STUDENTS' INFORMAL SPACES IN UNIVERSITIES OF SRI LANKA. A STUDY ON THEIR USAGE AND FUNCTION.
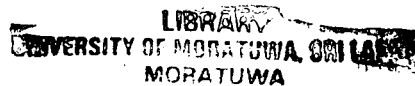
Dissertation presented to the

Faculty of Architecture

University of Moratuwa.

For the M.Sc. (Arch.) Final Examination.
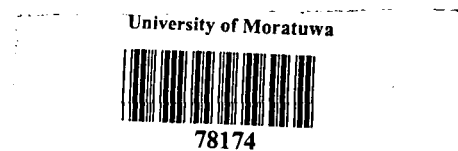
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March 2002.

ABSTRACT

The Sri Lankan community likes to live in-groups together (informal gathering) in a free and open environment quality which helped to have free movements activities.

The informal space is a pattern of behaviour, which can be varied; a space which encourages such behaviour and is flexible in usage.

Learning is an activity where informal space requirement is greater. Also, depending on the type of learning, the informal education, affective learning has to take place at peak level in university education. For such kind of learning to take place effectively, students must be able to maintain their informal spaces.

A pattern of events that takes place in an affective learning space has a strong similarity to the pattern that takes place in an informal space in a university. In fact effective learning primarily takes place in informal spaces such as, lobbies, courtyards, corridors, canteens, common rooms and student centers in a university. Therefore we may conclude that informal spaces are the effective leaning specs in an university.

Basically there are two types of Sri Lankan University establishments. These are institutions totally designed for purposes of a university and other institutions which have later developed to university status. In these situations, created informal spaces, which are popularly used are neglected.

Informal spaces create more and more opportunities for students' behaviour and living patterns.

Therefore, informal space is an essential part of a design, which contributes to both aesthetical and functional aspects.

ACKNOWLEDGEMENT

My sincere gratitude is due to many who contributed in writing this dissertation.

First and fore most, I wish to express my deep indebtedness to Dr. S. Manawadu senior lecturer, Department of Architecture, University of Moratuwa, for his advise, generous constructive direction and continuing contribution throughout the project in spite of his busy schedules.

I also take this opportunity to thank to Architects, Vasana wijesinghe, Varuna de Silva for giving incisive comments and valuable criticism, which helped me and gave pace to develop my thoughts and approach to this study.

I am profoundly grateful to Dr. R. Emmanuel the Senior Lecturer in the Department of Architecture, University of Moratuwa for his valuable guidance given at the beginning of the study.

I wish to express my deep appreciation to Mr R. Rajapasha Deputy Vices Chancellor, University of Ruhuna, and Mrs. N. Abayadeera, Senior Lecturer at University of Sri Jayawardenapura for the assistance given to me.

My warmest thanks go to Mr. S. T. Abayadeera, Mrs. D. Weerasooriya and to my friends, Chamal, Shamali, Meyuru, Bashini, for the constant support extended to me in numerous ways, during the study.

Last but not least I wish to express my greatest gratitude to my brother who has supported me and encouraged me in all my activities.

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INTRODUCTION

INTRODUCTION

(i) TOPIC EXPLANATION

The basic goal of education should be the development of responsible and loyal citizens who will be able to contribute meaningfully to the development of a country through a well-balanced general education.

Sri Lanka can boast of a number of universities scattered all over the country. The most recent addition to this number are provincial Universities.

Basically, there are two kinds of university establishments. Some are evidently designed as complete universities. While other institutions commence at Tertiary level and are later developed in to universities.

The basic idea of a university, according to Dr. L. S. R. Perera,

"... Is to make integrated balanced men and women like parts of human anatomy".

(Dr. L. S. R. Perera, 1986)

For that purpose it is necessary to preserve, transmit and expand knowledge. This can be achieved through teaching, research and informal education. The student is expected to experience all branches of learning and arrive at a truth so as to be prepared to be a citizen.

"...University cannot be simply concerned with the accumulation of knowledge, it must be the cultivation of truth, goodness and beauty of social quality and freedom."

(V. H.H. Green, 1960, p.319)

Universities are sanctuaries of the intellectual life of a country and those entering them have different ideas on various topics. They are the wellsprings of national awakening.

It is upon the involvement of successive generations of students that the life and vitality of the community will depend. A properly designed environment could generate the appropriate environment quality that would facilitate learning. Thus the required environment quality to facilitate university education would vary from active and a live environment to attentive environment.

> **"...University is a public institutional setting, which aims to develop in students, the ability to undertake independent studying and bring judgment to bear on their own works."**
>
> (University of Stering, 1986, p. 11)

Thus in a university, a student has to be self motivated and self confident, having a firm sense of him own identity to do such learning comfortably and efficiently. Therefore the degree of the need for informal spaces in universities is higher..

The informal space is hence very important for university education, because it develops the intelligence of the student. Informal spaces primarily take place in communal spaces such as lobbies, pathways, open spaces, terraces, courtyards, canteens and student centers.

There are special features that are necessary for the formation of informal spaces. These are location, enclosure, continuity, landscape and adaptability.

This connection between informal spaces and university environments is termed as 'co-relation' in this study.

(ii) PURPOSE OF THE STUDY

A university environment should primarily cater to affective learning. As affective learning is defined, learning attitudes and values makes students to be creative characters. Affective learning primarily takes place in informal spaces such as common areas.

It is the lack of informal spaces that caused on unfortunate situation in the universities in Sri Lanka. The lack of informal spaces can be directly attributed to the failure of psychological satisfaction in students. Such failures resulted in the formation alien of the base for planned and unplanned universities.

In a university, informal spaces are used for various purposes such as political activities in the form of unions; discussions about welfare activities, study activities, student relaxation and other social interaction such as recreational activities of music, drama and exhibitions.

Informal space designing is very important for future needs. In most of the buildings space wastage can be identified due to functional failures and unplanned layouts. Therefore, it is important to enlighten designers on these issues on optimum space usage, popular places and neglected areas in the existing context of a university environment.

(iii) INTENTION OF THE STUDY

Considering these issues, an attempt is made to identify the reasons behind this variety of usage of informal spaces in universities. It will also help to create informal spaces and modify those spaces for future university design in Sri Lanka. By focusing on the identification of spaces in terms of functionality, spiritual qualities of informal spaces and students needs. It is hoped to enhance this further.

(iv) SCOPE AND LIMITATION

Spaces could be identified as informal spaces in a university. Even though informal education should be encouraged in classrooms and laboratories, the study does not examine these types of spaces, because predominating activity in such spaces is not informal education. The study, examines only the informal spaces related to the academic facilities and not the informal spaces related to residential facilities of the universities.

Further, the study examines only the selected informal spaces according to their popularity under each category of informal spaces in these case studies. specially, there are three kinds of student informal spaces in universities.

- Informal spaces designed for congregating; actually used, such as canteens

- Informal spaces not designed; but, actually used by student, such as pathways and terraces.

- Informal spaces designed for congregating; but, not used by student, such as lobbies.

Therefore this is an attempt to identify the reasons behind this variety of usage of informal spaces in universities.

(v) METHODOLOGY

At the start, the study examines the idea of the university education system, university students and their behaviour to identify the informal spaces in a university. In this part of the study, the importance of informal spaces on education and how informal spaces enhance university education will be studied. The common behavioural patterns of students that will help in designing for informal spaces will also be identified.

In the second part of the examination a number of universities in Sri Lanka will be identified in terms of their various informal spaces design concepts. For this purpose three types of universities will be selected.

1. Designed for university - Basis of a "designed" University
    eg. University of Ruhuna

2. "Vocational and Technical Basis"
    eg. University of Moratuwa

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3.   "Social and religious basis" – commencement as a religious educational institution.

    eg.   University of Sri Jayawardanapura

Firstly, the study is focused on the layout survey and on site, through the photographic survey and observation survey with informal discussions under previously mentioned three kinds of university environment. Finally, a comparative analysis of the role and function of the students' informal spaces will be studied to obtain the result on the issues as well as architecturally, focusing on the modification and alternation to their existing environments.
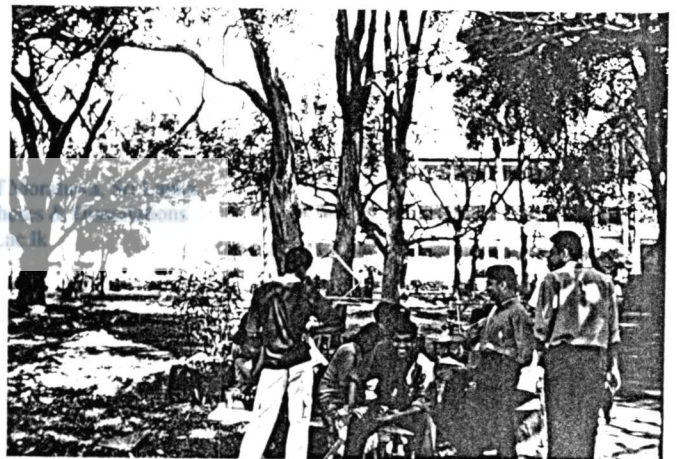
CHAPTER ONE

THE UNIVERSITY EDUCATION SYSTEM, STUDENT BEHAVIOUR AND
ROLE OF THE INFORMAL SPACES.

