

Familiarity & Perception of Small Urban Monuments

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Abstract: *Although the sense of many scientists and people is that the placement of monuments at “suitable” points is the key for becoming familiar to people, this paper is going to support that the personal features of the observers determine their familiarity with the monumental elements rather than the placement. Thus, goal of this research is to examine determinants of familiarity and perception of small urban monuments (e.g. statues or abstract constructions). The following results were produced: older dwellers visit monuments more frequently and are more aware of their historical value, parents are more aware of the historical value of a monument as they use it as education tool. Younger dwellers feel a stronger need for better placement of monuments than older ones, though they are not aware of the historical value of the monuments and they do not visit them so often. Female dwellers feel a stronger need for maintenance of monuments than the men, though they do not have more frequent contact to the monuments than the men. High education level at people of high age strengthens the perceptibility of historical value. Regarding aesthetic perception in relation with planting material, females prefer richer, multi-colored and aromatic planting material around the monument. Young and educated dwellers prefer also aromatic planting material surrounding it. The innovation of this paper is on the examination of the personal determinants of familiarity and perception of monuments by using quantitative social research. Case study was carried out with 10 monuments located at the City of Drama (northern Greece). The attitudes of 185 dwellers, towards these monuments, were detected by standardized and statistically examined questionnaires supported with color pictures.*

Keywords: *Social statistics; Perception; Historical value; Aesthetic; Maintenance; Planting material.*

1.Introduction

Although many people believe that the placement of a monument does matter for its familiarity to the observers, this research is going to support that a wide range of planning and construction options do not determine the familiarity. This is rather determined by personal characteristics of the observers (age, gender, family status, education level). Goal of this research is to examine determinants of familiarity and perception of small urban monuments (e.g. statues or memorial columns). Personal factors of observers influence also the perception. The role planning or construction options in monument perception are disputable. Deeper aim of this research is to emphasize the need for more intensive and extensive empirical research in urban monument theory.

The dependent variables, familiarity and perception, were analyzed as follows: Familiarity was dimensioned as (a) frequency of *visual contact*, and (b) *historical value*. Perception was distinguished in: 1) *feeling of importance*, and 2) *aesthetic perception*. Their detailed functionality is shown at the next Section (Methodology).

The following factors have been examined as independent variables: a. *concerning monuments*: placement along the street or at the neighborhood (visibility), construction characteristics, b. *concerning observers*: age, family status, education level and gender of observers.

Initial hypothesis was that placement would determine the familiarity of the monument, while the perception dimensions would rather be influenced by the personal characteristics of the observers. The first hypothesis was not supported by the results. In contrast, personal characteristics prove to be relevant both to the perception and familiarity.

1.1 Literature Review

Jiang *et al.* (2007) [2] evaluated the urban dwellers' impressions of the different types of environmental space of urban sculpture. The result showed that the feelings of the target audience and the effects of landscape of the environmental space strongly influence the visual satisfaction of environmental space of urban sculpture. Although this was an important over-bridging of spatial and social dimensions, they did not examine the relevance (or irrelevance) of planning and construction factors.

Lossau (2008) [3] challenged the image of the "traditional" European city and its supposed urban qualities only by drawing upon contemporary forms of public art and discussing alternative concepts of urbanity. Despite his substantial exploration of perception dimensions, he did not explore the role of explanatory variables through a quantitative approach.

Arnoldi (2007) [1] examined messages encoded in forty commemorative monuments that were built in Bamako, the capital city of Mali, and the ways that these messages were tailored for Malian youth. As public sculptures, the monuments were designed to represent a particular vision of good government, patriotism, and citizenship. They were intended to be national *lieux de memoire*, wherein citizens, especially young people, could engage in the performance of a shared history and national purpose. This research offered important insights. The particular paper is developed in a similar focus but on a more quantitative basis. Also, it does not lay emphasis only on historical value but also on issues of visual familiarity, and dimensions of importance and aesthetic.

Yu (2006) [8] supports that the designer of urban sculpture must be aware of the entire environment in order to harmonize his sculpture with the urban environment and points out the importance of cooperation between the city planners, architects and sculptors. Although he made interesting suggestions, he disregarded the systematic examination of the influence of personal features on the perception of monumental values. Moreover, his argument about the need of harmonizing sculptures with their urban environment should be critically considered, since placement of monument proved to be irrelevant for their familiarity and perception in the particular research.

