fashion shows, music festivals, and usually in conjunction with other performing arts (Ekim, 2011). The aim of video projection mapping is to create a physical illusion of images by composing audiovisual elements and to construct a new hybrid super-reality by combining real / augmented environment and virtual



Figure 3. Two contradictory versions of Pera Palace facade: day and night time under video projection mapping implementation, Nota Bene, Istanbul, Turkey, 2010 (author's archive).

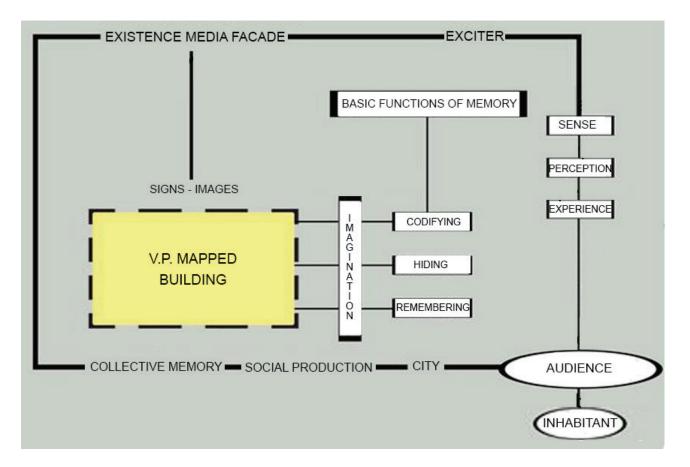


Figure 4. Diagram of media facade covering - video projected facade and audience relation, Tuğçe Gökçen, 2016. Courtesy of Tuğçe Gökçen.

spatiality. This kind of shows are performed alive, as well as prerecorded, also called as real-time video. They have the ability of using the technology as a medium and tool at the same time. Mapping is the technique of projecting video onto three-dimensional objects and buildings (see Figure 4), adjusting and masking the image so that it seems to follow the shape of the target object instead of spilling out onto walls (Ekim, 2011).

2.1 Historical Background

The historical evolution of video projection mapping can be categorized in three different generations. 1st generation video projection mapping performances, realized between 1920 – 1980, can be evaluated as experimental, immanent, elite, shared limited, amateurish, contextual, synchronized, addicted mostly to indoor or outdoor events such as theatrical performances, concerts as contributor to mainstream art and medium. Moholy Nagy, Erwin Piscator, Mark Boyle and Jo Cannon, who are originally not video mappers, are representatives of the first generation mapping. Erwin Piscator's works such as projections on canvas for Berthold Brecht's epic theatre in Weimar Germany during twenties can be evaluated as the pioneer video mapping activity (see Figure 5).

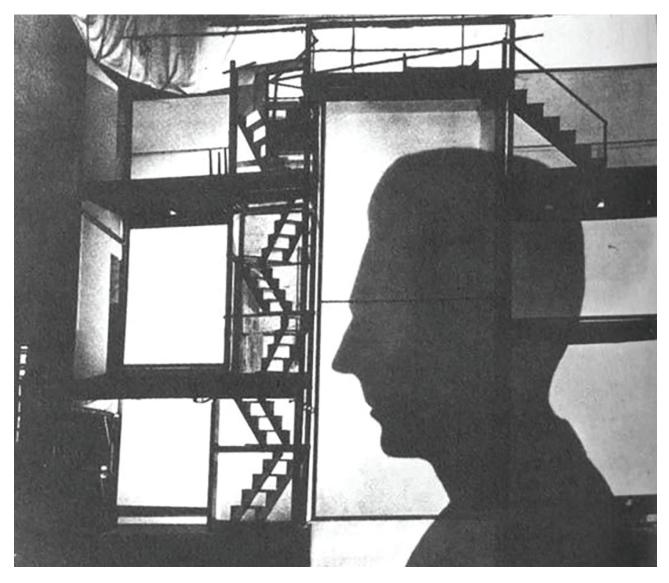


Figure 5. Brecht Epic Theatre Stage Design, Erwin Piscator, 20s (open source).