CHAPTER 01 - THE UNIVERSITY EDUCATION SYSTEM, STUDENT BEHAVIOUR AND ROLE OF THE INFORMAL SPACES.

University education is basically defined as a search for truth for universal humans. Affective learning is mostly used in education in universities and develops attitudes and values of students. Attitudes and values are mainly acquired through discussions using informal spaces in the university. The study of university student behaviour pattern is very important for the design of informal spaces.

Therefore, in this chapter it is hoped to examine the objectives of university education with emphasis on the aspect of student behaviour patterns in relation to informal spaces for community activities.

1.1 UNIVERSITY EDUCATION SYSTEM.

1.1.1 Development of education process.

The Sri Lankan education system dates back to the past especially up to the establishment of monastic education in Sri Lanka. That type of educational system was developed because the main task at that time was providing education especially for the monks. They were the most knowledgeable category of people in that society, to handle literary work. Although the Portuguese and Dutch rule had made various changes in the Sri Lankan education system, the British re-organized the education structure to suit their needs. They realized the importance of a proper educational program for their business and administrative activities. Their educational motives were handled to suit the socio-economic aspects prevalent at that time.

The Sri Lankan higher educational system was geared in the correct way after the establishment of the Ceylon Law College in 1870. Thereafter in order to fulfil the need of a university education system they established the Ceylon University College in 1921.

1.1.2 Aims of education

Education means acquiring knowledge. The aim of education should be to apply that knowledge to develop responsible and loyal citizens. They should be able to contribute meaningfully to the development of a country through a well-balanced general education,

Lord Buddha held the view that,

".... Initiation to a higher life is the object of education".

(Radhakrishna, 1956, P. 126)

Therefore education is a search for integration, for wholeness. According to Tagore,

"....The main aims of education is to import freedom, active communion with native and creative expression."

(R. Silverlingam, 1961, P.41)

Thus, the aim of education is to produce integrated men and women who are free of fear. This brings independence without ruthlessness, without contempt for another and could be considered as one of the most important aspects of life.

1.1.3 Learning and types of learning

Gathering of knowledge is defined as learning. All of man's special skills, attitudes, beliefs and prejudices are the product of learning process. The Encyclopedia Britannica defines learning as,

"....Any relatively permanent change in behaviour resulting from past experience...".

(P. Warren, P.859)

Thus in broadly defined terms, learning could be considered as a process which results in change in the ways of individuals responding to the result of previous experiences.

Learning according to Benjamin S. Bloom (1971) is three types namely; ie. Cognitive, Psychomotor and Affective. C.W.B. Green describes the goals of the cognitive domain as

" ....comprehension, application, analysis, synthesis and evaluation..".

<div align="right">(C. W. B. Green, 1934)</div>

The cognitive learning is associated with imparting and acquiring facts and figures, and may be most suitable in technical colleges but not the most important type of learning, which should take place at a university.

Learning by practising and experience is known as the psychomotor learning. Prof. Lisanio R. Orlandi categorises these skills as research and critical thinking. Research and critical thinking normally happens at much higher levels in university education. Affective learning develops attitudes and values of students. It is similar to informal education.
Architect,V. S. Nammuni says,

"....**Affective learning is** thus best understood as the asp**ect of education which imparts the sub culture appropr**iate to the intended activity."

<div align="right">(V. S. Nammuni, 1977)</div>

Affective learning could be considered as the development of appropriate motivation and personal character within individuals. In affective education the attempt is to allow students to acquire profound underlying democratic traits through a rational intellectual process. Attitudinal change, which has come through rational means, becomes the goal.

1.1.4 The idea of University education

The term university indicates a university, which means that, it is not reserved for one culture, one nationality, one community or one country, but is open to all the communities of the world.

The university is bound with a long historical background and it is the focal point for the development of a country in any part of the world.

<div align="center">3</div>

Every university has a certain representation in the development process and does not belong to one particular kind of people or group. It should be a universal institution for the whole world. G.L. Brook in his Book "Modern University" indicates,

> **"....The main goal of a University is to preserve, transmit and expand knowledge. This is achieved through teaching researching and extensive work."**
>
> (G. L. Brook, P. 43)

As it was said before, the acquisition of knowledge is very much necessary in university life. It is not enough continuing that process only within the time period, in which the student is in the university. Acquisition of knowledge should continue even after the student has left the university. Making the student familiar with that process is done by the university within the university life. In that regard the author agrees with Henry Emerson,

> **"....A graduate of yesterday who stops learning today will be uneducated tomorrow.."**
>
> (H. N. Casson, 1975, P.71)

The International Council on the future of university, writing says that ;

> **"....The primary purpose of the university is to transmit intellectual discipline and seek truth".**
>
> (The international council, 1973)

As Tagore says,

> **"....What are needed to day is that education of the whole man, physical mental, intellectual and spiritual..."**
>
> (R. Sivalingam, 1961,P.41)

Michal D. Stephens and Gorden W. Rodrick say that ,

> **".... University exist first to promote through reflection and research the life of mind; second to transmit high culture to each generation".**
>
> (Michal D. Stephens and Gorden W. Rodrick, 1975, P.04)

Thus, different scholars have defined the aims of university in various ways. Therefore, it can be said that the aim of university education is to make integrated and balanced men and women with humane qualities to be good citizens. Learning as a whole would help in achieving this goal.

1.1.5 Affective learning in University Education

Affective leaning was the most emphasized in education of universities. Many educationalists have emphasized that mere lecturing; tutorial classes and laboratory experiment are not much productive in providing atmosphere for acquiring attitudes and values. Therefore affective learning should overcome cognitive and psychomotor learning.

As experts of sensitive fields of human behavior, students passing out from the university should play the role of "leaders of thought" They should assist in moulding society's social, economical, political, and historical values and attitudes in the right direction for the sole purpose of nurturing society. As Jawaharlal Nehru says,

"....The University conditions and prepares the mind of students for the vicissitudes of life".

(R. Abesekara, 1994, p.02)

Therefore the university must commit it self to make its students to be good citizens. So that, their own attitudes of life and mode of behaviour will be an example to the rest of the community. Thus, it can be said, that affective learning is very important in university education.

For this purpose, thus the physical environment for learning in a university should primarily cater to affective learning and it could be formulated on a hierarchical order of levels of learning. The first level of affective learning second levels of affective learning and cognitive learning or psychomotor learning and third level of affective learning and cognitive learning and psychomotor learning.

Also, as described in the hierarchical order of different forms of learning, affective learning takes place in all its levels. Attitudes and values are mainly acquired through discussions. These discussions occur in various forms in the university and are similar to informal education.

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1.2 UNIVERSITY STUDENTS AND THEIR BEHAVIOUR

1.2.1 The University student

Considering the university students in the world, the Sri Lankan university student has his own characteristics. Unlike in other countries students in Sri Lanka receive free education during their primary and secondary school years , and spend much effort to enter the universities which are also conducted under the free education system. Due to lack of sufficient universities in Sri Lanka, entering the university has become very competitive and students have to obtain very high averages to enter the universities. In developed countries there are higher educational institutions equivalent to universities when students can register on a fee – levying basis. However in Sri Lanka we do not have such a facility hence the high rate of competition to enter the few universities available. Most Sri Lankan, university students come from middle-income families of various regions. They have their own life style and behaviour patterns according to their families and villages. Culture is very important and student interpretation is dependant on their particular background, unlike in other western countries, which do not emphasize on this aspect.

Students have to leave their homes, often for the first time and find their way in a university far away from their family environment. This proves to be very difficult, to make up their minds to fit in psychologically into a new society while studying, unless they are provided with an appropriate environment for living in these new surroundings.

The Sri Lankan university student is a very talented and intelligent student. This particular talented student steps forward into the universities with so many objectives. In fact the exact duty of the university should be to make integrated and balanced men and women with human qualities to be good citizens. In other worlds the university student should stand out as very thoughtful and creative personalities among others in the society. It is important to know how the secondary and technical student differs from the university student.

This will help us to understand the university student. B. Russel explained thus;

"....The students in secondary schools do mere studying, but not learning as a whole".

(. B. Russel,1980, P. 110)

Ibid said,

"'....The passive acceptance of the teacher's wisdom is common in secondary education."

<div align="right">(Ibid,P. 52)</div>

Therefore, it can be said that the secondary education student is more associated with cognitive learning. This involves no effort in independent thought. On the other hand, students at the age of their secondary education are not mature enough to develop attitudes and values from what they learn and affective learning does not happen much in secondary education. But in a University, a student perceives learning as a whole. He is supposed to be a fully integrated, balanced person by learning in a university. The other difference is that, Dr. L.S. R. Perera explained,

"..... in a university both student and teacher learns in mutual discussions".

