

A syntactic analysis of social interfaces in Istanbul Biennial patterns in case of biennial buildings in 2013

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Abstract

Biennial events in urban life can be discussed in terms of the interrelation of venues as well as art products and dialogues. There are a number of exhibition venues, where preferences are defined by pragmatic or thematic decisions, such as historical buildings, most common public spaces or contemporary popular places. These buildings are territorial markers of specific patterns and act as museum-like environments. This study aims to explore the potential and performative outcomes of these patterns in the Istanbul Biennial between 1995-2013 and aims to discuss the last biennial in 2013 with syntactical parameters and frequencies comparatively for each venue using interface activities and occupancy through the other biennials.

For that purpose, this paper will try to answer the questions below:

Do biennial space preferences have performative differences in their syntactical configurations through biennial history (between 1995-2013)?

Is there a performative relationship between the syntactical values of the interfaces (for the 2013 biennial) and the frequency of each gate of the venues, considering the interface activities and moods?

Comparison of the biennial patterns in Istanbul raises many questions in terms of spatial configuration, social network and functional hierarchy in addition to syntactic parameters such as the mean depth, integration or circularity. The territory of the 2013 biennial and its effects on frequencies will also be examined through biennial venues. To understand whether collective memory or accessibility is effective (dominant), audience frequencies are studied within the biennial pattern using gate counts and interface activities.

Keywords

Social interface, Urban performance, Syntactical configuration.

1. Introduction

Biennial events in urban life can be discussed in terms of the interrelation of venues as well as art products and dialogues. There are a number of exhibition venues, where preferences are defined by pragmatic or thematic decisions, such as historical buildings, most common public spaces or contemporary popular places. This study aims to explore the performative outcomes of exhibition space patterns in the Istanbul Biennial between 1995 and 2013 and aims to discuss the last biennial in 2013 with syntactical parameters and frequencies comparatively for each venue using interface activities and occupancy throughout the other biennials. The performance activity of the Biennials should be examined through different patterns with different orientations of biennial venues. As Özpınar (2011) indicated, through the art, knowledge and criticism platform generated outside of the academic space, it is possible to argue the biennial's public space quality as an operation where ideas, expressions and experiences are produced within a portion of the social life. The biennial is an event, generally organized by independent institutions, that aims to spread across the city with versatile activities but is often only realized in the city center.

The difference between the biennial and classical museum exhibitions, international exhibitions or public art projects is not only the fact that the artifacts are not for sale but also that it is a local activity expected to spread across the city and communicate a message. Therefore, the positioning of the biennial within the city, its forms of exhibition, and the urban instruments and mediums it utilizes are extremely important. The choice of location and its past and future indications gain importance as exhibition practice. The interaction between the location and the installed artwork becomes a priority for this choice. The artwork can present itself as a contrast, a criticism, a compliment or an attraction to the location and the meanings it conveys (Özpınar, 2011).

The Habermasian idea of the public sphere points to spaces created by the community where ideas, expressions

and experiences are produced, explored, shared, spread and discussed. City streets can facilitate encounters, opportunities, and divergent identities. Because city streets are a place of socialization, the exhibits should have a permissive quality with open access to all sorts of social, human and individual performances. The utilization and presentation of the public space in the biennial is important in terms of reconstruction of the space, the city and the individual (Özpınar, 2011).

For that purpose, this paper will try to answer the questions below:

Do biennial space preferences have performative differences in their syntactical configurations through biennial history (between 1995 and 2013)?

Is there a performative relationship between the syntactical values of the interfaces (for the 2013 biennial) and the frequency for each gate of the biennial venues, considering the interface activities and moods?

2. Territories and social interfaces

The space preference for biennial venues is a special urban territory open to public interaction. Venues, boundaries and movement patterns work to create a walking-based context, which creates a performative area in the city. Each biennial has the potential to create a specific micro-environment for urban events and interactions. The biennial buildings are territorial markers during the biennial period. Therefore, this study aims to study both this micro-environment pattern and the building interfaces in order to explore the potential and performances. Territorial space and behaviors are the keys to understanding this interactive pattern. The study includes different levels of space organization. These are the biennial patterns as micro-urban environments and social interfaces of buildings as territorial markers. The hierarchy in these specific micro-environments and their markers can be discussed using Stea's (1970) theory. The three scales of territory are units, clusters and structures. The scales are interactive and conceptually interrelated (Figure 1).