The projection work of Mark Boyle called 'Son et Lumiere for Earth, Air and Water' in UFO Club London, in 1966, and his later works for Jimi Hendrix and The Soft Machine are the further performances (Haeusler, 2009). Nam June Paik combined audio and video in sixties and the experimental productions by Duchamp and Paik can accordingly be evaluated as the pioneering examples of video and installation art in the digital era (Gökçen, 2016). Jo Cannon's LSD works, Jean Michel Jarre's projections on Eiffel and Pyramid in Cairo's facades during seventies, Derek Jarman's 'Super Eight Films' project on canvas during eighties in the company with Pet Shop Boys concerts and Anton Corbjin's video on canvas for Depeche Mode concerts are the most recognizable video projection mapping works until eighties (see Figure 6).

2nd generation Video Projection Mapping performances, realized between 1980 – 1990, can be evaluated as a transition process from being experimental, limited, elite and amateurish to a major, contextual, professional main and mass public art or pop shows. This generation works



Figure 6. Pet Shop Boys Concert Stage Design, Derek Jarman and Anton Corbjin, 80s (open source).

are the outcomes of a perfect synchronization of sound and visualization overlapping related to a scenario - storyboard, multi-layered and multi - disciplined, transcendent products dedicated to mostly outdoor events, celebrations, common meetings as a matter of public record. This generation's remarkable representatives are Jean Michel Jarre, Anton Corbjin, Derek Jarman, and Chris Allen who are originally not video mappers. The visual art group 'The Light Surgeons' is the first superstar of the video mapping, which was established by Chris Allen and Andy Flywheel in London in the beginning of nineties. This group has achieved to implement many slides on skyscraper's or highway facades as canvas especially during the mid-nineties and accomplished a couple of famous works constituted of many collages of images. This generation has tried to get in contact with the urban inhabitants and to reform the

public space (Haeusler, 2009). United Visuals Artists (UVA), as another important VJ group, has created many video projections in nineties and also in the new century, oriented on melodies and rhythms for several famous music groups or singers such as U2, Kylie Minogue, Oasis, Massive Attack or Basement Jaxx by using four projectors, I-Mag screening with LED Ball surfaces, which is called 'water fall' model. The 'advances music and multimedia art' work accomplished in 1997 during the festival in Barcelona by the VJ group Coldcut and the synthetic images designed by Golan Levin and Zachary Lieberman regarding the noise are the most remarkable mapping projects. Most of the video mapping projections in the 20th century is used in fashion shows, corporate events, concerts and theatrical performances. Lately a new trend of video projection mapping is being used on architectural structures, buildings and displayed in public spaces to reach a wider audience since the beginning of 21st century (Ekim, 2011).

3rd generation Video Projection Mapping performances, realized since 2000s, can be evaluated as a major, contextual, professional main and mass public art or pop shows. This generation's works are the high-technology including outcomes of a perfect synchronization of sound and visualization overlapping, related to a re-writeable scenario - storyboard. Design concepts are advanced processes and mostly experimental. It starts generally with the facades (especially the first works) sometimes looking for a specific facade according the accomplished design. First works of the 3rd generation designers can be evaluated as 'disjointed' to the environment, but the last works design principles should be considered the site where the building is located. The site is either preferred by the designer or it is generally offered by the employer. 3rd generation video projection mapping designers consider the site, volumes and the existent geometry. They are interested with the physical environment according the projection facilities, the light sources and the possession of the canvas - facade of the building. The location and the structure of the canvas - facade according to the flexible design criteria and its relation to the public space (emptiness in front of the facade) and the existent story of the facade, building and the site are the design references for the video mapping creators. They generally used to work on portrait facades, the minority of their works accomplished on landscape facades. All the works are synchronized to the music used during the show.

Mappers give the name "virtual theatre" to their performances as a kind of hybrid performance constituted of video art and architectural design. This visual theatre is dedicated completely to urban outdoor – indoor spaces and architectural facades on mostly the public buildings. They are majorly multi-layered and multi-disciplined interactivities, triggering social life, which can be considered as specific events, transcendent products dedicated to outdoor events, celebrations, common meetings organized for the urban inhabitants at most. This generation's remarkable video projection mapping artists - mappers as professional performers or groups are Leo Warner (see Figure 7), Pablo



Figure 7. Vivid Live Fest, mapping performance, Leo Warner, Sydney Opera House Sydney Australia, 2014 (open source).

Valbuena, Friedrich van Schoor, Francoise Wunschel, Olaf Eliason, Deep Visual, Obscura, D-Fuse, UNIVUP, Telenoika, Vimeo, Nota Bene, and Alper Derinbo az, who deals with research and development of experimental media installations on the public space and building facades with the aim to stage urban areas. They are always in touch with technologists, creators, strategists, videographers, audio experts, artisans, engineers, venue managers, union workers, and architects.