<div align="right">(Dr. L.S. R. Perera, 1986)</div>

1.2.2 Student behaviour

Traditionally man has been very much aware of his relationship to the rest of nature. He has been frequently concerned with maintaining the stability of his environment and has attempted to act in harmony with it. Some of his forms, elements and symbols include those of his dwelling place, especially in traditional social systems. Amos Rapport further explains thus,

"....An understanding of behaviour pattern including desires, motivations and feelings is essential to the understanding of built form , since built form ie the physical embodiment of these patterns; and second in the sense that forms; once built , affect behaviour and the way of life".

<div align="right">(A. Rapoport , 1969)</div>

The early community liked living in groups together in a free and open environment quality which helped to have free movements activities, eg. In the early days 'pola' they changed their goods while gathering around the tree in an informal gathering.

In the same manner they also participated in informal discussion. For instance listening to an orator under a tree with maximum attention. Therefore, learning is not mere acquisition of information, but formation of attitudes and values, which is known as affective learning. Affective learning, is very important in university education because it helps to develop the intelligence of students. The university students were encouraged to have intellectual discussions among peers as well as teachers inorder to acquire values and attitudes of the society.
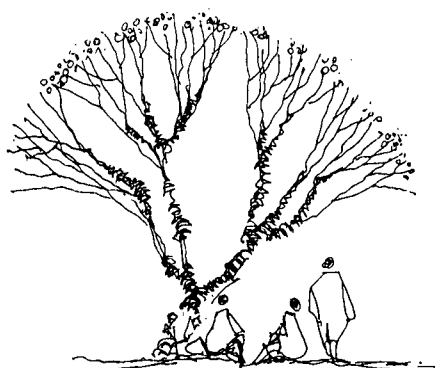
Considering the behaviour pattern of the Sri Lankan university, he or she is very busy and has to work hard to gain his university education. Therefore he needs relaxation, because he is subjected to stress in his day-to-day life and most students are extroverted and they come close to the environment.

Fig. 01 – Informal activity with nature.

According to psychologists; there are four basic categories that students are pigeonholed into, these groups are sanguine type, choleric type, phlegmatic type and melancholic type. Within each of these groups; the degree of extrovertness or introvertness and degree of activeness may vary according to the individual.

The identified behaviroual pattern of categories of students help in determining the spatial qualities that are required by each group.

According to the categorization, sanguine type students are extroverts who are active. Therefore they will satisfy their needs in an open and dynamic environment, which heightens the competitiveness and motivational levels.

Students with choleric type personality will be comfortable in an amiable and assuaging environment that provides a support to heighten their arousal levels and provide opportunities for them to be sociable and cheerful and extrovert, but they are passive.

On the other hand, phlegmatic type students due to their introvert and active personal qualities will prefer a warm and cosy environment in achieving their inner satisfaction.

Melanchdic type students, who are introverts with bigger personal space bubbles around them, will protect and maintain their personal spaces in a serene and secluded environment, that will make them feel secure and supported to acquire attitudes and values.

Attitudes and values are mainly acquired through discussion. These discussions occur in various forms in the university. These general forms of discussions that occur are as follows.

- Discussions between students and books or discussions with his own mind, where total learning occurs. Thus for acquiring attitudes and values there must be discussions.

- Discussion between students and teachers, where affective learning & cognitive learning or psychomotor learning occurs.

- Peer group discussions, where affective learning occurs.

For discussions to take place there must be relevant spaces, these spaces could be formal and informal. The results of the discussions would depend largely on the environment created by these spaces.

1.3   INFORMAL SPACES IN A UNIVERSITY

1.3.1   Man – Space Integration

Man - space integration begins at the moment he grasps the hidden meaning of man and space. If the two entities are tallied the interaction becomes a personal affair. After personalization of the space there comes a moment of realization of space. At that moment he is in perfect union, perfect harmony with the space. The fact is, C. Alexander said,

"....A person is so far formed by his surroundings, that his state of harmony depends entirely on his harmony with is surroundings"

<div align="right">(C. Alexander, 1970)</div>

And again:

"....A man is alive when he is whole hearted, true to himself, true to his own inner forces, and able to act freely according to the nature of the situation he is in."

<div align="right">(C. Alexander, 1970)</div>

1.3.2 Form and shape

Perception of space can be quantitative and qualitative. Quantitative facts which attributes for space can be categorized as voids, volumes, textures. Form and shape and geometrical patterns. They can be measured and are almost static.

In more simplistic terms, form is the image and shaping which gives it identity, making it personal. Architect V.S. Nammuni described, it thus;

"....Essence is form, details is the shape, what we must have is order; completeness in the pattern of the essence of a thing in the form of architecture, allowing the shape to absorb dissent, variety, thus giving individuality interest".

<div align="right">(V.S. Nammuni, 1993)</div>

In space making, form and shape should be given equal weightage, emphasizing their true values rather than personal tastes of the designer. Architecture should by no means encourage image making or shape building. No matter how different space is perceived and experienced individually, quantitative, elements should be the source for generating qualitative aspects.

Qualitative aspects are aroused by the sensations. the sensations give quantitative physical aspects arouse qualitative aspects. They are flexible and subjective and depends on the individuality of the person, the observer, the receiver, they are non – physical and cannot be seen.

1.3.3 Space and place

Spaces exist around us , likewise we experience the sky, sea , mountains and valleys, open space, enclosures, built space and un built space. In which the spatial entity can be quantified. At the same time, E. Ralph said,

".... Space is amorphorous and intangible and not an entity that can be directly described and analyzed".

(E. Ralph, 1975)

A place is multi – spatial. A place originates by accumulation of spaces within human experience deserving a total spatial entity. As Ralph E. described,

".... Though space provides the context for places but devices its meaning from particular places."

(E. Ralph, 1975)

A place is generally identified by a particular location or an area concealed in its physical context.

The space of spirituality is defined as the space we experience through our true-life pattern. It has been said that within the spiritual space, the existential space is created in the absolute way, by symbols and meanings of the common cultural values,

" .....Different people may have different images of the environment according to their values and attitudes and the 'role' they play in the society."

(Cauter, 1977)

The properties of the images that people present to their environment may be influenced by the strong character of he space and make them feel that they experience and belong to the same place.

1.3.4 The elements of space

Man needs space for his activities. His pattern of behaviour depends on the space available to him. For instance a person entering and unknown space such as a room will first seek to establish his where about and them set about his activities after he has built –up an awareness of his location and other attributes.

Man's interest in space has all ways been an important to exceptive help him relate his activities to the environment around him. And to bring meaning and order to various events and actions. Different spaces have held different meanings to the concept of space. The sky, horizon and natural elements were common to all. However enclosure and spaces had to be created or organized to give meaning and continuity to space as seen by the individual who created or designed the space in relations to his activity.

At all times people relate their activities to spaces. The use of pathways for example has a relation to certain elements which we may consider as follows;

1. A centre

2. An enclosure

3. Continuity
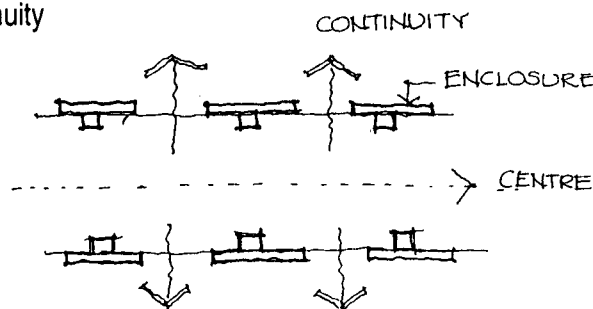
Fig. 02 – Space created – The Center, Enclosure, Continuity

In order to understand space it is important to signify the concept of centre , as the reference point of space. It is a pint towards which man's interest in directed.

"….It is the point where he acquires position as a thinking being in space, the point where he lingers and lives in the space."

(Shultz , ON 1971 : 19)

In studying spaces we should look at the quantitative aspects as well as the qualitative aspect. The former is a measurement of the space under consideration while the latter signifies the relationship to user experience.

The limited size of known places naturally goes together with a centralized form. A centralized form primarily means concentration. According to Alexander C said,

"....A public space without a centre is quite   likely to stay empty"

<div align="right">(Alexander C , 1979)</div>

A space should have it's demarcations or limits or boundaries for man to perceive and understand. The centre of a space carries the notion of enclosure with it.

Territory provides the physical enclosure with the use of elements such as walls, floors, roof fenestration and trees. This physical enclosure, given meaning to spatial entities called places.

The enclosure divides the space into two, there by the sense of 'here and there', 'inside and outside', 'this and that', are created. Continuity bridges the gap of these two spaces. The outside space is mainly divided in two categories, the positive space and negative space.

The importance of "orientation' is highly felt as the level of used 'space' is extended.

By means of spatial attributes man perceives the space and grasps relationship with the space provided. As he develops relationship with space he orientates himself with his environment.

