

ATTRIBUTES OF URBAN PUBLIC SPACES THAT CONTRIBUTE TO QUALITATIVE PUBLIC LIFE; STUDY OF EMERGING PUBLIC SPACES IN COLOMBO

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Abstract

Urban Public Space (UPS) is a vital component in the formation of a cityscape. Such spaces further enrich the public requirements of activity nodes facilitating people's interaction and relaxation. Thereby quality of UPS has a direct impact in terms of public benefits which may be in two folds of physical and psychological.

It is a fact with the rapid urbanization, UPS becomes an essential component and Sri Lanka too has no exemption to such prerequisite requirements. But in close scrutiny it will be disclosed that many Urban Public Spaces' in Sri Lanka, had emerged without prior prerequisite requirements and thereby compelling, not to have proper design or standards in quality. The lack of quality and standards is mainly due to the fact that left over spaces (LOS) had been turned as UPS's; than creating the UPS's in advance, as a key component of the cityscape. In these circumstances the need has arisen to redirect the emerging urbanization to consider proper urban design and planning aspects in terms of UPSS which would in return contributes to the public and their Standards of living through Quality of Urban Public Space (QUPS) .

The paper, intends to explore qualitative aspects in UPS's, that had turned out of LOS's; by comparing the international models authored by Jan Gehl and Helen Beck, and which in return would create a comprehensive analysis and evaluation model to achieve qualitative Urban Public Life (UPL). The methodology adopted had two folds, namely a literature survey and social survey and the said social survey had been carried out by a structured survey through a questionnaire. The data gathered in the said social survey had been compiled and analyzed by using the derivatives attached to each and every questionnaire. Further it is to be noted that non availability of UPS's, the aforesaid four spaces were selected as the most suitable case studies for the research.

In the analysis of UPS's in terms whether it has been predesigned UPS or LOS turned as UPS, the impact over standard of living and thereby the QOL, is almost the same. But in detail analysis had divulge that QUPS has a direct impact over the public in the usage of the facilities provided.

Key words: urban public spaces, urban public life, quality of life, quality of urban public space

NOTION OF URBAN PUBLIC SPACES

The UPS's are built by the society and it changes with the society along with the requirements of the society. The other importance of UPS is that it acts as a balance between built and un-built. Public squares, water fronts, parks, gardens and streets are some of the identifiable UPS's. Thus UPS's has broken the monotony of streetscape and enriches the character of a city.

UPS's become memorable spaces due to its own QUPS and further it creates a space for communication; thus making urban activity nodes, a social integration of any living city. In terms of users of UPS's, the ultimate goal of QUPS will lead to achieve the aspect of user friendly forcing such space to be humanly vibrant. Thus UPS's indirectly contributes to improve the QOL of many, while giving physiological and psychological comfort to its citizens.

Urban cities have very dynamic and varying qualities where people live work and enjoy their social cultural relationship which is similar to the UPS's. These spaces are diverse with people and full of various activities. (Spiro Kostof, 1999)

The identity of a city is mostly dominated by the characteristics in UPSS which in return makes an image in the minds of the public. The diversity of UPSS leads to have different images of the cities, even though all the other physical factors remain the same. The generation of communal spirit developed with UPSS as UPSS behaves and support the social interactions amongst communities, which brings the opportunity to socialize with the known and unknowns.

The key three features of public spaces are (i) democracy / equality, (ii) responsiveness and (iii) meaningfulness (Carr S. & Francis M., 1993). The first factor, democratic / equality contributes to the UPS rights of users; and the second factor, responsiveness provides the needs of the users and the third factor meaningfulness allows users to make strong connection between the space and the personal lives. There are five types of reasons that account for the quality of public space; (Carr S. & Francis M., 1993) (i) comfort, (ii) relaxation, (iii) passive engagement with environment, (iv) active engagement with the environment and (v) discovery. The model presented by (Carr S. & Francis M., 1993) would lead to the conclusion that users of UPS would encounter a space by one of the above or a combination. The table 1 indicates the concerns in UPS's and identifying entertainment as the highest percentage and figure 1 indicates such use in Sri Lankan context.