Sharp *et al.* (2005) [7] showed how cultural policy and in particular public art, intersects with the processes of urban restructuring and how it is a contributor, but also antidote, to the conflict that typically surrounds the restructuring of urban space. Throughout, it is argued that the processes through which artworks become installed into the urban fabric are critical to the successful development of inclusion. Although he indicated a noticeable role of artworks in architectural functionalism, he did not detect concrete variables in a quantitative empirical approach.

Saleh (1998) [6] presents the erection of memorial and abstract sculptures as traditional historical symbols that can facilitate environmental interaction, foster a sense of identity and promote intimacy between a community and the surrounding environment. Landmarks allow the architect, urban designer or planner to organize, arrange and configure physical space in such a way as to encourage desired behavior and to allow for the satisfaction of human needs.

However, he did not explore the role of social and personal determinants in perception of monumental values.

Rozentals (2008) [5] says that in the public space of the city, viewers are encouraged only to look at the surface of the monument, where in the gallery memories and cultural identity are exhibited in such a fashion that request the viewer to look beyond the surface and explore alternative representations of the past. The traditional ways of presenting memories through monuments, appropriating symbolic sites to reinforce identity, and the act of gentrifying everyday ruins to hide difficult moments of the past are being ruptured and questioned. These works contest the prescribed and assumed notions that local and national authorities project onto communities. His work offered crucial hypotheses but he did not focus on few explanatory variables. These hypotheses were, however, in part a stimulus for this research.

Finally, the contribution of Riegl (1982) [4] to the analysis of monumental values was illuminative for the particular research. He has distinguished the values of a monument in “historical value”, “aesthetic value”, “age-value” and “utility value”. The “historical value” consists of information a monument provides about the past and it has been used in this research. The “aesthetic value” expresses emotions caused by a monument and it is also in part measured [the employment of the “age-value” (nostalgia) and “utility value” (practical and economic function) are not measured in this research]. However, Riegl did not apply these concepts in quantitative empirical research. The use of such dimensions in a survey is a particular innovation of this research.

1.2 Paper’s Contribution & Innovation

The contribution of this paper lies in the statistical examination of determinants concerning familiarity and perception of small urban monuments after a survey on city dwellers. Riegl’s concept of “*historical value*” and “*aesthetic value*” are also employed in an empirical research introducing their metadata functionality. The innovation of this paper is that the statistical results show that a wide range of planning and construction options do not determine the familiarity of the dwellers with the monumental elements. This is rather determined by personal characteristics of the observers.

1.3 Paper’s Organization

The rest of the paper is organized as follows: In Section 2 (*Methodology*), the 10 monuments are described, as well as the collection and analysis of the samples and the related variables. In Section 3 (*An Application Case Study*), tables of statistical results are presented. The frequency of visual contact, the awareness of historical value, the importance perception (need for maintenance and need for better placement) and the aesthetic perception (in relation with planting material) are discussed. In Section 4 (*Conclusions*), the conclusions from the analysis and discussion and also the limitations of the research are presented. Future research, including more detailed factors and in depth interviews, is suggested.

2. The Proposed Methodology

The City of Drama (northern Greece) has been selected as a case study because of its variety of monuments. Two samples have been collected and analyzed: (a) 185 standardized questionnaires with color pictures of the monuments answered by dwellers of Drama, and (b) 10 monuments. The familiarity and perception of 10 built monumental elements of Drama were statistically examined. Six (6) of them were busts and four (4) were columns. The 10 monuments are the following: the busts of Kolokotronis (national hero of 1821 revolution

against Ottomans), of Kazantzidis (singer), of Dionysios (church man), of Agathaggelos (church man), of Athanasiadis (mayor of Drama), of Armen (national hero of Macedonia fight in early 20th century), and the columns of "*Jews*", "*Cypriotes*", "*Freedom*", and "*10.000 war martyrs*". The parametric Pearson test and the non-parametric Kendall test have been used after normality test. Stepwise regression has also been used for detecting latent relations.