"Norrberg Shulft shows,

" .... That man grasp relations between the objects within his used space, in a form an elementary organization that consisted of centre enclosure , continuity" .

<div align="right">(Nornberg S., 1971, P - 18)</div>

The informal spaces can be different types certain facilities for the community may be designed conspicuously to indicate their importance, while others may be in the form, of quiet retreats.

Yet the 'center' and 'enclosure' aspect should be made obvious in order to evoke the sense of place.

1.3.5 Usage of informal spaces in university

Identifying the main university activities and its spaces and putting them into hierarchical order is much easier for zoning the activities such as academic zone, administration zone, and residential zone. Each identified activity must have identical separation but it should not be isolated. It must have a proper connection without any obstruction to its linkage. Administration works, faculties, and the student social facilities must have that identical separation without isolating each other completely. It is also important to identify the formal and informal activity spaces such as, specialized teaching spaces, general teaching spaces, communal spaces, canteen and activity centers ie. Theater, library, sports center and other group centers such as student union, academic staff center, other staff centers.

Residential accommodation and circulation spaces such as pathways and lobbies should also be borne in mind.

The qualities of "formal" are a pattern of behaviour or conduct predetermined by custom or design, a space, which encourages. Such behaviour is as important as much as lecture halls, classrooms and laboratories for a successful university education.

The qualities of "informal" are a pattern of behaviour, which can be varied. A space, which encourages such behaviour and is flexible in usage. A place in communal spaces such as lobbies, corridors, courtyards terraces and student centers is an example.

As mentioned previously affective learning under "informal" spaces in a university environment are communal spaces and the patterns of events that keep on happening in these spaces are related to communal activities. Therefore articulation of the informal education spaces; paths which led to these spaces and the area or domains where these places are located enable the enhancement of the communal spirit in the university. Formal education occurs in classrooms and laboratories; it is not the predominate activity in such spaces as in communal spaces.

A space has a strong character when it is generated from an appropriate pattern of events. In the case of informal spaces in university environment the pattern that is related to communal

activities of users, are appropriate pattern of events. Thus the success of these spaces depends upon their ability to motivate people in coming together. The motivation may be a specific experience given by the space it self, variety of activities it housed and the people it attracted. In fact when informal learning space becomes a place where people linger and where people feel that they are at home, we could say that the space is appropriate.

Affective learning takes place at all it levels. Thus, it is obvious that the university should be primarily a center for affective learning spaces to achieve its aims and be close to the informal spaces for affective learning to occur, student must engage in discussions. For this he must predominantly feel at ease, comfortable and secure.

A well-fed student, whose attention is more concerned on his problem of psychological insecurity, cannot feel free to engage in discussions. This problem could be overcome if he is able to protect his personal space bubbles as personal space contributes to psychological satisfaction of the person. Therefore, it is important to provide opportunities for students to protect their personal spaces within the universities to pursue informal learning as a whole. Thus, there is a correlation between personal space and learning. Therefore, it is very important that the universities should not only facilitate for cognitive and psychomotor learning spaces but should also cater to the personal space needs of students to facilitate informal learning spaces.

In a university where primarily informal education takes place, the environment should provoke the students' minds for discussions for educational, leisure and political purposes. In addition to this, the students must have a sense of security and intimacy. Therefore, it is essential that an active and alive environment is provided for spaces in the university.

Intimacy in general means 'close friendship' or 'closeness' and being close to one's heart. Intimacy in environment means in general, an environment in which one should feel that he is 'close' to the environment. It should not impose, threaten or terrify him, but be in sympathy and in association with him. Thus the environment needs to be non – dominating and non – hostile. It is not unfair to claim that small clustered spaces are more 'intimate' than an open ground. This does not imply that he is imprisoned, but suggests a sense of privacy. It has also been found that 'intimacy' is also related to smaller groups than larger groups and the highest degree

of 'intimacy' happens among two people. Intimacy is the spatial hierarchy where the spaces in a university are arranged in a sequence, which corresponds to their degree of privacy.

The sense of a place varies according to the person who experiences circumstances of the place his intentions and personalities. In the built environment, the qualities, which enhance a sense of intimacy, should process common physical and geometrical characteristics. Informal spaces in the university environment must be engaged with it's landscape, not only for increasing it's beauty. The landscape improves the meaning of certain university buildings. It also helps student relaxation, since he his subjected to stress in day-to-day activities.

Relaxation could be mainly divided in two parts, as physical relaxation and mental relaxation. Universities provide different places and various facilities in order to feel relaxed. Informal spaces for relaxation can be varied from their common rooms, terraces, court yards, theatre and canteen.

In the university, the topological conditions can be used to improve the natural environment for student activities. It is also helpful to create an idea of "Learning with the nature" among the students. Most of the Eastern traditional university education is based on the fact , that they used shade trees and open spaces for university activities rather than the inside of the building University students prefer to use landscape as their meeting place for discussing the subject as well as for their social activities.

Lobbies, paths and walkways give the real shape of the university. It connects buildings and the spaces; properly arranged paths and walkways help to make university informal activities flow smoothly.

Terraces and open spaces also provide the student space for their social and educational activities and courtyards provide agreeable surroundings for informal gathering and activities. Hence we find that the formal spaces of academic are formed around the informal spaces in the university.

We have examined the importance of informal spaces in the University which enhances learning and the development of the student mind. We can therefore, conclude that in designing in a university or any other institution of higher informal learning spaces play a vital role.

CHAPTER TWO

EXAMINATION OF STUDENTS' INFORMAL SPACES IN UNIVERSITY.

CHAPTER 02 - EXAMINATION OF STUDENTS' INFORMAL SPACES IN UNIVERSITY

The informal space is very important for university education, because it helps to develop the intelligence of the student. Informal spaces primarily take place in communal spaces such as lobbies, pathways, canteens, courtyards and student centers.

In these case studies a variety of usage of informal spaces are identified through observation with informal discussions, photographic survey, and layout study on site.

They are categorized as follows,

1. Informal space designed for congregating; actually used
2. Informal space not designed; but actually used by students
3. Informal space designed for congregating; but not used by students.

I have tried to consider various issues and tried to identify the reasons behind this variety of usage of informal spaces in selected universities. Thus in every case study, the selected informal spaces under each category are examined on the basis of their articulation of layout, informal spaces with landscaping and user experience.

Basically, there are two kinds of University establishment. There are some that have been totally designed for established Universities and others for other types of institution, which have later been up graded to University status.

The various design concepts in three Universities selected from among the universities in Sri Lankan have been identified for a study of the functionality of student informal spaces in the Universities. The studies are as follows;

1. Designed for University
   Eg ; University of Ruhuna

2.   Vocational and Technical Basis (Upgraded instutions)

        Eg. University of Moratuwa

3.   Social and religious basis (Educational institution)

        Eg. University of Sri Jayawardanapura

CASE STUDIES.

2.1   UNIVERSITY OF SRI JAYAWARDANAPURA

2.1.1   Back ground study

The University of Sri Jayawardanapura is one among thirteen National Universities in Sri Lanka. It was founded upon the tenet *"Vijja Uppatatam Settua*; of things that arise knowledge is the greatest". With the noble purpose of awakening of indigenous knowledge and to promote national development. The birth place of this great educational center of the nation was the *Viddyodaya Pirivena at Maligakanda*, which was founded by Reverend *Hikkaduwe Sri Sumangala* Thero, in 1883.

In 1959; by the University act No 45 of 1958, this *Pirivena* was given university status and named *Vidyodaya University* of Ceylon. With this transformation, it was geographically shifted from *Maligakanda* to its present location. In 1978 this center of higher learning was renamed as the University of Sri Jayawardenapura, to comply with the name of the newly established administrative capital of Sri Lanka.
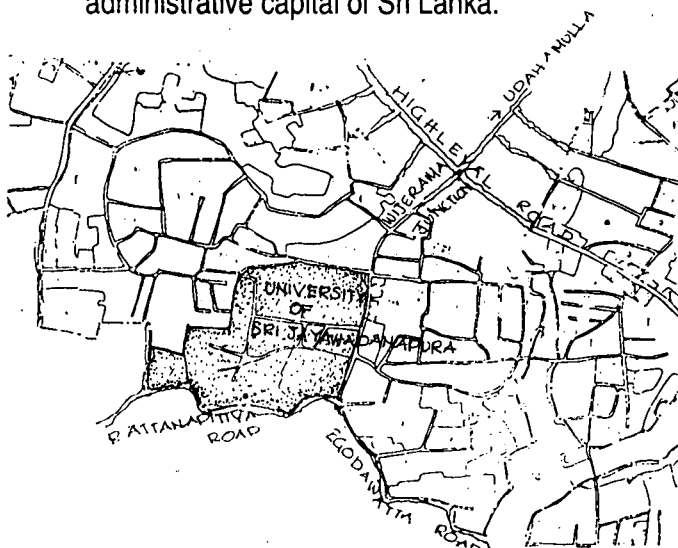
The University is situated at Nugegoda town, 13 km off Colombo city. The site comprises 55 acres of beautiful flat land. The access to the University is from the surrounding suburb towns such as Nugegoda, Maharagama and Boralesgamuwa.