Table 1: Activity percentages in public spaces

Entertainment	26%
Fountain	19%
Watching people	12%
Atmosphere	11%
Opposite sex	10%
Isolation	8%
Appearance	6%
Sun	5%
Location	3%
	100%



Figure1: Activity percentages in some of the UPS in Sri Lanka
 Source: Author

Source: Marcus C. & Francis C.
People Places, 1997

The physical boundaries of any UPS's are to be enclosed by surrounding walls and an inevitable floor which suits its purpose; with a social demarcation which may lead to a distinct purpose to serve. But any one of above physical qualities or social demarcations are sufficiently strong, it alone establishes the sense of urban space.

ATTRIBUTES IN URBAN PUBLIC SPACES (UPSS)

The concepts of QUPS originated in the 1960s, when visionaries, Jane Jacobs (*The Death and Life of Great American Cities, 1961*) and William Whyte's (*The Social Life of Small Urban Spaces (1980)*) forwarded the theories of designing cities should be catered to people and primarily not for vehicles. Their work focused on the importance of lively neighborhoods and creating inviting UPS's.

Jan Gehl, (*Cities for People, 2010*) also made a checklist of twelve qualities that public spaces should aspire and in his philosophy he clustered the twelve factors under (i) comfort, (ii) protection and (iii) delight as the three essential attributes in public places.

Helen Beck (2009) who explained the link with quality of public space, health and wellness states that the following ten aspects are as essential contributing factors.

- 1) Cleanliness of the space: Clean and well cared-for place
- 2) Accessibility to the space: Place that is easy to get to and move through
- 3) Attractiveness: A visually pleasing place
- 4) Comfort: Somewhere that is pleasant to spend time in
- 5) Inclusiveness: A comprehensive place that is welcoming
- 6) Vital and viability: A place that is well used in relation to its predominant functions
- 7) Functionality: A place that functions well at all times
- 8) Distinctiveness: somewhere that makes the most of its character
- 9) Safety and security: Somewhere that feels safe from harm
- 10) Robustness: A place that stands up well to the pressures of everyday

In achieving QUPS criterion to be fulfilled such criteria have been surveyed in detail in the research as macro level analysis of – (i) Site selection, (ii) land formation and micro level analysis (iii) achieving comfort, (iv) delight (v) protection and (vi) cleanliness.

1. Site selection for UPSS

The site selection could be considered as a key factor made at the very beginning when creating the UPS, which could in return impact major consequences for the overall success of the project. The site selection could make a dramatic impact on almost every facet of the design, construction and then the final outcome along with urban population who intend to use the space. The site affects the organization, massing, functionality, sustainability, operation, economic efficiency, security and more importantly the aesthetic qualities of the UPS.

Factors of selecting a site for waterfront urban public space (Refer Figure. 2):

- 1) Maintenance of visual connection between the city / town and the water
- 2) Access by pedestrians to waterside promenades and the park
- 3) Limited use driveways and landscape paths providing views of water body

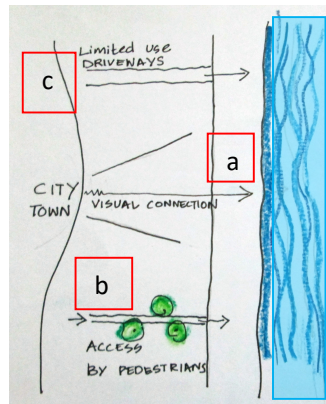


Figure 2:- Site selection for a water front development
Source: Author

This paper evaluates the aspects of site selection (Table 2 – (a) to (f) criteria) on the selected UPS's in terms of the said aspects, as summarized and indicated.