The micro-environments and their potentials in urban performances cre-

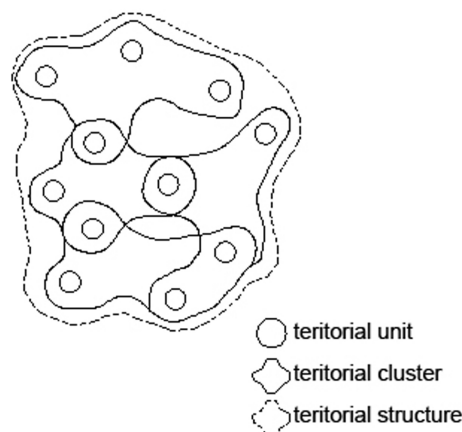


Figure 1. Three territorial spaces (Stea, 1970).

ate spatial practices. Walking based routes and moving based configurations creates a site-specific experience in biennials. As Hillier (2005) mentioned, buildings and cities exist in two ways: as the physical forms that we build and see and as the space that we use and move through. That's why this study tries to explore the differentiations and similarities of different biennial patterns and analyses urban performances through spatial configurations. Contreras (2006) derived the term 'The Urban Performance' from the 'representational space' concept, which is a part of the spatial triad defined by Lefebvre (1974) and reinterpreted by Iain Borden (Borden, 2001). The assumption is that spatial practices and representations are the things people do and the patterns they physically create for disrupting abstract space. The 'potential energies' of groups act to transform and create new social spaces. Thus, the Istanbul biennial has the power to organize these new social spaces.

According to Borden (2001), the supposition is that in the urban realm, the idea of an activity in space is the key to understanding the representations and experience of space, and because of these actions or performances, we become true objects in time and space and not simply users or experiencers of but produced by, and products of, the architecture around us. A multi-stranded contemplation of the notion of "knowing a place" includes both the existence and the possibilities

of architecture and the city. Whether for inhabitants or foreign audiences, the biennial pattern is a space for experience, coding or decoding. By movement through exhibition areas, cognitive maps are created by the mind and experienced by the public space itself.

Through biennial patterns, movement and actions are simply dependent on markers. Thus, the 'events' and 'activities' are the bodies that experience the biennial in different ways, routes, frequencies, etc. "If movement is to be one of the generating factors of architecture, it will not take a single form or configuration. There is random movement, as experienced on a flat plane, free of any attraction or constriction. But there is also vectorized movement, which interact with static spaces, often activating them through the motion of bodies that populate them" (Tschumi, 2000).

We also interact with the city conceptually as the events occur. In that specific time, with collective artifacts, the city is shared by the people. Thus, as Hillier (2009) indicated, we need a concept of distance which reflects not only the relationship of one part to another but of all parts to all others. In biennial patterns the question is, whether the venue is familiar or not, what are the parameters of performance? Even though people can move randomly, they need to orient themselves with the big picture of the biennial route. Exhibition points within the pattern should be seen as a path to reach a performative event. This is why movement possibilities inside the route have a relationship with the integration of exhibition points.

The space syntax theory states that spatial configuration influences the distribution of movement within a network system and that when spaces are more directly connected to other spaces, they are likely to attract more movement (Peponis & Wineman 2002). Our concern with movement patterns over biennial patterns suggests a relationship between the legibility of physical space and the social occupation of that space.

Beside the biennial patterns and their social possibilities, the exhibition buildings are also important markers

with interfaces they have. When some markers are new, some others have a memory in biennials. The interfaces means interactive layouts both in memory and in physical environment. The audiences have a role to re-produce this spaces in each biennial. Thus, the pattern has a possibility to create new markers and a new spatial practice in the city. To Lefebvre (1974), all social space, at all scales of consideration, is produced. Lefebvre's theory of space sets forth three principles or modes of production: 'spatial practice', 'representation of space' and 'representational space'. (1) Spatial practice is what people - the enactors of social space - do. Though this may seem obvious, it is a considerable conceptual leap for those who assume that space (as a container) precedes activities in space. Spatial practice is ordered, and spaces take on order through (2) representations of space or the plans established by social bodies with the power to create blueprints for the world. Societies are thus said to inhabit (3) representational spaces that contain and are produced by spatial codes that change over time. The representational spaces of everyday life are produced by contemporary spatial codes, fragments of discarded codes, and echoes of revolutionary codes (Protevi, 2006). The biennial buildings are re-produced each time by audiences. The spatial experiences of audiences and how it has shared are the main concern to explore spatial characters of biennial buildings in each pattern. Thus, the second phase of analysis in this study aims to explore this spatial codes in interfaces.

3. Method

Through theoretical point of view the method includes different scales of studies both in micro-environments of biennials and building interfaces. The interactivity of these scales will be discussed with an introduction to the comparative analysis of biennial patterns through history. Comparison of biennial patterns in Istanbul raises questions in terms of spatial configuration, social networks and functional hierarchy.