The **familiarity** was functionalized as: (1) frequency of *visual contact* (it was polarized as no visual contact at all or visual contact almost every day, because interviewees would remember to give a more detailed grading of frequency), and (2) *historical value* (this is here functionalized as awareness of the intentional monument message). Also, the **perception** was functionalized as: (1) *importance perception* (a. need for maintenance; b. need for better placement), and (2) *aesthetic perception* in relation with planting material. All dependent variables are measured in a binary scale.

The age is a metric variable (inversely measured as birth year and education level is measured in 8-step scale from non-primary-school-graduate to doctorate. All other independent variables (family status, particularly parenthood, and gender) are measured in binary scales.

The sample of dwellers (185) seems to be adequate, whilst the sample of monuments (10) seems to be small. Collecting a larger sample of monuments can be a challenge for future research. Factors like placement and technical characteristics of monuments have proven to be of disputable relevance for the familiarity. In future research, more detailed factors can be examined. Moreover, the sample of 185 dwellers is not a random one but a judgment sample. Namely, it is appropriately selected so as to include a variety of age (inversely measured as birth year), education level, family status and gender.

New indexes and concepts like "*historical value*" and the afore-mentioned dimensions of familiarity and perception emerged as an extension of Dublin Core Metadata Initiative [9]. Through this extension, the functionality of the Dublin Core metadata is fostered in the Cultural Heritage management. Furthermore, the way for developing Web Communities methodology in community cultural heritage systems is opened up (please see: RWTH, R. Klamma [10]).

3. An Application Case Study

The Bivariate correlations and regression will be presented in this section. Descriptive statistics (average, minimal and maximal values) does not pertain to the purpose of this research. Nevertheless, the sample of 185 dwellers was a non-random one, as explained above. Thus, a presentation of descriptive statistics would be misleading rather than illuminative.

3.1 Exploring Determinants of Familiarity

It is purposeful to distinguish the *factors* in two categories: A) *factors* which are usually expected to be statistically relevant to the "*familiarity*" and in this research they did not prove to be so; and B) *factors* which are expected and proved to be statistically relevant to the "*familiarity*".

A) Factors not determining familiarity

Objective factors, related with the placement of monuments, do not influence the familiarity of them to the local dwellers. Physical proximity to residence place and visibility appear insignificant.

Contrary to the expected relation of monument familiarity with the residence place, it has been found that the residence place is not significantly correlated with the contact a dweller has with a monument and also not with the knowledge about the monument (Table 1).

A monument of the neighborhood can be completely unfamiliar to the neighbors. The only monumental elements which are strongly correlated with certain neighborhoods are the Jews and Cypriotes column and the bust of the singer Kazantzidis. They are visited almost every day by dwellers of “Komninoi”. “Komninoi” is a neighborhood in a suburb of Drama, quite far away from these three monuments. However, the inhabitants of this neighborhood are dwellers who have lived in Drama for a long time (not students or newly appointed civil servants). ereby, they have drawn their attention to these monuments because they are peculiar like Jews column or they see them during their transport from and back to the home (like Kazantzidis bust and Cypriotes column). Moreover, Kazantzidis was a singer well known to the old dwellers of Drama and Cypriotes column is remarkable because it is has the characteristic shape of Cyprus island. Thus, their familiarity with these few monuments is no surprising success.

Table 1. Residence place and frequency of contact (Pearson test)

<i>Contact frequency</i>	<i>Residence place</i>				
	Centre	«12 apostles»	«Dikastiria» (courts)	«pente dromoi»	«Komninoi»
Agathaggelos bust no visual contact at all	,019	,088	-,052	-,093	,019
	,798	,232	,480	,210	,799
Agathaggelos bust visual contact (almost) every day	-,014	-,140	,124	,082	,084
	,850	,057	,093	,265	,254
Armen bust no visual contact at all	,047	-,074	,006	,125	-,050
	,524	,317	,931	,090	,502
Armen bust visual contact (almost) every day	-,129	,130	,037	-,088	,012
	,081	,077	,616	,236	,867
Athnasiadis bust no visual contact at all	,082	-,051	,033	-,051	,033
	,267	,490	,659	,490	,660
Athnasiadis bust visual contact (almost) every day	-,144	,059	-,006	,090	,005
	,051	,426	,938	,222	,946
Cypriotes column no visual contact	-,066	-,044	,010	,015	-,013
	,374	,551	,891	,834	,856
Cypriotes column contact (almost) every day	-,096	-,123	-,004	,056	,176(*)
	,193	,096	,959	,446	,016
Dionysios bust no visual contact at all	,054	,079	-,060	-,042	-,062
	,463	,287	,415	,574	,400
Dionysios bust visual contact (almost) every day	-,084	-,085	,113	,077	,106
	,257	,248	,125	,295	,152
Freedom column no visual contact at all	,100	-,104	,108	-,022	-,142
	,176	,158	,144	,763	,055
Freedom column visual contact (almost) every day	-,075	,117	,025	-,135	-,037
	,313	,112	,740	,067	,613