- 1) Location - Closeness to public areas and possible inter and intra connections
- 2) Historical value as to approach as an UPS
- 3) Providing a feeling of security and safety within selected location and surroundings
- 4) Environmental quality before and after the creation of the UPS
- 5) Accepted types of users to the particular UPS
- 6) Context of the surrounding and possibility of further development
- 7) Available space for development and for future expansions
- 8) Attractive natural feature such as a clean water bodies, greenery

Table 2: Aspects of site selection analysis of case studies

	(a) Location	(b) Historic value	(c) security	(d) Environmental quality	(e) User accessibility	(f) Designed or Usage change	(g) Availability for future expansion
GFG	Colombo 1, Easy Access	Since 1859	Secured	Satisfy- boundary of the sea	Accessible for all	Function change over time	Available – availability of level difference
DUB	Battaramu lla, Easy Access	2012	Secured	Satisfy- conductive atmosphere created - boundary of lake	Accessible for all	Designed as a Outdoor area	Available As space in limited with the other developments
DHC	Colombo 1, Easy Access	Since 1681 but not as UPS	Secured	Satisfy – conductive atmosphere created	Accessible for all but socially Limited Accessibility created	Change of use when lending to commercial activity	Limited
UWP	Nugegoda , Easy Access	2012	Secured	Satisfy - boundary of lake	Accessible for all	Designed as a Urban Wetland park	Available

2. Formation of urban public space


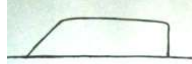



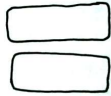


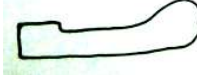
The successful UPS's forms are basic in shapes such as squares and rectangles. Further it is being strengthened by its scale of space and facades of buildings around, along with visibility to human scale. The objects surround the UPS enriched the spatial attributes which in return contributes to the QUPS. The facades of UPS can be bounded with buildings or natural environment and such environment may consist of trees, water, mountains and many other picturesque compositions. Though this forms the basic form of many UPS's, the personal notion of each space differ based on the details of the said factors, which in return attributes to the QUPS's.

The sample of GFG which has been taken for the said research illustrates many hotel buildings around with the sky above make this space within the city limits and the sea shore makes the other boundary. The figure 3 illustrates the space of GFG & DUB and the Table 3 elaborates the examples of GFG & DUB formation.



Figure 3:- GFG "Space" and DUB "Space"
 Source: Author

Table 3 – GFG, DUB, DHC & UWP analysis of the plan form

Location	Shape	Formation
GFG	 Source: Google Earth	shape has chnaged from time to time and curently shape of trapezoid  Line drawing
DUB	 Source: Google Earth	Irregular form , not a basic form  Line drawing
DHC	 Source: Google Ear	Based from a basic shape, rectangular in shape  Line drawing
DUB	 Source: UWP website & www. defence.lk	Irregular form, not a basic form   Line drawing

Source: Author: www. defence.lk

GFG - Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC- Dutch Hospital Courtyard, UWP- Urban Wetland Park

3. Aspects of Comfort

Comfort is a key factor in attracting public to a UPS. In achieving comfort there are some design aspects to be followed and the research analyzed the facts in detailed as (a) room for walking, (b) zones for sitting, standing and stay (c) good surface of walking (d) areas to talk and listen, (e)disable access and (f) areas for play, exercise and creativity.

(a) Room for walking in UPS

The adequate room for walk and related activities based on the possible pedestrian density is a factor to be considered in any UPS. Though area allocation is an assumption based on certain data, it is a fact that a foolproof system could not be made in any UPS.

The aspect of walking has been analyzed in terms of room for walking and presence of no obstacles four research samples as indicated in the Table 4. Figure 4 indicates the three dimensional art embedded walkways in DUB which attracts users; and figure 6 of GFG indicates that due to certain conditions the space is not sufficient for the purpose except to be considered as gathering space.

Table 4 - Opportunity to walk analysis of case studies

		GFG	DUB	DHC	UWP
a	Room for walking	Available	Yes (Fig. 4)	Yes, but comparatively less but proportionate to the space.	Available
b	Presence of no obstacles	In some areas (Fig. 5)	Yes No obstacles	Seating layout in some areas obstructed	Yes No obstacles

Source: Author

GFG - Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC- Dutch Hospital Courtyard, UWP- Urban Wetland Park



Figure 4:- Sufficient room for walking in DUB & three dimensional art works

Source: Author



Figure 5:- Obstacles in GFG

Source: Author



Figure 6:- Crowds on weekends and festival time- blocking space for walking

Source: Weekend FT, Volume 4/1082.