The similarities and the differences in the biennial layouts are the basis

of a discussion on the elements and possibilities of the spatial configuration. The anticipated path movement of the pedestrian may differ according to context. Therefore, the relations of typologies, the venues, clusters and interconnections are the concerns of the research.

The territory of the 2013 biennial and its effects on frequencies will be examined through the biennial venues. Biennial venues are different types of buildings where people both visit exhibitions and socialize. The pattern of the biennial is a designed integration that is a part of the collective memory. The number of times each building has been occupied throughout biennial history will also be considered. In order to understand whether collective memory or accessibility is effective (dominant), the audience frequencies are studied within the biennial pattern using gate counts and interface activities. The research for the 2013 pattern focuses on parameters such as the comparison of the frequency of audiences at the gates of biennial buildings, collective memory of these buildings throughout biennial history, the modes of the audiences in interfaces, and the syntactic values of the pattern and the gates of the venues.

The social interfaces are performative spaces with social, individual and movement-based modes. These interfaces are the spaces where people wait, gather or pass through before exhibition in biennial buildings. At the end of the research, these modes will be examined and the interrelation between the syntactical values and the gate frequencies will be discussed.

The following methods are applied for the biennial patterns in this study:

3.1. Analog method

- Gate count: Simultaneous recordings of the frequencies at the gates of biennial buildings for 10 minutes both during weekdays and weekends.
- Interface frequencies: Simultaneous 2-minute camera shots in each biennial buildings interfaces.
- Interface moods: The interface moods are individual (waiting, sitting, etc), social (gathering, talking,

etc.) and active (movement based) behaviours. in 2 minutes

- Collective memory of buildings: How many times has these buildings occupied throughout the history of biennials

3.2. Syntactic analysis

- Visual space analysis including integration, circularity and mean depth for each biennial are comparatively studied for each biennial pattern (the active grid numbers for each 100 m² were the same for all patterns, which are different in scale)
- Syntactical analysis of the 2013 biennial pattern, including integration, circularity and mean depth
- Focus on building analysis in order to explore the social interfaces which are the spaces where people

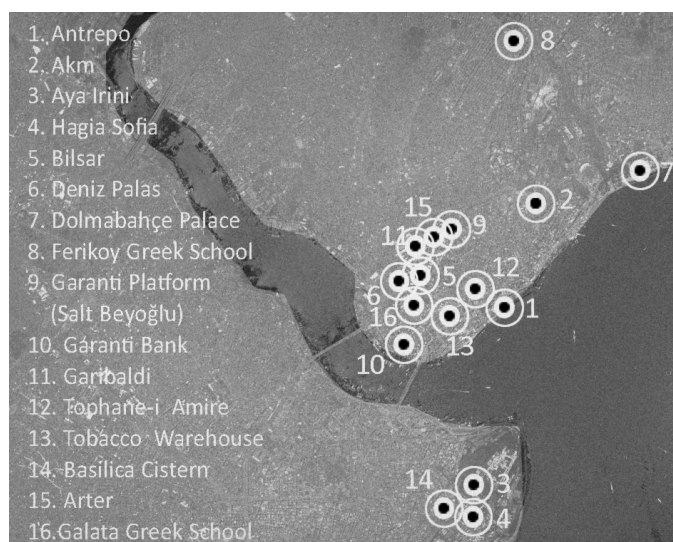


Figure 2. The biennial venues.

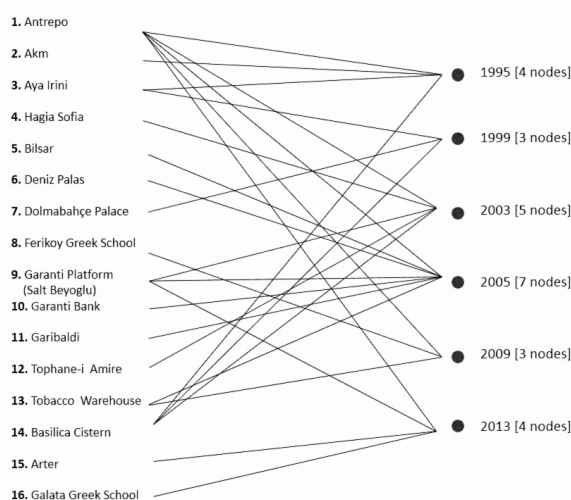


Figure 3. The relationship between biennial venues and years / 2013 venues.

wait, gather or pass through before exhibition in biennial buildings.

3.3. Statistical analysis

- In the statistical analysis conducted with SPSS software, significant relationships are researched through regression analysis.