Fig. 03 – Location of University of Sri- Jayawardanapura.

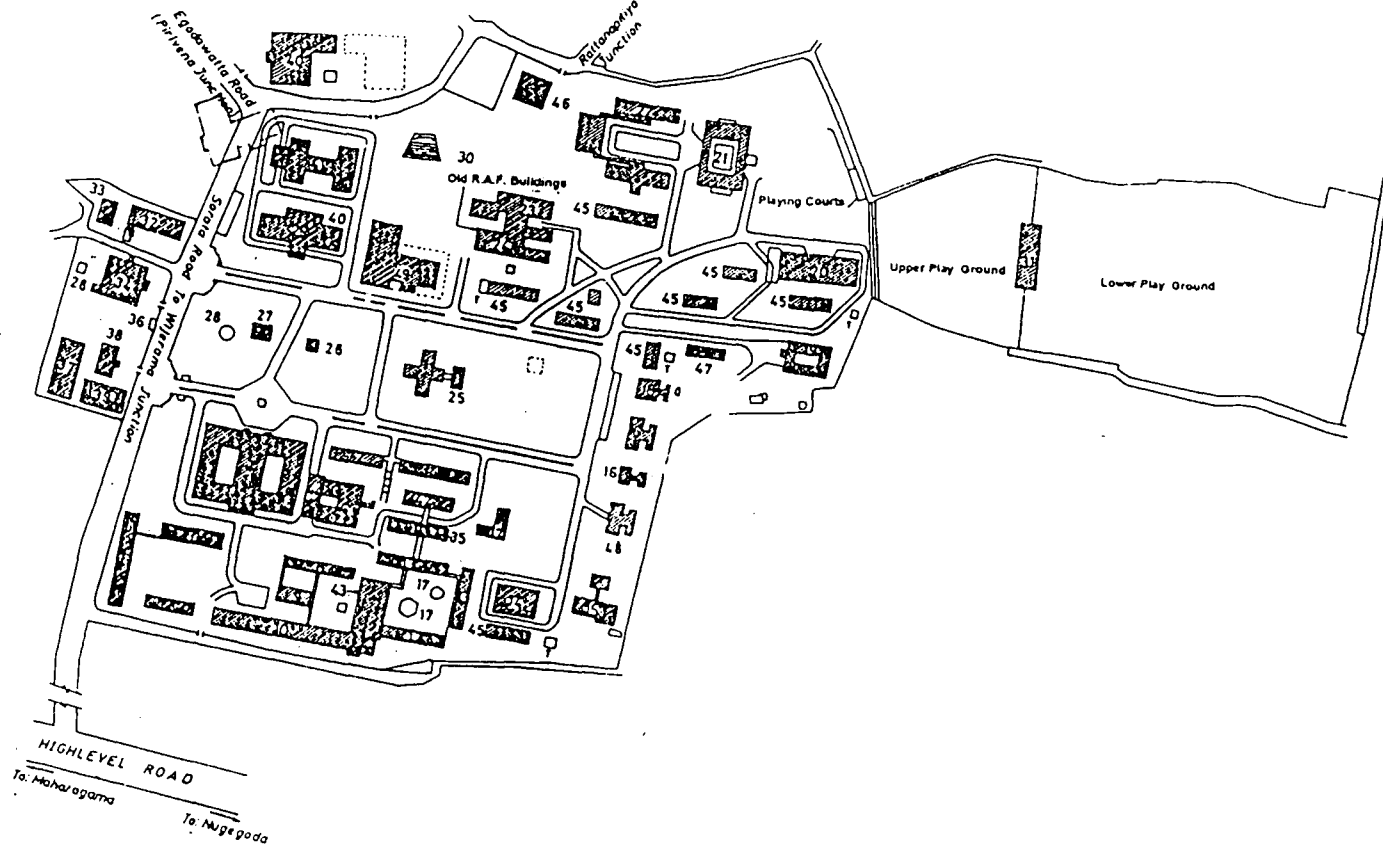Fig. – 04 Lay - out, University of Sri Jayawardanapura.(Source: University hand book)

1 Sumangala building

2. Ghneswara building

3. Ratanasara building

4. Class rooms for the faculty of management studies

5. Physics department

6. Science work shop

7. Mathematics department

8. Zoology department block 'C'

9. Science dean's office.

10. Chemistry department

11. Botany department block 'D'

12 Zoology department block 'A'

13. Botany department

14. New art theatre

15. Walpola Rahula Hostel

16. Staff quarters

17. Green house

18. Graduate faculty

19. Health center

20. Bandaranaike halle

21. Student center '1'

22. Sorata Dharmapala hostel

23. Maintenance section

24. English unit

25.Student center '2'

26 Shrine room

27 Shop

28. Water tank

29 Central library

30 Open air thearter

31 Pavilion

32Bikku Hostel

33 Staff quarters

34. Prof. Hema Ellewela hostel

35. Forestry department

36. Post office

37. Prof. Jinadasa Perera hostel

38 prof. L.P.N. Perera hostel

39. Rev. Wimaladarma hostel

40. Medical faculty

41. Administrative building

42. Forestry library

43. Science faculty auditorium

44. Prof. R. A. Perera memorial hall

45. New lecture halls and class rooms

46. Family practice center

47 student canteen

48. Estate management and valuation

49. Management faculty

T. Toilets

2.1.2 Layout

The university consists of five faculties, administration area and student recreation facilities. Considering the layout, the building are arranged individually with no relationship between the buildings. The buildings are scattered across the vast open green area like *"Mahamewana Uyana'.* Even though similar kinds of rigid geometrical, highly formal and strong access. Existing layout, it made rapid change in its development activities, and additions were fitted to its built environment under various social economic stages and buildings have used various architectural languages and most of building are massive and solidly built.

The layout it self manifests a sense of order and the highly disciplined arrangement of the elements. There are no proper zoning systems for their activities.

2.1.3 Informal spaces with landscaping
- **Open spaces, Terraces and courtyards.**

Considering the main entrance, there was no proper designed waiting area and one directly entered the large open forecourt. The University entrance gave and impression of a shanty environment due the lack of maintenance and landscaping.
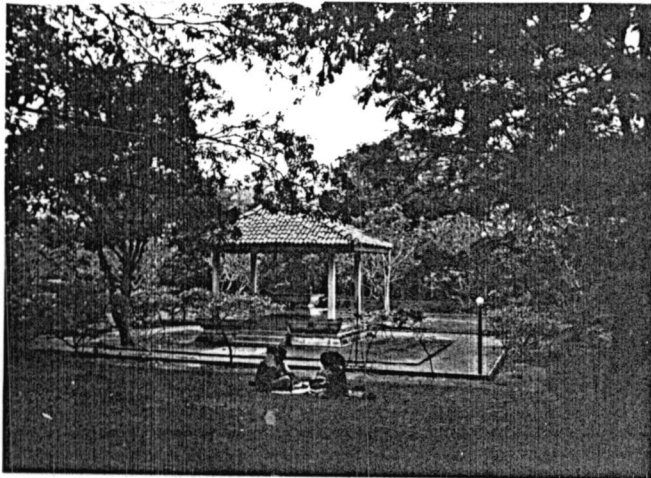
The only natural landscape element is the large trees mainly used by student's for informal activities and student relaxation, group discussions, political activities and eating-places. This space is not properly designed for informal gathering, but students have adapted it to suite their needs.

Fig.05 - Tree shade for more comfortable space.

20

The small ramparts on both sides of the roads were used for student informal activities *"Tell bamma"* and students seated on the ground are in open and dynamic spaces. Within this space, there are several small trees. Daylight penetrating through their level created beautiful patterns of light and shade on the ground.

Fig. 06 – View of the major pedestrian path thorough the fore court.

This shady out door space is one of the most popular places in the university where students often loiter. The 'open' canteen nearby enhances their life here. This vast open space, acts as a transitional space, which indicates that we have entered a different place from the paths. The cosiness and the sense of freedom, prevailing in this place give clues to the vitality of the University life.

Fig. 07 – Benches arranged in the area for student 's out door leisure.

Fig. 08 – University fore court open main gathering space.

Considered, the layout used the less inner courtyards. The main building of *Sumangala* building has two-court yards and it gives an ugly appearance to the University. The courtyard was probably not thoughtfully, landscaped. A pond is located at the center, but there was nothing effective in the landscaping techniques and is not useful and activities. It also contained ugly Courtyards. A space along the narrow corridors, facing the court yard is used for informal group discussions.
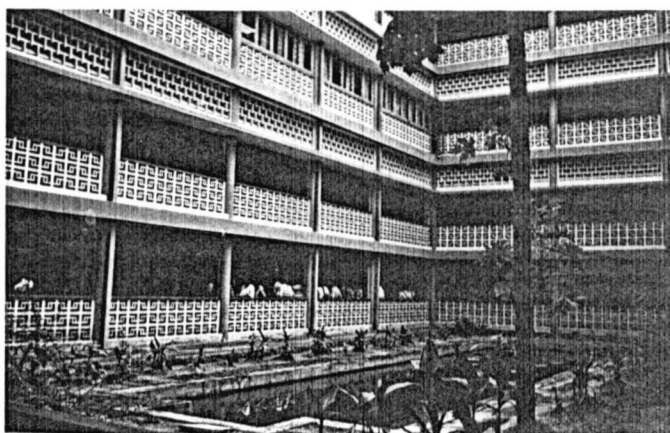
Fig. 09 – Unutilized court yard in the Sumangala building.