(b) Zones for sitting, standing and stay in UPS

The aspect of zone for sitting makes the users to stay for a long time and be engaged in activities of their preference and it is enhanced with comfortable seating arrangement. In the overall

seating arrangements defined spaces for staying should be offered and such should cater a wide range of possible personalized users. The said zones could make in different locations within the same UPS which could be utilize for sitting, viewing and many more functions. The seating arrangement should be provided with a shade from the harmful elements of the environment and necessary comfort for long hours of seating.

The figure 7 explains the present availability of seating at GFG. The zones have been provided for different activities at a distance. The possibilities of play, sit, dance, exercise, ride a pony, eat, watch the sunset or a couple in a lover's niche, watching a musical shows or even flying a kite sometime happens at the same time due to its zoning potential and thereby users are involved with their likes and dislikes at any given time at a distance as well as in their own private realm.

Table 5 - Opportunities for sitting facilities analysis of case studies

		GFG	DUB	DHC	UWP
a	Zones for sitting	Available	Available	Available (Limited)	Available (Limited)
b	Utilizing advantages to sit and view people and sunset	Available	Available	Not available	Available
c	Good place to sit -The options are available to chose	Available	Available	Limited	Limited
d	Benched for resting	Available	Available	Not available	Limited

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

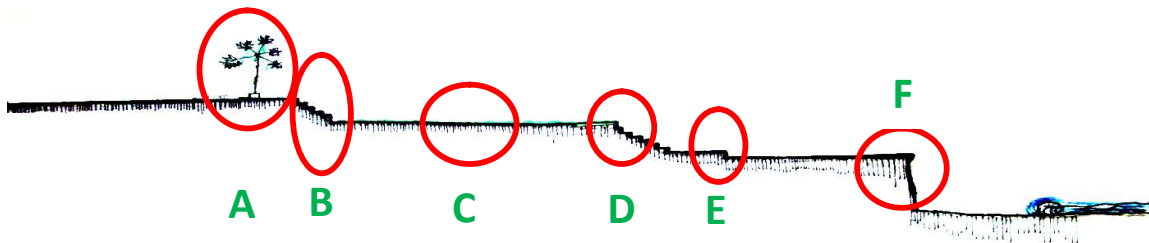


Figure 7:-Section through sitting areas of GFG.(Not to a scale)

Source: Author

The zones:

- A- The area around the trees as casual sitting zone.
- B- Steps and benches are allocated for sitting in this zone.(Figure 8)



Figure 8:- Sitting areas- ii in GFG.

Source: Author

C- The green area itself offers many sitting, leaning and sleeping facility to users while the others enjoy. (Figure 9)



Figure 9: Sitting areas- iii in GFG.
Source: Author

D- The steps allow clear view towards the sea - Width 4" riser and 12" thread. (Figure 10)



Figure 10: Sitting areas- iv, in GFG.
Source: Author

E- Tier provides benches to enjoy the sea view. (Figure 11)



Figure 11:- Sitting areas- v, in GFG.
Source: Author

F- The edge that people have created offers them good seating. (Figure 12)

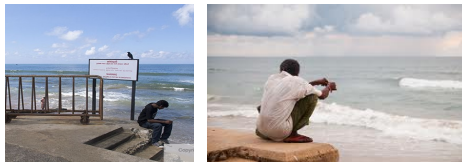


Figure 12:- Sitting areas -vi, in GFG.
Source: Author

(c) Good surface of walking in UPS

The aspect of good surfaces to walk merges the gap between the user and the UPS. The surfaces to walk have been explored in many UPS's, but not in all four samples of the research. The facility at DUB & GFG has explored grass, paved and sand surfaces as walking surfaces, thereby inviting many users as such provides option to be explored for different purposes as indicated in the Figure 13 & 14.