The method includes transforming the patterns and the last biennial building interfaces to syntactic data (with the help of a program named "Syntax 2D" licensed by the University of Michigan) including mean depth, circularity and integration.

4. Istanbul Biennial patterns as museum-Like environments and buildings as territorial markers

The Istanbul Biennial is an international cultural network for local and international artists, curators and art critics showing new trends in contemporary art every two years. The Istanbul Biennial is an exhibition model that enables a dialogue between artists and the audience through the work of the artists, exhibitions, panel discussions, conferences and workshops. The Biennial is organized by the İstanbul Foundation for Culture and Arts (IKSV). The first two biennials were established under the general coordination of Beral Madra in 1987 and 1989. After 1989, a curator system was established.

The Istanbul Biennial does not have a permanent location. Although certain structures were used more than once, each biennial has had various locations. The biennial venues show differences in historical and contemporary context in Istanbul (Figure 2).

The study was done in five biennial contexts defined by context-based walking characters. The biennials that took place in both the Asian and European sides of Istanbul were dismissed because of the need to consider public transportation in these cases. The configurations of biennials differed, whether in the number of venues or in the place references related to for each year (Figure 3). As a consequence, the last biennial will be examined with pattern syntactical parameters and gate frequencies with the interface activities of biennial venues in that pattern. The venues will also be discussed with

reference to the collective memory through all biennials.

5. Syntactic analysis and discussion

The space syntax helps us analyze the patterns of connection, differentiation and centrality that characterize urban systems and the relationship between the parts and the whole that they engender. The axial map comprises the fewest and longest lines that are necessary to cover all parts of the urban fabric. The number and length of the axial lines is a function of the degree to which other parts of the system are directly accessible and visible from each point. The intersections between axial lines are treated as the elementary relations between spaces. The key property of axial maps is integration. Integration measures the relationship of each line to the network as a whole (Peponis, Ross, Rashidi, 1997).

The computation of integration values for the space of a given area is, of course, affected by the location of the area boundary. As Peponis et al. (1997) noted, an integration core that not only links all the parts together but that also relates the center to the periphery seems to encourage the diffusion of movement and the opportunities for exchange and interaction. The area boundaries and accessibility patterns for analysis have been chosen to indicate the possible movement routes between each venue (Figure 4).

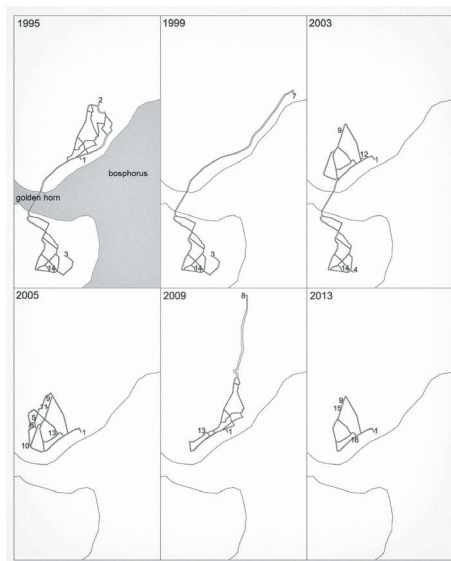


Figure 4. Selected biennial pattern layouts.

1st step: Descriptive discussion of biennial patterns from 1995 to 2013 due to urban performance:

The locations of choice for the 4th Biennial (1995) titled 'Orient-ation' were Antrepo (1), AKM art galleries (2), Aya Irini (3), and the Basilica Cistern (14). The locations situated the biennial in the historical peninsula and the modern front of Istanbul, with the two areas connected by the Galata Bridge (Figure 4). The pattern can be described as a bridging quality with two different loops.

The locations of choice for the 6th Biennial (1999) titled 'The Passion and the Wave' were Aya Irini (3), the Basilica Cistern (14) and Dolmabahce Palace (7). The locations situated the biennial in the historical peninsula with continuity through the Bosphorus connected by the Galata Bridge (Figure 4). The pattern can be described as a continuous linear quality with one loop.

The locations of choice for the 8th Biennial (2003) titled 'Poetic Justice' were Antrepo (1), Hagia Sofia (4), the Garanti Platform (9), Tophane-i Amire (12), and the Basilica Cistern (14). The locations situated the biennial in the historical peninsula and the modern front of Istanbul connected by the Galata Bridge (Figure 4). The pattern can be described as a bridging quality with two different loops extended through Istiklal Street, a main pedestrian street with high traffic. This biennial strived to join modern city life and addressed not to only specific target audiences but to everyone with access to the public space (Ozpınar, 2001).