2.2 Process, Technology and Typological Classification

Contemporary computer based video projection mapping creation process (see Figure 8) is as follows:

• information and analysis: the first meetings between the mapper and the client in terms of understanding the content – context, conceptual and technical analysis of the site (public space, building facade, outdoor-indoor atmospheres where exactly the mapping will be implemented) and client's requirements, technical analysis of the given facade and space relations, decisions on projection methodology and technical equipment.

• pre-production planning and budgeting.

• conceptual scenario: creation of the design principals throughout brain storming, scripting, analog and

digital sketching, contextual integration of the storyboard, superposition of motion and sound.

• video preparation: 3D modeling and processing the animation by montaging the scenes including effects (motion graphics - effects composition) and application on the given facade - canvas on computer screen, design and fabrication of display media, installation engineering, realtime 3D development.

• on site working: preparation of the architectural facade / space, superposition of the physical architectural facade or space and the video animation, on-site installation - operation, 360 degree & HD / SD video shoots, rehearsals.

The related technology as hardware and software systems used in video projection mapping implementation is as follows:

- Photography
- Laser technology
- Video projection set up
- Combination of all measures
- 3d+cgi and 4d modelling

• Video montage + audio effect (sound and image superposition)

- Advanced Video Adjustment
- Video projection on the model

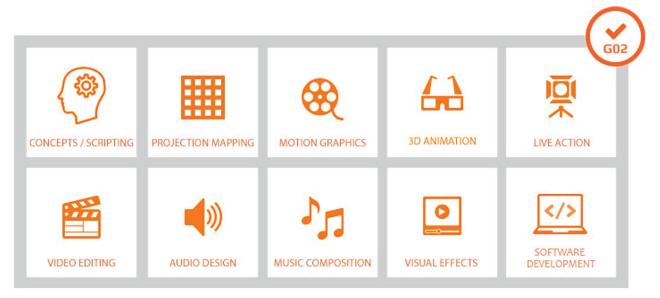


Figure 8. Diagram of Video Projection Mapping Process (open source).

List of required equipment is as follows:

• 3 CHIP DLP 20K, LCD 10K, SINGLE CHIP 10K projection machines

- Standard throw lens
- Power supply sources
- One Way Vision curtain wall should be produced according to the existing façade
- Network setup
- Cabling installations and wire placements
- DP and DVI transformers

2.3 Typological Classification

Typological Classification (characteristic qualification) of contemporary video projection mapping design approaches on urban outdoor – public indoor spaces and on architectural public buildings facades is as follows:

Design Approach - Type I (conservative conceptualism): conserving the existing urban space and / or architectural facade, implementing the video completely to the related physical space and / or facade, conservative interpretation – composition of the architectural construction, proportions and structural components located on the building – space, composing the existence of the old facade by conserving all the texture and architectural proportions, reflecting - showing up the content and interior plan – section of the building on exterior skin by using color and light, compatible adaptation of video performance to the facade – space (synchronization between the old and the new), projecting the information about the interior of the building on the facade, projecting the building on the building, no interactivity (see Figures 9 and 10).

Design Approach – Type II (contextual deformation, interpretation): deconstructing / reconstructing the urban space and / or the architectural facade by interpreting – deforming the proportions, changing the physical surface and its contours by adopting the video projection on, changing the reality contextually through virtual operation, exchanging the hardware with software, reconstructing, re-mapping the building's surface related to the old one and its social, historical, local and architectural identity, hybrid composition including cinematographic effects such as images, sounds and lightings on the existing objects / modules of the facade and / or space, weak interactivity (see Figure 11).

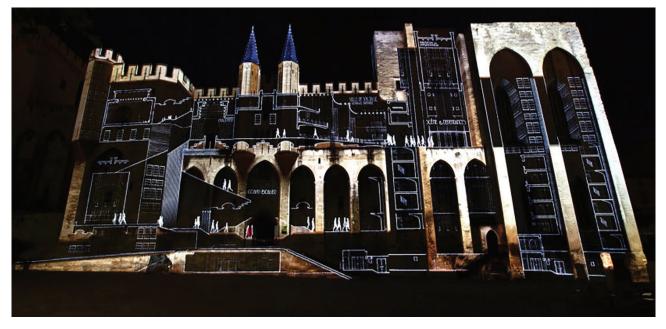


Figure 9. Palais de Papes, UNIVUP, Avignon, France, 2015 (open source).