Figure13:-Different surface to walk at DUB.
Source: Author

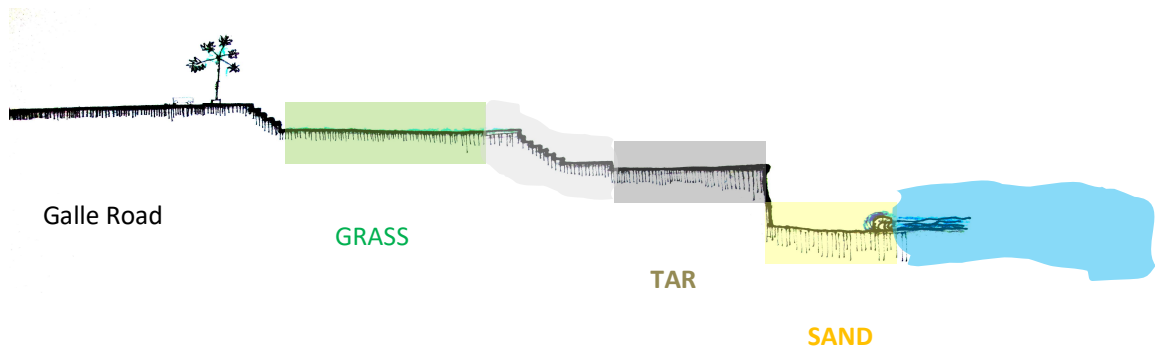


Figure14:-Different surface to walk at GFG.
Source: Author

(d) Areas to talk and listen in UPS

The aspect of 'talk and listen' in UPS's need quiet places where they can go and seek respite as high noise levels would not serve the purpose. The layout of street furniture that provides "talk pockets" or the opportunity to have a conversation among them allows the users to hang around for a long period of time. The research samples that has been considered has the facility at various degrees, but at DUB it has been maximized by its design itself with different styles of benches, outdoor and indoor spaces as indicated in Figure 15.



Figure 15:- Different areas in DUB
Source: Author

(e) Disable access in UPS

The aspect of accessibility for everyone to all the facilities is an essential quality to be considered in UPS in achieving a qualitative public life. There should be ramps (Figure 16), safety rails and other facilities provided along with other facilities like public toilets. In the four samples of this research though the ramps have been provided, the toilets have not been provided.

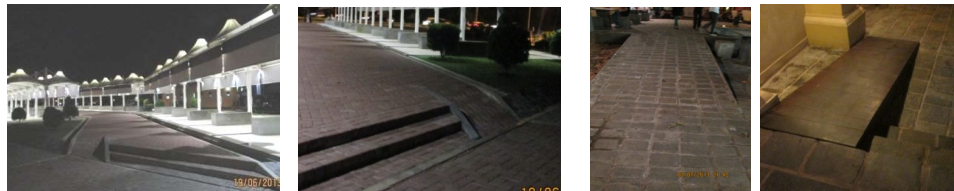


Figure 16:-Ramp facilities at DUB & DHC
Source: Author

(f) Areas for play, exercise and creativity

The aspect of play, exercise & creativity areas in UPS attracts many users and having such facility during the day and night makes the space more vibrant as shown in figure 17. The samples that were used for the research again have various degree of such aspect, but at GFG as illustrated in figure 18, have a scale much more than the other three samples.



Figure 17 - Night food market, Thursday and Friday special sales of plants, exhibitions in DUB
Source: www. Defense.lk



Figure 18:- Varying activity in GFG
Source: Author & studio U

4) Aspect of Delight

The aspect of delights consist of factors which consider (i) scale (ii) opportunity to enjoy the positive aspect of climate and (iii) positive sensory experiences, and all such have been analyzed in table 6. The four samples that have been used for this research have different scales and degrees of this aspect, but with an exceptional position at UWP.

This UPS is an effort arranges many things within limited small space that has been successful in certain areas, but failed in some areas. The water fountains and ponds replicating the Pollonaruwa ancient ponds with curved walkways alongside exotic landscape, seems to be that it does not merge with the location and its gives a feeling of overdone.