The locations of choice for the 9th Biennial (2005) titled 'Istanbul' were Antrepo (1), Bilsar (5), Deniz Palas (6), the Garanti Platform (9), the Garanti Bank (10), Garibaldi (11), and the Tobacco Warehouse (13) (Figure 4). This biennial represented a modernist transformation of the city with the chosen locations giving reference to daily life through the use of the most crowded and integrated streets of Beyoğlu. The biennial moved away from the historical peninsula. The pattern can be described as having a compact quality with one loop.

The locations of choice for the 11th Biennial (2009) titled 'What Keeps

Mankind Alive?’ were Antrepo (1), Feriköy Greek School (8) and the Tobacco Warehouse (13) (Figure 4). The venue was limited, with only three locations. The route had more indirect possibilities for passing or landing. The pattern can be described as a continuous linear path with two ends without a loop.

The locations of choice for the 13th Biennial (2013) titled ‘Mom, Am I Barbarian?’ were Antrepo (1), the Garanti Platform (SALT Beyoğlu) (9), Arter (15), and Galata Greek School (16) (Figure 4). This biennial also represented the modernist transformation of the city, and the chosen locations gave reference to daily life in the context of the most crowded and integrated streets of Beyoğlu with two new venues. The pattern can be described as having a compact quality with one loop through Istiklal Street, a main pedestrian street with high pedestrian traffic.

The biennial pattern typologies and their syntactical values can be summarized as follows (Figure 4):

1995, 4 venues, bridging typology with two different loops, 963 mean integration.

1999, 3 venues, continuous linear typology with one loop, 1468 mean integration

2003, 5 venues, bridging typology with two loops extended through a main pedestrian street with high frequency, 1121 mean integration

2005, 7 venues, compact typology with one loop, 1768 mean integration

2009, 3 venues, continuous linear path typology with two ends without a loop, 5080 mean integration

2013, 4 venues, compact typology with one loop extended through a main pedestrian street with high frequency, 1974 mean integration

Table 1 summarizes the results of the syntactical data for selected biennial venues between 1995 and 2013. On the basis of this data set, ‘mean integration’ values were produced to investigate the extent to which street connectivity and land use density explain the distribution of movement per street segment with the different typologies indicated above. As mentioned in previous figures, these patterns show differences in the form and character of the paths:

The results of this analysis show that pattern configurations have a direct effect on syntactical values. The Golden Horn acts as a boundary in 1995 and 1999, whereas bridging typology has the lowest integration (table 1).

The linear configuration without a loop has the highest integration in

Table 1. The syntactical data of biennial venues.

Biennial Year	Biennial Space	Integration Value	Mean Depth	Circularity	Mean Integration	Mean Depth	Mean Circularity
1995	Antrepo	2279	8,92	271	963	8,56	148
	Akm	1091	2,18	87			
	Aya Irini	49	16,5	82			
	Basilica Cistern	703	10,74	217			
1999	Aya Irini	20	1,2	118	1468	10,9	170
	Dolmabahce Palace	764	11,98	68			
	Basilica Cistern	376	14,84	229			
	Antrepo	784	8,64	102			
2003	Hagia Sofia	900	11,56	169	1121	9,36	159
	Garanti Platform	1472	10,51	172			
	Tophane-i Amire	1234	8,38	185			
	Basilica Cistern	336	13,27	344			
	Antrepo	648	5,71	86			
2005	Bilsar	1999	4,65	144	1768	5,04	156
	Deniz Palas	426	7,37	72			
	Garanti Platform	3025	4,19	193			
	Garanti Bank	1390	5,37	154			
	Garibaldi	3320	4,18	206			
	Tobacco Warehouse	833	6,16	174			
	Antrepo	1500	2,84	195			
2009	Ferikoy Greek School	2686	5,03	105	5080	4,08	137
	Tobacco Warehouse	466	3,38	142			
	Antrepo	1070	5,42	45			
2013	Salt Beyoglu	2203	4,46	187	1974	4,09	164
	Arter	2559	4,44	173			
	Galata Greek School	4306	3,31	245			
	Antrepo	1070	5,42	45			

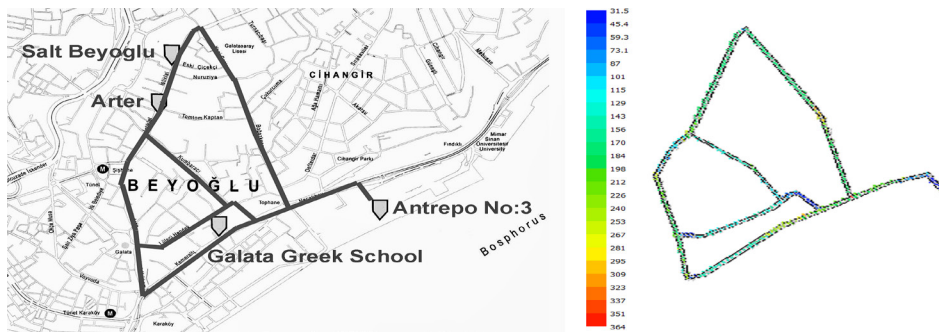


Figure 5. 2013 Istanbul biennial pattern.