● **Paths and walkways**

As mentioned previously, the major buildings are open to the main paths. Which run through the buildings. On the edge of these paths there are a variety of places where students often linger.

Fig. 10 - The trees provide shade to the path around the University fore court.

These places as well as the entrances, which open off to the path, enhance their liveliness. The major pedestrian paths of the University are quite dull due to lack of activities on it's edge; as well as the lack of shady trees.

Indoor paths are also very narrow
and most of the corridors in recently
constructed buildings at this
University have a close similarity to
this corridor.
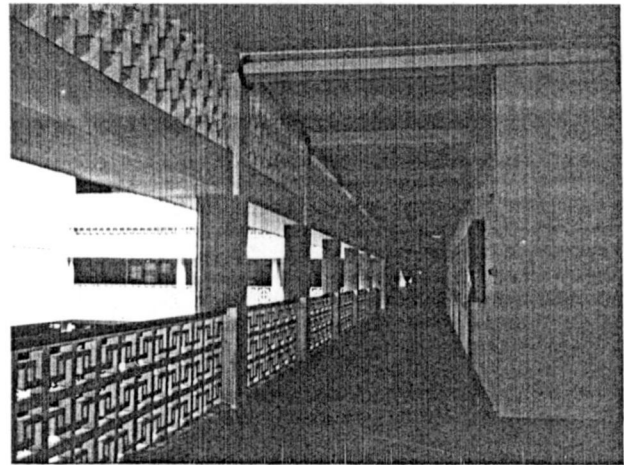
Fig. 11- Narrow corridors made tight spaces.

They are designed merely to walk along, but not for loitering. In these long and dark corridors
meeting another human being is an event. Thus these spaces forbid formation of community
rather than encourage its growth. These corridors may be considered monotonous and
bureaucratic. The sunny corridors are very pleasant but narrow and used for informal group
discussions by students.
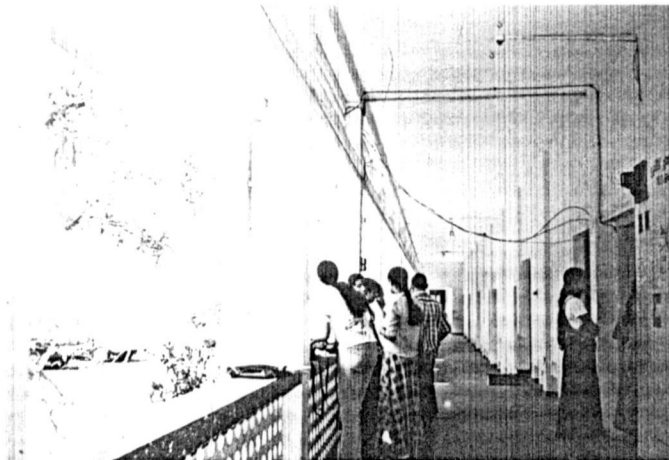
Fig. 12 – Informal spaces made by the students along narrows sunny corridors.

- **The lobbies**

At the Sri Jayawardenapura University, most of the lobbies are neglected and have wasted useful. In the main building of *Sumangala*, the entrance lobby is a vast impersonal space where not one lingers. The lifelessness, the chilling stillness conveys nothing human at all and there is no proper ventilation or lighting. This created a gloomy and ugly lobby.
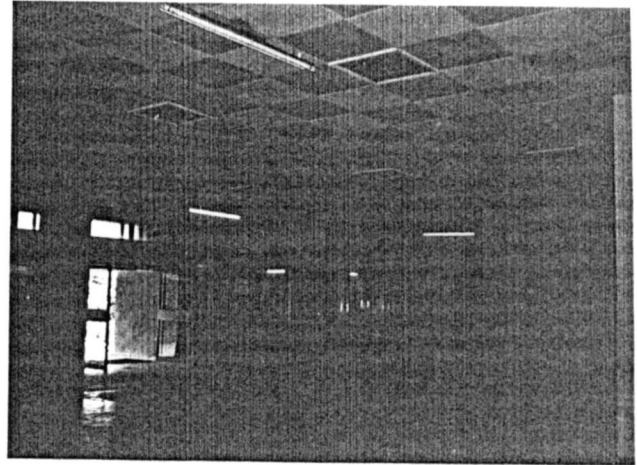
Fig. 13 – Interior view of the main entrance lobby, Sumangala building.

The building is also low and it does not give harmely atmosphere. Other major lobbies also use vast areas which created ugly lobbies. They are just places to walk through, but not a place to stop. The space being very rigid and mechanical does not encourage people to linger. The sub center lobbies are not properly designed for student informal activities; and created very tight spaces. The students have created their informal spaces in these lobbies.

Fig.14 – View of small lobby adapted by students informal spaces.

- **The Canteen**

Canteens are the places in the University where we could have an informal discussion over a cup of tea. such discussions are so pleasant when compared to formal discussion in classrooms. In fact these moments are the most memorable in our university life.
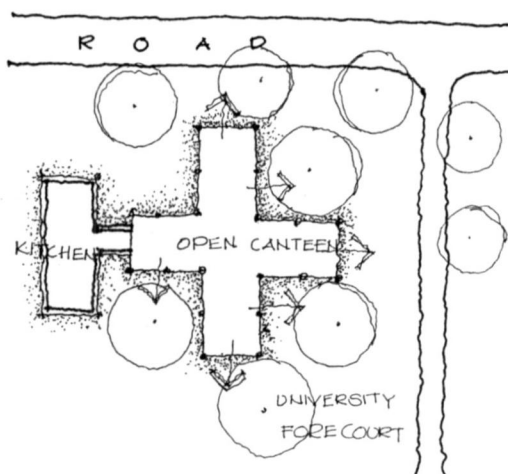
In this university, there are number of canteens, but the most functional canteen is located in a central position in the university forecourt. The major pedestrian paths run tangent to it. Thus students are easily attracted to it.

Fig. 15 – Plan of the canteen (Not to scale)

In comparison to the student population, it is a small canteen. The terraces of this canteen have an open and dynamic quality and an ideal setting for discussion of great spirit, learning and exchange of thoughts. In fact it is a place where we could sit comfortably for hours in public.
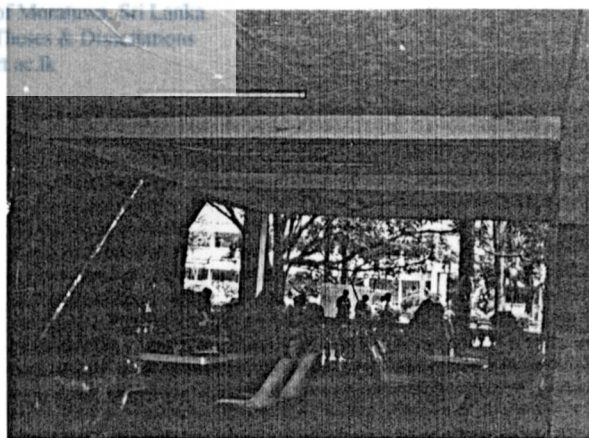
Fig. 16 – Canteen creates and open, dynamic quality environment.

Another small canteen is located near the play ground. It is fully enclosed and creates an uncomfortable environment. The students called it *"Kele Kade"* canteen.

A small snack bar is located in the main fore, and court enhances the sprit of the place by giving and opportunity to have a cup of tea while waiting or lingering. However these indoor canteens also expressed poor functionality by not providing a proper environment for student informal activities eg. Canteen of Sumangala building.

- **Student center**
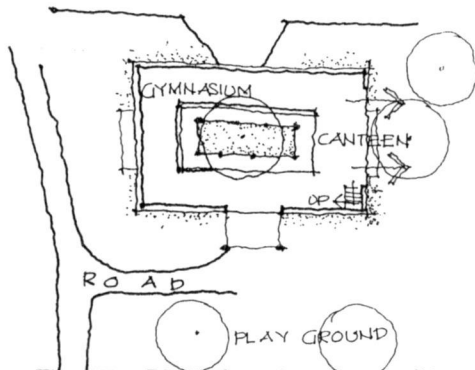
The student center is located at the edge of the university ands close to the playground. This block even though it is not located in a major pedestrian path is a live place where people always linger.

Fig. 17 – Plan of student center (Not to scale)

This center though relatively small is well used by a large university community. However in comparison to the number using, it the facilities are insufficient. The building is introverted and has created tight places. It consists of a gymnasium, canteen and space for other welfare activities. All these spaces are arranged around an enclosed courtyard, which is not being used.