Jews column no visual contact	,026	-,052	-,022	,038	-,078
	,722	,485	,761	,611	,289
Jews column contact (almost) every day	-,098	,110	-,004	-,046	,181(*)
	,185	,137	,953	,538	,014
Kolokotronis bust no visual contact	-,165(*)	-,003	,092	-,003	-,064
	,025	,965	,212	,965	,386
Kolokotronis bust contact (almost) every day	,060	,066	-,039	-,030	,097
	,418	,369	,602	,684	,189
Kazantzidis bust no visual contact at all	-,142	,032	,119	-,058	-,130
	,054	,663	,107	,431	,078
Kazantzidis bust visual contact (almost) every day	,176(*)	-,096	-,091	,009	,165(*)
	,017	,191	,218	,902	,025
10000 war martyrs no visual contact at all	,079	-,042	,138	-,042	-,136
	,286	,574	,060	,574	,065
10000 war martyrs visual contact (almost) every day	-,094	,134	-,083	-,082	,090
	,203	,069	,259	,267	,222

(*): correlation is significant at the 0.05 level

Similar independence is observed between residence place and the awareness of historical value of the monuments. The local neighbors are not interested in any information provided by the monument about the past or related with it. The only exception is Kazantzidis bust. Dwellers of “Komninoi” are aware of the contribution of Kazantzidis to the culture as a singer. The reasons have been discussed above. Although local neighbors often come in visual contact with a monument, they are not motivated to find out about it, either by asking or by reading the small label of monument. They are much more discouraged to read the label, when it is written in small letters or in old language style.

Table 2. Awareness of historical value and residence place (Pearson test)

Awareness of historical value	Residence place				
	Centre	«12 apostles»	«Dikastiria» (courts)	«Pentodromoi»	«Komninoi»
Agathaggelos bust	-,007	,024	-,117	-,008	-,029
	,926	,746	,112	,915	,695
Athanasiadis bust	-,037	-,058	-,068	-,058	,122
	,615	,432	,360	,432	,098
Armen bust	,597	,094	-,006	-,145	,038
	,597	,202	,931	,048	,612
Cypriotes column	,089	,103	,027	-,079	-,045
	,229	,162	,718	,286	,546
Dionysios bust	,030	-,018	-,090	-,049	,003
	,681	,810	,223	,504	,973

Freedom column	-,182(*)	,091	-,035	,031	,122
	,013	,219	,637	,673	,098
Jews column	-,009	,067	,075	-,153*	,072
	,899	,367	,311	,038	,330
Kazantzidis bust	,067	-,004	-,114	-,077	,188(*)
	,367	,955	,121	,297	,010
Kolokotronis bust	-,016	,056	-,021	-,010	,034
	,825	,452	,773	,891	,646
10000 war martyrs	-,096	-,023	-,041	-,057	,134
	,193	,757	,584	,444	,070

(*): correlation is significant at the 0.05 level

As seen in the satellite photo of the City of Drama (Fig. 1), 5 of the 10 monuments, specifically the busts of Kazantzidis, Athanasiadis ana Armen, and the columns of Freedom and Cyprus, are placed along the central highway of Drama. However, this does not make substantial difference in the promotion of monuments.



Figure 1. The places of monuments in the City of Drama

A monument visible to numerous drivers and pedestrians everyday from a highway street in comparison with a monument hidden in a park would be expected to be much more observable and remarkable as a landscape element. However, in Table 3, a positive but weak

correlation appears between visual contact frequency and visibility from the highway. This is understandable as the drivers are normally concentrated on the driving and the local pedestrians on their everyday routine. Because of their familiarization with the local urban environment, they see it as space and not as a landscape. They do not behave like tourists who try to be familiar with every new place, starting with monuments. Although one could argue that 10 monuments are too restricted sample, this statistical independence should raise at least reasonable doubts about the rationality of seeking visible places for the monuments. Thus, an architect who seek a visible place for his art work thinks as an artist rather than as an engineer who should achieve the maximal effectiveness (if promotion is defined as "effectiveness" in this case).