2009, with the least number of venues. The compact typologies have similar results in 2005 and 2013 with a different number of venues (table 1). Thus, the configuration seems more effective than the number of venues. The interrelation between venues, boundaries, paths and movement has a strong effect on syntactical outcomes.

As mentioned above, the configuration may influence the location of attractors, but the location of attractors and their positions cannot influence configuration. In other words, patterns may influence movement, but movement cannot influence the configuration of the patterns. The syntactical values of configurations can orient a through movement in venue that is independent from the distance. The configuration has an effect on movement independent from specific attractors or choices. As Hillier et al. (1993) mentioned, layout differences have effects on movement independent from the attractors. The results of our analysis show that Antrepo, which is one of the most important and most occupied venues through the biennials, has the highest integration value and the lowest pattern integration value in 1995 Table 1).

2nd step: Syntactical analysis of biennial pattern in 2013 due to social interfaces:

The configuration of the 13th Biennial (2013) titled 'Mom, Am I Barbarian?' has four venues: Antrepo, the Garranti Platform (SALT Beyoğlu), Arter, and Galata Greek School.

This biennial also represented a transformation from previous pattern choices with two new venues, Arter and Galata Greek School, and gave reference to daily life in the context of the most crowded and integrated streets of Beyoğlu. This pattern was described above as having a compact quality with one loop (Figure 5).

The research for the 2013 pattern focuses on parameters such as the comparison of the frequency of audiences at the gates of biennial venues, the occupancy of the venues through biennial history, the interface activities and modes and the syntactic values of the pattern and the gates (Table 2, Figure 6-7). The outcomes can be summarized as follows:

Even though they are both new venues in 2013, Galata Greek School has a higher gate count than Arter, and Galata Greek School has the highest integration value.

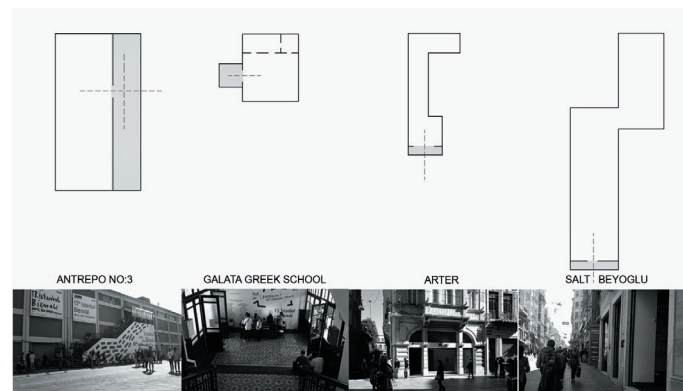


Figure 6. 2013 Istanbul biennial buildings and interfaces.

Table 2. The analogue and syntactical data of 2013 biennial buildings.

2013 Istanbul Biennial Spaces	times occupied through the history of biennials	gate count						syntax values gate I pattern			interface moods										syntax values interface I building	
		weekday			weekend						weekday					weekend					Mean Integration	Mean Depth
		enter	exit	total	enter	exit	total	Mean Integration	Mean Depth	Mean Circularity	individual	social	active	total	individual	social	active	total	Mean Integration	Mean Depth		
antrepo	5	86	57	143	180	155	335	1070	5.42	45	6	29	24	59	10	56	36	102	1602688	1.64		
galata greek school	1	33	22	55	68	49	117	4306	3.31	245	11	2	14	27	20	6	34	60	331643	1.51		
arter	1	20	28	48	34	44	78	2559	4.44	173	3	3	4	10	6	10	17	33	21652	1.51		
salt beyoglu	3	45	63	108	203	185	388	2203	4.46	187	5	9	15	29	7	19	56	82	31947	2.02		

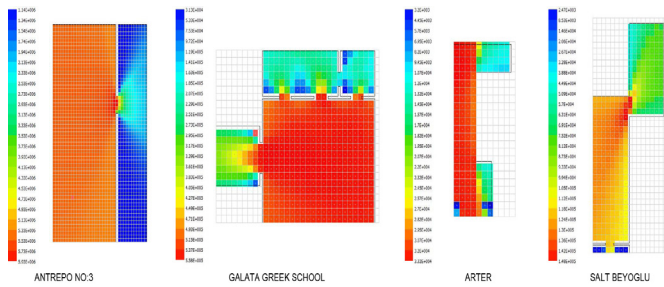


Figure 7. 2013 Istanbul biennial building interfaces and syntactical analysis.