Figure 19:-Many features in a limited space
 Source: www.defence.lk,new.urbanwetlandpark

Table 6 - Analysis of aspects of delight

		GFG	DUB	DHC	UWP	
(i)	Scale	With the sea extension visually gives bigger scale approach.	Human scale	Human scale respond	Not to a proportion-ate scale	
(ii)	Opportunities to enjoy the positive aspects of climate					
	a	Sun / Shade	Though shading devises are not provided people use the space	Shading devises variety provided	Open verandahs give shade during day	Shading devises NOT provided
	b	Heat / Coolness	Too much of heat at day time as its open to direct sun , not usable, still some use the space	Too much of heat at day time, still some use the space	Verandahs provide shade and coolness to some extent	Too much of heat at day time as its open to direct sun , not usable
	c	Breeze	Good breeze	Good breeze	Good breeze at times	Breeze is blocked in the center
(iii)	Positive sensory experiences					
	a	Good design and detailing	Moderate User friendly	Available, but congesting with new buildings	Available	Available , not very user friendly , very arbitrary
	b	Good material	Moderate	Available	Available	Available
	c	Fine view	Available sea views and city	Available	Within the courtyard	Available but

			views		and street side	restricted within the park
	d	Trees, plants, water	Available but not many, suitable trees - not found	Available	Hard landscape	Available not adequate

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

5. Aspect of Protection in UPS

The aspect of protection is a factor that may not be decided by the UPS itself but to be discussed and considered with the immediate vicinity and many other socio economical issues. The concept of protection discusses (i) against traffic and accident / feeling safe (ii) against crime and violation / feeling secure and (iii) against unpleasant sense of experience / climatic conditions; leading to many issues outside the UPS to be considered in its analysis. The aspect of protection has not been considered for this research as all four samples are along and adjoining key main roads, well within the same geographical limitations and same socio political conditions.

6. Utility activities and Cleanliness of the UPS

The cleanliness of any space will create a different images against it is not being cleaned and UPS's are not exceptional to such circumstances. Thereby aspect of clean, maintained cared of UPS's is factor for achieving the QUPS. In this aspect of cleanliness all Public utility activities like gender based toilets, specially designed differently able toilets, ramp accesses, public telephones, drinking water, etc. all facilities shall be looked into. The four samples of this research have considered all these factors in various scales and degrees, but GFG has failed in terms of facilities to differently able persons and UWP in terms of public toilets. But all four samples are kept clean and tidy in terms of local standards.

PUBLIC LIFE IN URBAN PUBLIC SPACES

The relationship between public life and public space is dynamic, bonded together with continuous interactions among people. This fact is further strengthened in the writings of William H Whyte (The Social Life of Small Urban Spaces,1980) he stress that success of an UPS is measured not in graphical terms but in numbers of its users and simply say that success equals crowds and failures are spaces without people. Jane Jacobs emphasized that people and their reactions are the driving forces of a positive public space. (Death and Life of Great American Cities, 1961) The author further explained that people are motivated by social experiences; some enjoy watching other people, looking out for known people and some even enjoy being watched in public spaces help their experiences to facilitate. In nutshell it is a psychological fact that one feel safer when there are people around.

USER GROUPS IN URBAN PUBLIC SPACES

UPS's enable people of all ages, irrespective of the caste, creed, nationality or religion to access the facilities provided with any UPS and most of the time the accessibility does not warrant physical barriers and safety concerns. Gehl (1971) identifies four categories of users in public

spaces as (i) everyday users, (ii) passerby, (iii) recreational visitors and (iv) visitors to event. The following explains further,

- (a) Everyday users People who live and work in the area
 Visitors and customers
 People who visit the area from beyond
- (b) Passersby People pass through the area going or coming from other places
- (c) Recreational visitors People who visit the park for its beauty or for recreation.
- (d) Visitors to events People who come for special programs.

Table 7:- Categories of users in UPS

Location	Everyday users	Passersby	Recreational visitors	Visitors to events	Other
GFG	6/30 -walk	4/30	12/30	5/30	3/30
DUB	5/30	6/30	4/30	10/30	5/30 – plants
DHC	-	3/30	5/30	2/30	20/30 –Bear festival
UWP	2/30 - jog	2/30	5/30	-	

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

The natural and instinctive habits of people in UPS's consist of reading newspapers and books apart from few others would contemplate as part of relaxation and all these groups are called as routine activity groups. UPS's also acts as social space, especially for older people, who are at their retirement feels lonely due to less connectivity with the society, at large.