Table 3. Independence between visual contact frequency (Kendall test)

	No visual contact at all	Visual contact almost every day
Visibility from the central highway of Drama (invisible=0, visible=1)	-,271	,268
	,346	,347

No strong correlation

In Table 4, the familiarity of a monument presents no strong correlation with any of its constructional and secondary placement characteristics (additional to the visibility from the highway discussed above). Busts are not more familiar to the dwellers than columns. Concrete forms (e.g. persons) are not more familiar than abstract ones (e.g. the angular column of Jews). Monuments relatively small (at eye-height) are not more remarkable than higher ones, which are more difficult to be recognized. Impressions of green (or built) ground around the monument, as well as the impression of built (or not built) background, play also no role in the familiarity. The use of white or black marble makes a monument also not remarkable. Concrete concepts (e.g. persons, Jews etc) are not more familiar than abstract ones like "freedom". The visibility of the monument from a cafeteria, a bunch or other stand point makes it not more widely known. Finally, whether a monument is placed at the point where the represented person has acted (e.g. bishops' busts at the place of a church) does not make any difference in familiarity.

Table 4. Independence between familiarity and technical characteristics of monuments (Kendall test)

	No visual contact	Visual contact almost everyday	Awareness of historical value
Constructional characteristics	Column=1, bust=2	-,031	,122
		,915	,670
	Abstract form=1, concrete form=2	-,264	,224
		,359	,433
	Eye-height=1, higher=2	-,339	,447
		,239	,117
	On green ground=1, on built ground=2	-,308	,243
		,285	,394
	Big building as a background (no=0, yes=1)	-,181	,149
		,530	,602
	Black marble (no=0, yes=1)	,452	-,373
		,116	,192
Abstract concept=1, concrete concept=2	,066	-,098	
		,000	
		1,000	
		-,151	
		,600	
		-,066	

Placement characteristics		,819	,732	,819
	Visibility from stand point (entertainment place, bunch) (no=0, yes=1)	-,246	,122	,092
		,392	,670	,748
	Connection with place	-,246	,122	,092
		,392	,670	,748

No strong correlation

B) Factors determining the familiarity

Factors which determine the familiarity of a monument to the dwellers are the following ones (Table 5): a) the age (older dwellers visit monuments more frequently and are more aware of their historical information), and b) dwellers who are parents know also more about the meaning of a monument and this may be attributed to its possible use as pedagogic and encyclopedic tool. Furthermore, if one helps his child in the school lessons, he becomes also familiar with historical issues.

Table 5. Determinants of familiarity (Pearson test)

	General awareness of historical value	Visual contact almost everyday
Birth year	-,156(*)	-,156(*)
	,034	,034
Being a parent	,144(*)	,123
	,050	,095
Number of children	,166(*)	,112
	,024	,129
Education level	,112	-,039
	,130	,596

(*): correlation is significant at the 0.05 level

Although education level as a single factor in Table 5 seems to make no significant effect on the awareness of historical value, it seems to make stronger difference in synergy with age (Table 6). Educated older population seems to be more perceptive of historical value. Thus, education in the past paid more attention to the history.

Table 6. Regression: determinants of historical value awareness

	Standardized Coefficients	Sig.
Birth year	-,248	,002
Education	,217	,007

Dependent Variable: Awareness of historical value, R Square= 0,063, F=6,105.

3.2 Determinants of Perception of Monumental Elements

Concerning importance perception, younger dwellers feel more need for better placement than older ones, though they do not know much of the historical value of the monuments and

they do not visit them so often. Simultaneously, young observers are more susceptible to prefer aromatic plants (Table 7). This apparently shows a feeling of strengthening the aesthetic value of urban space on the part of young people, who are systematic and intensive users of open-air entertainment places (e.g. cafeterias).