Even though Arter is on the main pedestrian street in Istanbul, Galata Greek School has a higher frequency due to its highest integration value in the biennial configuration. As mentioned above, this is because the data reflect the propensity of spaces to be passed through on the way from all origins to all destinations. This shows that new venue preferences for the biennial should be considered with syntactical values of the biennial pattern instead of the urban pattern.

Antrepo is the most occupied and the main venue through all biennials. Therefore, it has the highest gate frequency even though it has the lowest integration value.

Antrepo and SALT Beyoglu are the most occupied venues during all biennials, with significant differences between weekdays and the weekend.

Even though Arter and SALT Beyoglu are on the same street and have similar integration values, the gate frequencies are quite different. This means that attractors have less effect on traffic than the syntactical values of the venue itself. SALT Beyoglu, even as a well-known biennial space, could not affect the frequency of Arter.

The interface of Antrepo is the most social and most integrated venue. The integration value of the interface is the highest.

Arter is a relatively new venue and has a lower integration value. This affects the interface moods, and the total activity seems lowest despite the fact that the venue is on an active pedestrian street, Istiklal Street.

The most active venue is SALT Beyoglu, which has three times the occupancy of other venues in biennial history, and the location is on an active pedestrian street, Istiklal Street.

3rd Step: Statistical analysis:

In the statistical analysis conducted with SPSS software, we observed a significant relationship when we used gate count numbers (the number of people passing through a gate) as the dependent variable and when we used the integration values of these gates as the independent variable on weekends. The regression analysis between the integration values of the selected gates of biennial venues and the number of people (frequency) using these buildings (gates) shows a tendency of 80,7% and a mildly significant negative relationship, with $R=-0,807$.

We observed another significant relationship when we used interface moods as the dependent variable and the integration values of these interfaces as the independent variable on weekends. These interfaces are the spaces where people wait, gather or pass through before exhibition in biennial buildings. The interface moods are individual (waiting, sitting, etc), social (gathering, talking, etc.) and active (movement based) behaviors. The regression analysis between the integration values of the selected interfaces of biennial venues and the moods of people using these interfaces shows a significant tendency of 92,7% and a significant positive relationship, with $R=0,927$.

6. Conclusions

The pattern of the biennial is a designed integration of venues that is also a part of the social interface. The biennial's interactive structure provides potential for more effective social outcomes through the design of its location patterns and the use of buildings as territorial markers. The pattern configurations and their qualities have more effect than the metric distance related to certain directions. This is not just a matter of seeing buildings but is also about observing space. The visual distances, collective memories, and integrations on any level orient the movement more than the metric distances. The human relationship with space in cities is generated not only by movement but also by experience and interactions. These museum-like environment patterns define a street con-

figuration in a specific context based on walking, with buildings as markers. The use of buildings as territorial markers in these museum-like environments create social interfaces. These interfaces have an effect on social relations and gathering activities. Additionally, collective memory is important, and future decisions about biennial venues should consider its influence. The configuration of exhibition buildings is important to an active social network and performative territory. This study has analyzed venue preferences for specific public events such as biennials according to the interaction levels, integration and frequencies of interfaces related to a specific pattern for performative outcomes. The study's aim has been to discuss these multi-levels and to show that both scales should be discussed together. In this manner, this study will guide further research about performative pattern configuration choices and social interface outcomes for future biennials.