Gehl (1971) has also summarized three main features of good public space.

(a) A Meeting place

In a meeting place there are furnishings that encourage people to stop and chat with each other and in urban settings this means benches and tables to sit at, pillars to gather around and lean against and trees to provide shade.

(b) A Marketplace

This space is physically with shops and stalls, but also any place which a transaction of ideas or performance might occur becomes a marketplace in literally.

(c) A Thoroughfare

Public space needs to encourage people to move through it by foot or on bike, so it needs to have destinations on either end as well as along the route.

The said author reveals in the same book that the behavior patterns and the involvement of people when designing public spaces. The key principles of designing a UPS, the author highlights to cater (i) necessary activities, (ii) optional activities and (iii) social activities where public would impart an identity in UPS.

(i) Necessary activities

The activities that are explained as essential activities are more or less compulsory for day to day operations. It is said that these activities occurs throughout the year, in all conditions.

(ii) Optional activities

Optional activities occur only if there is a wish to do so and if time and place make it possible. These activities take place only under favorable exterior conditions such as the weather which includes walking, standing, sitting and sunbathing.

(iii) Social activities

These are the activities which depend on the presence of others in public spaces like children at play, greetings, conversations and communal activities can be most well-known social activities. These activities can also be named as "resultant" activities and all of these instances evolve from activities linked to the other two activity categories.



Figure 21:- Social activities in Galle face and DUB.
 Source: Author

Table 8 graphically indicates the relationship of the quality that matters for activities in a public space and rate of occurrence of outdoor activities with the quality of space.

Table 8:- Graphical relationship of quality of outdoor spaces and the rate of occurrence of outdoor activities

	Poor quality	Good quality
i) Necessary activities	●	●
ii) Optional Activities	●	●
iii) Social Activities	●	●

● Icon is the Indicator of amount of activity

Source: Gehl Jan, 1971

The learning process, in UPS's comes through social behavior which is observing how strangers look and behave. In depth observations of people in UPS's would be interesting as complete strangers are meeting and having discussion. The degree and scale of sociability also depends on facilities and activities provided by the UPS's for the users and it has been proved that there is a direct relationship to the friendliness of the space and the degree of sociability.

ROLE OF QUALITY IN UPS

The definition of quality may vary based on the individual but definitely it should have minimum technical standards / quality. In UPS the quality has its own impact over the emotional aspect of it users. Thereby in this research the emotional well being has been tested through the questionnaire. But the life evaluation in terms of UPS's has not been tested in this research due to its constraints attached with. The improvements in quality in any UPS attract considerable attention from the public as quality has become one of the main considerations of people. There are many characteristics in UPS's when achieving quality which has a direct relevance to the qualitative aspects of a public space.

One of the methods of measuring the quality would be the number of people using the public spaces and their impression on the space. There can be a standard set of design guide lines that can be implemented to achieve in all public spaces, where the basic requirements can be full filled and the rest can be an additional effort to make the particular public space more attractive.

USER BEHAVIOR ANALYSIS

In order to understand the users and their behavior in the UPS's the analysis was done on the respective UPS taking in to consideration the special times, activities of interest and gender category as key areas. When data was being collected, the counts were taken on a Wednesday to analyze the weekday scenario and on a Sunday to analyze the weekend scenario considering only at one point of the public space. A colour mark, identifiable indicator was issued when counting the user which was returned when they left the location (table 9). Total of 30 sample users was considered for the activity count (table 10) data analysis and some of the activity user's involvement was overlapping.