Figure 10. Video Projection Mapping Fest, Roberto Fazio, Moscow, Russia, 2013, (author's archive).

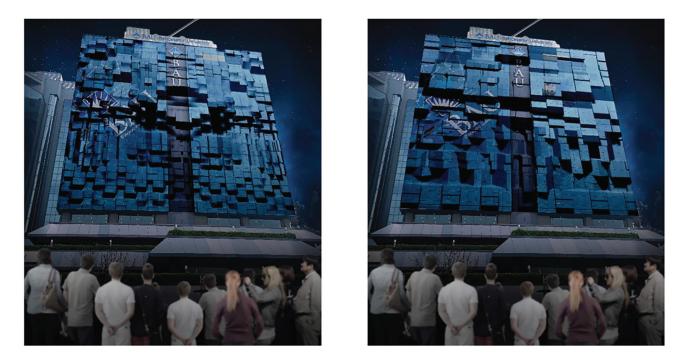


Figure 11. Video Projection Mapping on Bahçe ??ehir University North Campus Faculty of Architecture Building's facade, NOTA BENE and the author, Istanbul, Turkey, 2017, (author's archive).

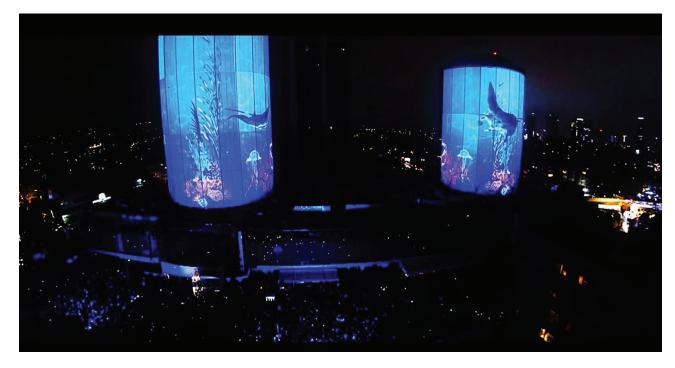


Figure 12. Video Projection Mapping on Akmerkez Shopping Mall's facade, Illusionist, Bige Kutlu, Istanbul, Turkey, 2015, no interactivity (author's archive).

Design Approach - Type III (a-contextual / irrelevant, deconstructive, irrelevance): projecting an unconcerned, independent video on the facade / space, annihilation and newly construction of the facade and / or public space as software, remapping the urban perspective and architectural facade through deconstruction - deformation - reconstruction, imposing dreams, implementing virtual world by changing or ignoring the physical context, promoting entertainment and gaming, making a playground from the urban morphology, strong interactivity either visually and / or physically, strong interactivity (see Figure 12 and 13). According to the client's expectations, building's historical context and architectural identity, its public content, Design Approach Type I, Type II or Type III is preferred. All the works are inter-activated virtually or physically and should be dedicated to the audience.

3. Conclusion

"Public space is urban planning's moderator in a city of free players." (Christ, 2000) "Can urban screens become a tool to contribute a lively urban society involving their audience (inter)actively?" (Struppek, 2006)

Today's architectural design concept as a new type amalgamation of engineering and other actual scientific and artistic disciplines turned into a hybrid design performance for the new interfaces and their spatial knowledge in the 21st century. Current architectural concepts such as virtual reality, fluency, flexibility, and multi-functionalism create new potentials for the contemporary, and variable public space. In this context, the media-architectural public facade, particularly the urban screenings with multiinformative images have become a distinct component, which is separated from the building, the structure of the building and the physical conditions imposed by the interior space. The contemporary media-architectural facade is not the word for word translation of the interior space anymore. It is mostly related with and it surrounds, but it further offers a sophisticated spatial and social vision for the inhabitants of the modern city or metropolis. The