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References

- Borden, I., Kerr, J., Rendell, J. Pivarro, A. (2001). *The Unknown City*, Cambridge, Massachusetts: MIT Press.
- Contreas, Christian, Beros. 2006. *Space, Events and Urban Performance, Proceedings of the 10th Iberoamerican Congress of Digital Graphics* (pp. 333-336). Santiago de Chile.
- Hillier, B., Penn, A., Hanson, J., Grajewski, T., Xu, J. (1993). Natural movement: or, configuration and attraction in urban pedestrian movement, *Environment and Planning B: Planning and Design* (Volume 20, pp. 29-66).
- Hillier, B. (2005). The art of place and the science of space, *World Architecture* (11/2005 p. 185). Beijing.
- Hillier, B. (2009). Studying cities to learn about minds: some possible implications of space syntax for spatial cognition, *Environment & Planning B: Planning and Design*.
- Lefebvre, H. (1974, 2004). *The Production of Space*, United Kingdom: Blackwell Publishing.
- Tschumi, B. (2000). *Event-Cities 2*. Boston: MIT Press.
- Özpinar, C. (2011). Istanbul Biennial in the Contexts of the Individuals, the City and the Public Sphere, *Kült-Referenced Cultural Studies Journal* (pp. 263-283). Istanbul: Istanbul Bilgi University Publications.
- Peponis, J., Ross, C., Rashid, M. (1997). The Structure of Urban Space, Movement and Co-presence: The Case of Atlanta. *Geoforum* (Vol.28, No.3-4, pp. 341-358).
- Peponis, J. & Wineman, J. (2002). Spatial structure of environment and behavior. In R.B.Bechtel & A. Churchman (eds.), *Handbook of Environmental Psychology* (pp. 271-291). New York, NY: John Wiley.
- Protevi, John (2006). *A Dictionary of Continental Philosophy* (pp. 356-357). Yale University Press.
- Stea, D. (1970). Space, Territory and Human Movements. In Proshansky, H., Ittelson, W., Rivlin, L. (eds.) *Environmental Psychology: Man and His Physical Setting*. New York: Holt, Rinehart and Winston, Inc.
- 2013 İstanbul Bienal mekanları üzerinden İstanbul Bienal dokusunun sosyal arayüzlerinin sentaktik analizi
- Kent yaşamı içinde bienaller, sanat ürünleri ve diyaloglar kadar, bienal mekanlarının ürettiği ilişkiler ile de tartışılabilir. Tarihi binalar, popüler mekanlar, çağdaş mekan örnekleri gibi pragmatik ve veya tematik kararlar üzerinden tercih edilen bienal mekanları mevcuttur. Bu çalışma 1995 ve 2013 yılları arasındaki bienal mekan

örüntülerinin etkileşimli çıktılarını ve sonuç olarak 2013'te gerçekleşen son bienal çerçevesinde karşılaştırmalı olarak mekanların sentaktik parametreleri ve giriş frekanslarını, binaların oluşturduğu sosyal ara yüzleri ve bu ara yüzlerdeki eylem biçimlerini de dikkate alarak tartışmayı amaçlamaktadır.

Bu amaçla, bu makale aşağıdaki sorulara cevap aramaktadır;

1995 ve 2013 tarihleri arasında bienal tarihi boyunca mekan tercihlerinin sentaktik konfigürasyonları doğrultusunda etkin farklılıkları var mıdır?

2013 bienali kapsamında mekanların yarattığı sosyal ara yüzler olan ön mekanlarının sentaktik değerleri ve frekansları arasında aktivite ve biçimleri de göz önüne alarak etkin bir ilişki var mıdır?

İstanbul Bienal örüntülerinin karşılaştırması, sentaktik parametrelerin yanında sosyal ağ, fonksiyonel hiyerarşi, sosyal ara yüzler gibi bir çok soruyu da tartışmaya dahil etmektedir. 2013 bienalinin etki alanı ve frekanslara etkisi bienal mekanları kapsamında tartışılmıştır. Bienal mekansal örüntüsü aynı zamanda ortak belleğin de bir parçası, tasarlanmış bir konfigürasyon

ve etkileşim ağıdır. Bu nedenle her bir mekanın bienal tarihi boyunca kaç kez kullanıldığı ve bellekteki yeri de çalışma parametreleri arasındadır. Belleğin mi yoksa sentaktik değerlerin mi etkin olduğunun araştırılması için, kullanıcı frekansları hem kapıda yapılan sayımlarla hem de mekanın ürettiği ara yüzdeki aktivite ve biçimleri ile araştırılmıştır. 2013 Bienali kapsamında bu tartışmalar bienal noktalarındaki kullanıcı frekansları, mekanın bienal tarihi boyunca kaç kez kullanıldığı, ara yüz aktiviteleri, hem bienal mekan örüntüsünün hem de mekanların sentaktik değerleri gibi parametrelere odaklanmaktadır. Bu sosyal ara yüzler, sosyal ve bireysel eylem biçimleri ve hareket modları ile etkin mekanlar olarak değerlendirilir. Metot kapsamında Michigan Üniversitesi lisanslı Syntax 2D programı ile hem mekan örüntülerini hem bina ara yüzlerini sentaktik değerlere dönüştürerek, SPSS yardımı ile belirleyicilerin istatistik çalışması yapılmıştır. Çalışmanın sonucunda gelecek bienaller için daha etkin örüntü ve mekansal organizasyon öngörülerinin tartışmaya açılması amaçlanmaktadır.