Table 7. Determinants of perception (Pearson test)

	Perception of importance		Aesthetic perception			Dimensions of familiarity		
	Feeling need for better placement	Feeling for better maintenance	Preference for multi-colored plants	Preference for aromatic plants	Rich ornamental planting material	No visual contact	Visual contact almost everyday	General awareness of historical value
Birth year	,169(*)	-,003	,098	,183(*)	-,012	,119	-,156(*)	-,156(*)
	,021	,965	,184	,013	,870	,106	,034	,034
Male=1, female=2	,113	,155(*)	,218(**)	,269(**)	,208(**)	-,052	,075	,065
	,127	,035	,003	,000	,005	,481	,310	,381
Education level	,069	,025	,059	,165(*)	,019	-,071	-,039	,112
	,352	,733	,422	,025	,794	,335	,596	,130

(*): correlation is significant at the 0.05 level, (**): correlation is significant at the 0.01 level.

In Table 7, female dwellers seem to transfer the supposed “*feeling of maintenance*” outside of their house, as they feel stronger need for maintenance of monuments than the male observers. Also, the females feel this need more strongly, though they do not have more intensive contact to the monuments or better awareness of their historical value than male observers. Female do not generalize only the “*feeling of maintenance*” to the monuments but also the “*feeling of need for better aesthetic value*”. They prefer multi-colored, aromatic and rich ornamental planting around the monuments. Neither males nor females present better perceptiveness of the historical value of the monuments and they are characterized by no strong difference in frequency of visual contact. However, females are more perceptive of the aesthetic dimension of the monuments.

Education, as a single factor in Table 7, seems only to make a positive effect on the aesthetic dimension. Specifically, it seems to strengthen the preference for aromatic plants around the monument. Comparing this result with the result of Table 6, where high age appears to magnify the effect of education on the historical value, it can be supposed that education nowadays is connected with impressiveness and aesthetic rather than historical value.

Finally, columns are regarded by the dwellers as more “unfairly” placed than busts (Table 8). They feel that columns are not so strongly promoted by placement. This can be attributed to the fact that a column is usually more difficult to be understood because of their abstract character.

Table 8. Perception of busts and columns

	Feeling need for better placement
Column=1, bust=2	-,609(*)
	,033

(*): correlation is significant at the 0.05 level

Moreover, columns are often more impressive than busts due to their size and shape. Thus, a more visible place would achieve stronger effect and would make the understanding of these monuments easier.

4. Conclusions

Contrary to the expected relation of familiarity with the residence place, it has been found that the residence place is not significantly correlated with the contact a dweller has with a monument and also not with his/her knowledge about the monument. A monument of the neighborhood can be completely unfamiliar to the neighbors. Thus, a designer should not take for granted that the monumental values will influence local neighbors more than other dwellers. A monument of the neighborhood can be completely unfamiliar to the neighbors, even if it is situated exactly on the relevant historical place. A challenging result is also that the education level as a single factor is as a rule irrelevant for the awareness of historical value of the monument.

The education level in case of young people is as a rule irrelevant for the awareness of historical value of the monument, dwellers who are parents know also more about the meaning of a monument and this may be attributed to its possible use as education tool or to the contact of parents with the school lessons of the children. Younger dwellers feel a need for better placement than older ones, though they do not know much of the historical value of the monuments and they do not visit them so often. Female dwellers seem to transfer the supposed “feeling of maintenance” outside of their house, as they feel stronger need for maintenance of monuments than the men. Also, the females feel this need more strongly, though they do not have closer contact to the monuments than men. Although education level, as a single factor, proves irrelevant for the perceptibility of monumental value, in synergy with high age, it strengthens the perceptibility of historical value. Regarding aesthetic perception in relation with planting material, females prefer richer, multi-colored and aromatic planting material around the monument. Young and educated dwellers prefer also aromatic planting material surrounding it. Columns are considered to need promotion through more suitable placement.

The objective architectural factors like placement of monument and a wide range of constructional characteristics do not substantial help a monument become well known to the dwellers of a city. The architects who place the monuments are based on personal aesthetic criteria or criteria related to urban planning law rather than on rational criteria derived from empirical research. Provided that monuments should be constructed for all people and not only for the pleasure of their creators, then empirical research is necessary. What may make a monument more remarkable is perhaps an especially impressive (or provocative) appearance. The placement along the road makes only slight difference and should not become a serious policy issue.

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