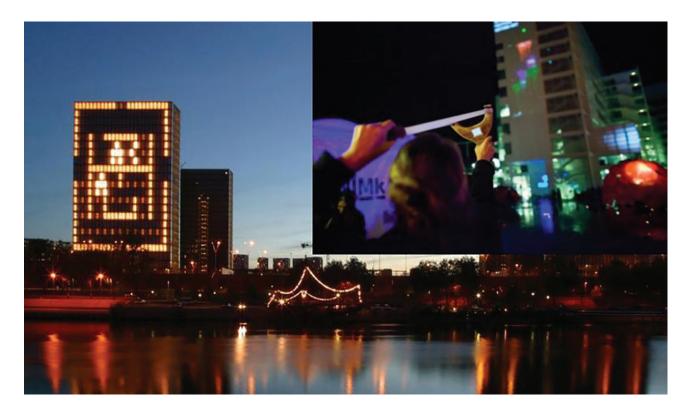


Figure 13. Video Projection Mapping 'playing urban games', TROIKA, Amsterdam, Netherland, 2005, interactivity (open source).

contemporary public facade as the potential product of interactive surface architecture is able to give the actual information to the citizens, to entertain them and also to create a vigorous public space. It is a kind of anagram, an over-interpretation and can be again perceived as a texture or directly as a narrator as it was in the pre-modern times. The new facade concepts, accordingly, invite people into a dream city again with its theatrical or cinematographic scenery.

In this context, video projection mapping as a contemporary visual public art today is the representative of communication and complexity in which the gathering of fiction and reality is observable. Video projection mapping (urban screenings), which transforms the facade into an interactive interface between the interior and exterior, provides also the conditions of a shared, creative, perceptual public atmosphere and constitutes the perceptual / abstract space so that citizens can imagine of a unity composed by

the abstract and concrete environment, can build their own creativity upon and share it. In this sense, as a hybrid visual communication performance, video projection mapping evokes a 'visual theatre' in which the citizens can participate and experience the fictive physicality by entertaining and discovering. Accordingly, mapping activities on building's surfaces might also be able to reconstruct the 'utopian' public space (reinvention of public space) reminding the pre-modern time period's urban morphology including interactivity, creativity, information and freedom again. Such a powerful public re-construction can also be defined as visualization zone of a fusion of virtual and real world, where the fictive atmosphere and the physical urbanity resemble. Digitally mapped facade or urban screening as a potential part of a new urban language is the multi-layered, multi-purposed surface which is dedicated to information and entertainment, where the hybrid architecture, mediaarchitecture or medi(a)rchitecture, becomes the outcome of soft / hard layout's generic superposition.



Figure 14. Senigallia Capodonna Projection Mapping Performance, Luca Agnani Studio, Bormio, Italy, 2015, (open source).

Video projection mapping media architectural design approach as an encyclopedic index, or as a multi-language narrative representative of augmented reality, can also be considered as a hybrid outcome / product of a multidisciplinary, regenerative intertextual process, or as an integrative / interfacial operation to 'koinos cosmos' (common world) and 'idios cosmos' (inner world). Mapping should not dominate the city a-contextually, but it should be able to trigger the creative unification of inhabitants on a performative urban morphology, in a cinematographic and peaceful imaginary world, while making a new space from a facade / a new facade independent from its physical background. This digitally mapped new index facade becomes a superposition of 'ichonographia', 'orthographia' and 'scaenographia' as Vitrivius (Small, 2019) once mentioned. This new facade (deep structure) order is a unification of literal, phenomenal, and immaterial reality, a linguistic and semiotic cartography (see Figure 14).

Mapping is an outcome of an endless re-programming process of optical illusions of cognitive soft architecture implemented on the vertical urbanity. This video projected facade becomes elevation of elevation, interpretation of interpretation or over-interpretation (Eco, 1996), a post-structure of architectural simulations, which require dialogue with citizens, as a 'speaking architecture'. Public space under the digital domination of video projection is transforming into a soft re-construction / de-construction (Koolhaas, 1994), into a kind of spatiality (Aydınlı, 2008). In the twenty first century, which is the time of visibility, flexibility, affluence, and fastness (Calvino, 2004), the fiction and reality are blended and are producing a new hybrid space and its publicity. Contextually, digital architecture / media-architecture (medi(a)rchitecture) as a speculative second life option, can be seen as an architectural parallax (Zizek, 2011), where the perception and experience are entwined (see Figure 15).