Fig. 18 – View of the enclosed court yard of the student center

The space along the narrow corridor, facing the court yard is of an open dynamic quality and the students hve adapted to these informal spaces. Thus in the long run the opportunity to

enjoy the beautiful view of the play ground is not given to the students. The upper floor is also completely neglected by the students. This may be due to the lack of proper vertical spatial continuity. The canteen of this center however, has created flexibility and freedom for the students.

2.2 UNIVERSITY OF MORATUWA

2.2.1 Back ground study

The University of Moratuwa, was established by an order under the University Act, No 16 of 1978, but had its origins In the Ceylon Technical College of Maradana , Colombo which was established in 1893, and conducted two faculties of studies , faculty of Architecture and Faculty of Engineering .

The University of Moratuwa is located at Katubedda an urban area of Moratuwa and borders on the well-known *Bolgoda* Lake and the site comprises 56 acres of beautiful parkland, which slopes towards the enchanting *Bolgoda Lake*. The University is placed situated 1 k m to the East of Galle Road along the Katubedda – Piliyandala road.

Fig.19 – Location of Moratuwa University.

2.2.2 Layout

The buildings of the University of Moratuwa, are separately located and there is no link between the different buildings. The layout is also rigid, geometrical, highly formal and mixed and has created the un planned road network.

Fig. – 20 Lay – out University of Moratuwa.(Source University hand book)

A. Vice Chancellor registrar

B. Lecture hall.(James George hall)

C. Gymnasium

D. Canteen

E. Chemical engineering
Physics
Financial administration

F. Work shops
Heat lab
Auto lab
Carpentry shop
Foundry

G. Dean Engineering
Electrical Engineering
Electronic and telecom. Eng.
Mechanical Engineering
Architecture
Town and country planning
Computer section
Dept. of Building Economics

H. Material engineering

Mining and Mineral engineering
Chemical engineering

I. Chemical engineering

J. Student centers canteen.

K. Design and drafting center

L. Marine Engineering

M. Maintenance engineer's office

N. staff center

O. Warden's Quarters

P. Medical center

Q. New Lecture hall
English language training center,
Maths department, Main stores.

R. Men's Hostel A, B, C.

S. Civil Engineering building

T. Textile technology work shop

U. Ladies hostel

V. Library

W. Garages

X. Marine engineering lab.

Y. Central Examination hall

Z. Day care center

Reference

SH – Security hut

G - Gate

BM – Bench mark

WT – Water tank

BY – Boat yard

PG – Play ground

The existing layout has made rapid changes in its addition of buildings and activities. Therefore we find that there are different architectural languages of buildings and no inter relationship with each other. The buildings are situated close to each other and created tight spaces.

The buildings are disoriented and did not respond to the natural environment eg. The civil building's laboratories are located facing the beautiful view of *Bolgoda lake.*
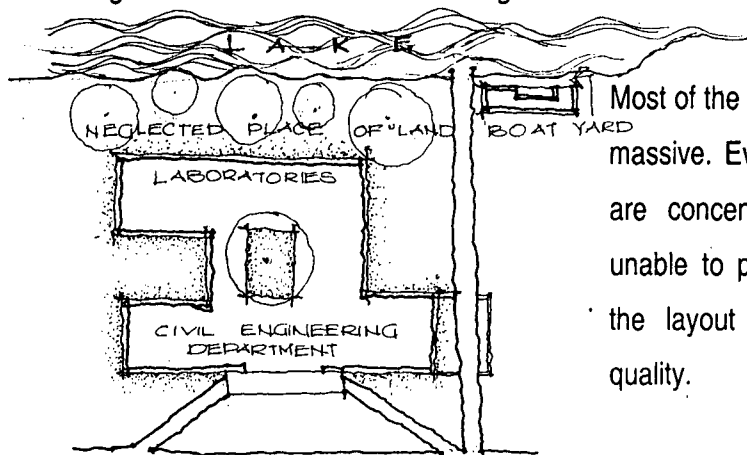
Most of the buildings are large monolithic and massive. Even though a variety of activities are concentrated in it, the buildings are unable to provide a community feeling and the layout expressed the highly complex quality.

Fig.21 Civil Engineering laboratories on the lake side.

2.2.3 Informal spaces with landscaping

The informal spaces of paths, lobbies canteens, courtyards and student center are not properly designed in this University and many spaces were wasted. There fore, the students adopted their own informal spaces, considering the location of the activities: communal spirit did not flourish. Thus, opportunity to have informal interaction between faculty and student adopted their own informal spaces.

• **The Pathways and walk ways**

In this University there were a number of shady out door paths passing through the layout, but not been used for clear accessibility to the buildings.

At the edge of these tree covered path ways there were a variety of places where students could linger. These places are very simple but 'round' in the true sense of the world. Usually there are concrete benches under the trees, garden steps leading to play ground and more public spaces.

Fig. 22 –An informal space made by the students at
the edge of the shady out door path

Some buildings also used wide-open corridors with a variety of corner places along them to give the students an opportunity to make places of their own preference together.

Fig. 23 – Students on the steps leading
to the tennis court

Some corridors are designed clearly for walking but not loitering. In these long and dark corridors, meeting another human being is an event. Consider the Engineering Faculty building (*Sumandasa* building) the sunny corridors run along the perimeter of the courtyard and are generously lit by the sun. Thus they are pleasant to be in. Yet, their excessive length represents monotony and bureaucracy.
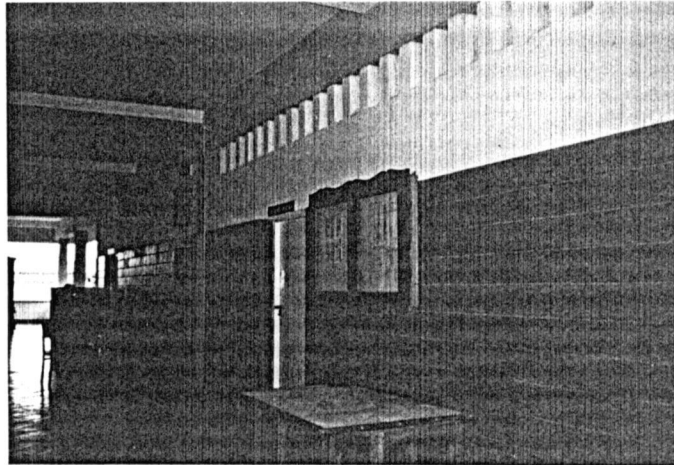
Fig. 24 – Dark corridors created gloomy environment in Civil Engineering building.

In some floors of this building, pillars are placed here and there along the corridors; student often flocked to these places and therefore the monotony of the corridor was broken down to a certain degree.

Fig.25– Corridors with seating places.

- **The Lobbies**

Lobbies located in this University have been put to a variety as usage. The semi – enclosure entrance lobby invites you in. Even before that the large opening shows it's cosy inside where student's lingered and settled down.

The shady atmosphere prevailing at the entrance due to the surrounding trees indicate that we have entered a different place from the street. Most of the students used this lobby for informal activities, but it is too small.

Fig. 26 – Main entrance lobby with shady atmosphere.

Some lobbies are neglected because the students do not use them for their informal discussions as they are not comfortable to linger and settle down. Some stair case lobbies are extensively enclosed, only one side is open to the corridor and courtyard beyond. Thus the space minimizes interaction of a student with his environment.
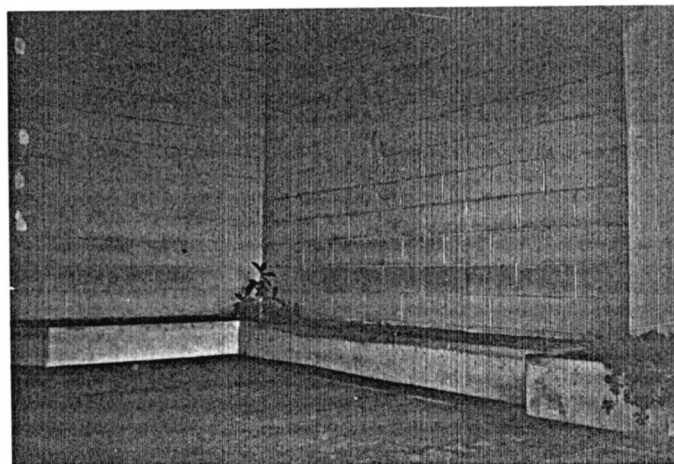
Fig. 27 – View of the neglected stair case lobby.