Table 9: -Numbers of users in UPS's on a week day and weekend

Location	Number of users						Loiter for more than 1 hour in the evening	
	WEEKDAY			WEEKEND			WEEKDAY	WEEKEND
	6AM to 8AM	11AM to 13PM	6PM to 8PM	6AM to 8AM	11AM to 13PM	6PM to 8PM	6PM to 8PM	6PM to 8PM
GFG	37	74	754	64	440	1254	325/754	525/1254
DUB	28	42	430	125	560	620	235/430	450/620
DHC	-	44	54	-	40	223	45/54	140/223
UWP	35	5	65	40	22	60	6/40	12/60

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

Table 10:- Activity counts during a weekend in UPS's

Location	Activities during a weekend – Saturday 6PM-8PM							
	Sitting	Standing	Walking	Eating	Talking	smoking	Reading	Watching
GFG	18/30	5/30	12/30	20/30	18/30	2/30	-	12/30
DUB	12/30	15/30	12/30	10/30	15/30	-	-	5/30
DHC	15/30	1/30	5/30	24/30	25/30	5/30	2/30	5/30

UWP	5/30	3/20	12/30	-	3/30	-	-	3/30
Percentage	41.6%	20%	34.2%	60%	50.8%	11.6%	6.6%	20.8%

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

The survey highlighted that

- 1) Most popular times of using UPS's were the evenings from 6 to 8 both weekdays and weekends – this is due to the time availability and climatic conditions. (Table 9)
- 2) The users loiter for more than one hour in some locations due to the available facilities at the places especially at GFG & DHC. (Table 9)
- 3) People using the UPS's enjoyed meals (60%), talking (50.8%) and sitting (41.6%) compared to other activities. Though availability of food has not been considered as an Attribute in the research model, it was evident that food is one of the best attractions to the UPS's. (Table 10)

Table 11: Gender and age group counts of users in UPS

Location	Gender		Age group		
	MALE	FEMALE	1-30	30-60	60-80
GFG	19/30	11/30	12	13	5
DUB	20/30	10/30	15	10	5
DHC	18/30	12/30	9	16	5
UWP	23/30	6/30	5	24	1

Source: Author

GFG-Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC-Dutch Hospital Courtyard, UWP-Urban Wetland Park

The survey highlights the fact that more males using these public spaces compared to female population (table 11) and in terms of age children to middle age groups were a popular category. It was understood males are still more socialized in Sri Lankan society and thereby a part and parcel of the public spaces.

Table 12: Reasons of using UPS

Location	Joy	Stress released	Overcome Sadness	Release anger	Feel Refresh	Other
GFG	13/25	2/25	2/25	1/25	3/25	4/25
DUB	10/25	1/25	-	-	11/25	3/25
DHC	13/25	12/25	-	-	-	-
UWP	10/25	-	-	-	-	15/25

Source: Author

GFG - Gale Face Green, DUB-Diyatha Uyana Battaramulla, DHC- Dutch Hospital Courtyard, UWP- Urban Wetland Park

Twenty five numbers of users were tested to examine the emotional experiences provided by the case studies for factors to celebrate joy, to release stress, to overcome sadness, to release anger, and poor in affection and make one self refreshed. (Table 12)

The survey highlighted users make use of the UPS mostly as pleasurable, stress released and for exercise. One reason could be the limited facilities available in some UPPS to attend to any other activity and the time limitations of spending time outdoors

CONCLUSION

The research of four samples revealed that the six attributes of (i) Site Selection, (ii) Formation, (iii) Comfort, (iv) Delight, (v) Protection and (vi) Cleanliness are factors that has impacted on the local conditions, though the degree of applicability would have had differ within a margin. Further all four samples are occupied by public in large numbers and the qualitative aspects discussed in detail have made the public to be present and enjoy the facilities.

Urban design is finally meant for the people and the designers should fulfill the demands of the users and when planning UPSS higher priority should be given to comfort level, making space delight and provide protection and to make a sense of the space. The improvements to four samples are still in existence and all future development should consider the attributes much critically and sensitively in implementing Urban Public Spaces.

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LIST OF ABBREVIATIONS

UPS	Urban Public Space
UPL	Urban Public Life
LOS	Left Over Spaces
QOL	Quality Of Life
GFG	Galle Face Green
UWP	Urban Wetland Park
DHC	Dutch Hospital Courtyard
DUB	Diyatha Uyana Battaramulla
QUPS	Quality of Urban Public Space