Contemporary video projection mapped facade is a representative of patternative, performative, demonstrative, three dimensional, new baroque architecture of spectacle, which is able to bring the poetic urban space back again, whereas Kevin Lynch (1977) mentioned, that people look not only for a physically well



Figure 15. The Weather Project, Olaf Eliason, Tate Modern Museum Interior, London, England, 2003, (open source).

designed space but also for a poetic space, which composes the utopian land of their dreams (Öztürk, 2005) and let the people play urban games (Kuenzlen, 1972). Media facades, in contrary to the physical, economical morphology in metropolises, have the potential to be a design tool to contribute a lively urban society involving their audience (inter)actively (Struppek, 2009). In this sense, video projection mapping is reminding the narrative, spectacle, theatrical, ancient urbanity by emphasizing the discourse of architectural poetry (Lefebvre, 1975) that citizens might have lost since pre-modern times.

Conflict of Interests Declaration:

The author declares no conflict of interests.

Acknowledgments

The author acknowledges Tu2ce Gökcen who shared the

diagram of media facade covering - video projected facade and audience relation.

REFERENCES

Aydınlı, S., 2008. Time and Space, From Space to Spatial – Temporality of Space, Spatiality of Time, YEM Publishing, Istanbul, Turkey.

Balaran, D., 2016. Researching the Relationship between Media Facades and Architecture, Master Thesis, ITU Publishing, Istanbul, Turkey.

Braun, M. S., 2008. Facades, Architectural Details. Braun Publishing, Berlin, Germany.

Bullivant, L., 2007. Playing with Art, In: 4dsocial, Interactive Design Environments, 32-44.

Calvino, I., 2004. Invisible Cities, YKY Press, Istanbul, Turkey.

Christ, P.W., 2000. Public versus private Space, IRS International Symposium Proceedings, Berlin, Germany.

Debord, G., 2010. Society of The Spectacle. Ayrıntı Publishing, İstanbul, Turkey.

Dempsey, A., 2002. Styles, Schools & Movements, Thames and Hudson, London, England.

Eco, U., 1996. Interpretation and Over-Interpretation, Can Publishing, Istanbul, Turkey.

Ekim, B., 2011. A Video Projection Mapping Conceptual Design and Application: Yekpare, The Turkish Online Journal of Design, Art and Communication – TOJDAC, Volume 1, Issue 1, 10-19.

Gökçen, T., 2016. Video Mapping as a Multidimensional Design Interface on Architectural Facade and Perceptual Space, Master Thesis, Bahcesehir University Publishing, Istanbul, Turkey.

Habermas, J., 2005. The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society, IletiIim Publishing, Istanbul, Turkey.

Haeusler, M.H., 2009. Media Facades, History, Technology, Content, Leibfarth Press, Ludwigsburg, Germany.

Jahn, H., 2004. Life: Serono Headquarters, Geneva. Media Façades, 51-66.

Koolhaas, R., 1994. The City: Construction, Re-Construction, De-Construction, in: Neil Christie (Eds.), Risiko Stadt, Junius Press., Berlin, Germany, pp: 94-98.

Kuenzlen, M., 1972. Playing Urban Games, The Systems Approach to Planning. I Press Books, Boston, Massachusetts, USA.

Lefebvre, H., 1975. Discourse Structure of Poetry, Payot Publishing, Paris, France.

Lynch, K., 1977. The Image of the City. The M.I.T. Press, Boston, Massachusetts, USA.

Manovich, L., 2006. The Poetics of Augmented Space. Visual Communication Journal, 219 – 240.

Marx, K., 2003. Alienation, Sol Publishing, Istanbul, Turkey. Öztürk, M., 2005. Cine-tale Cities, Two Heroes of Modernism: An Evaluation About City and Cinema. Don Kilot Press., Istanbul, Turkey.

Pallasmaa, J., 2007. The Eyes of the Skin, Architecture and the Senses. John Wiley & Sons Ltd. Press., London, England. Ranaulo, G., 2001. Light Architecture, New Edge City. Birkhaeuser Press. Berlin, Germany. Small, J.P., 2019. Circling Round Vitruvius, Linear Perspective, the Design of Roman Wall Painting, Arts, 8:118, 1-29.

Struppek, M., 2006. The social potential of Urban Screens. Screens and the Social Landscape, Visual Communication, Vol. 5, No. 2, 173-188.

Struppek, M., 2009. Urban Screens – The Urbane Potential of Public Screens for Interaction, Navigating E-Culture Locative Media and Public Screens, 16-24.

Virilio, P., 1998. A History of the Present: Speed and Politics, Metis Publishing, Istanbul, Turkey.

Zizek, S., 2011. Architectural Parallax, Spandrels and Other Phenomena of Class Struggle. Encore Publishing, Istanbul, Turkey.