The Main entrance lobby is a vast impersonal space where no one lingers. The lifelessness and chilling stillness conveys nothing human at all.
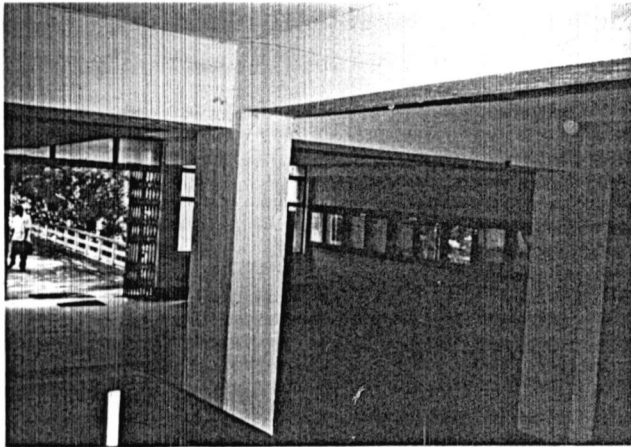
Thus the place does not encourage people to stop, but to pass through, so they are not used for informal discussions. The lobby of the Civil Engineering building is also used as a transitional place, but there are no corner spaces, which may encourage people to settle down.

Fig. 28 – Vast, mechanical lobby in Engineering
           faculty building.

The main lobby of the Department of Architecture has a well functional lobby. It is the place where students always linger having informal conversation with their colleagues as well as with their teachers.
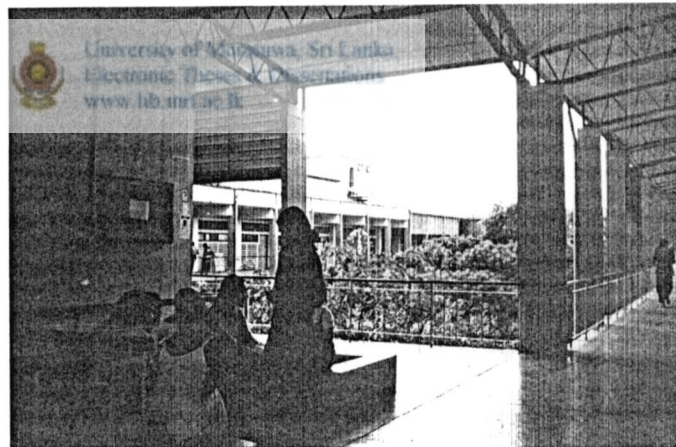
Fig. 29 – View of the most functional central lobby - Architecture department.

Some times they do their group work and make the place more cosy. Other times, they just sit on the cement pillars and watch the world go by in the court yard below. Even though the lobby is created simply by placing built – in seats at a corner place of a super structure it lacks the rigidity of other similar places because it gives freedom of choice to the user. This lobby is a protective enclosure and is fully open to the main corridors so that the lobby generates a warm and cosy quality that would help certain students to have informal discussions in a comfortable atmosphere.

33

- **Open spaces, terraces and courtyards**

In this University a number of court yards have been identified. The center courtyards, of the *Sumanadasa* Building , its tight enclosure gives us claustrophobia   rather than a feeling of pleasure that is safe and secure.
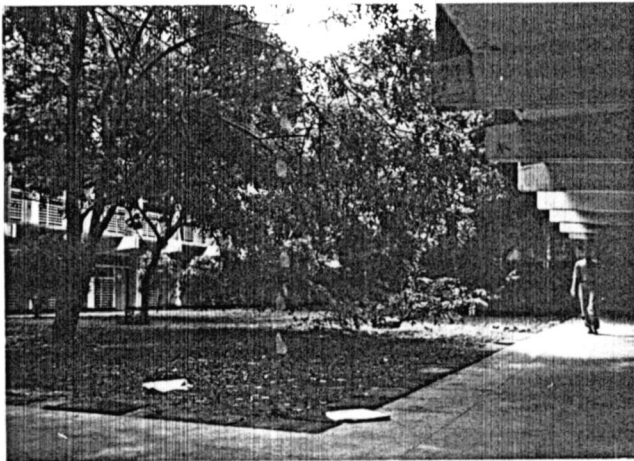
The courtyard center is mostly used to store some engineering equipment, so it seems to create and ugly quality. At present, the courtyard lacks a crisscrossing of paths. It may be due to the fact that the activities are housed at the perimeter of the courtyard.

Fig. 30 - View of the central courtyard -Engineering Faculty building from its corridors.

At ground level there are no activities, which encourage people to linger even in the corridors. For example, laboratories and machine room. Further, it lacks a common focus and the large scale of the space also prevents people from using the courtyard.

The space along the corridor facing the courtyard is of an open and dynamic quality. it is a space in which certain students prefer to work in and some others adapted to informal spaces. The courtyard and the secluded spaces formed by the walls facing a quiet courtyard is also adapted by certain students who prefer isolation from others.

Some courtyards are neglected; because they are surrounded by laboratories, Financial and Administration buildings.
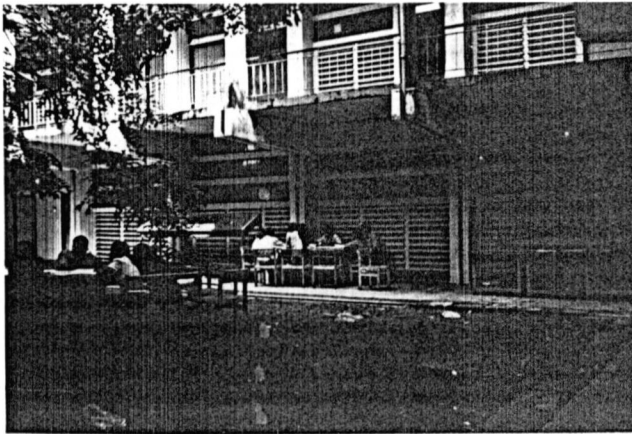
So these inside court yards were neglected by the students due to their in convenience and their location. Students used the building corridor for their leisure activities. These side corridors are more attractive and give a grater feeling of relaxation than these ugly courtyards.

Fig.31- Open and dynamic spaces
along the corridor, facing the court yard.

In this University where the open air theatre has been designed using the open terrace near the small scrub area surrounded by *'Kaju trees'* we find that the theatre area has become neglected.
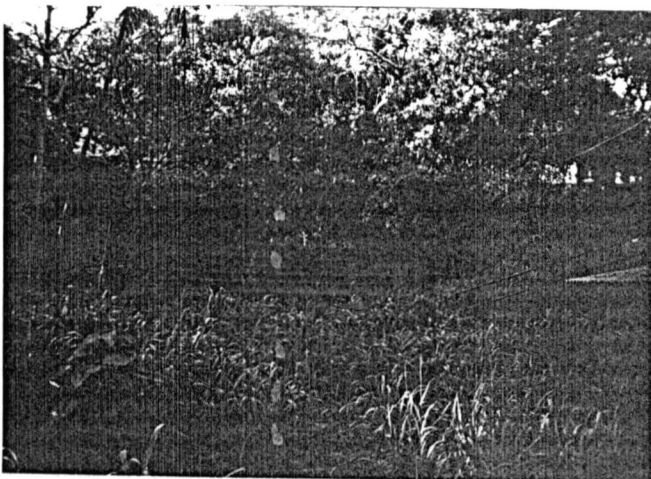
This unfortunate situation has arisen, because, proper landscaping techniques have not been used ; neither has the location been studied at depth . As a result access roads and pathways have not been properly designed this has caused in a total neglect of the open air theatre and its use by the student community.

Fig. 32 – View of neglected open-air theatre.

- **Boat yard**

The university has a beautiful view of the *Bolgoda Lake*. However nothing has been done to enhance this view. Instead of developing the boatyard to be used as a gathering place where student may be able to relax, a building has been put up, which blocks out the whole view across the lake. The building itself does not seem to give maximum benefit to its users. What could have been a beautiful space has now become just like a blank wall.

Fig. 33 – The boat yard and buildings.

- **The canteen**

There are a number of canteens located in the campus. The most popular canteen is *'Goda'* near the *James George* lecture hall. It is located at a central position in the campus. A major pedestrian path runs tangent to it; but there is not direct access. Thus students are attracted to it easily.

This canteen is divided into an inner room and outer terrace, which has an open, dynamic quality. The open terrace is opened to the adjacent small courtyard. It is used by people who often cross the courtyard as a short cut to reach this building but, is not used for informal discussions.
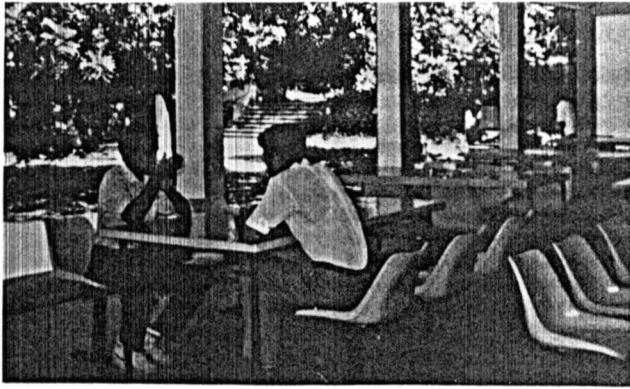
Fig. 34 – View of the Terrace of the Canteen.

From this courtyard a flight of steps runs upward to reach another courtyard. This courtyard has also been neglected and students cannot use it as an informal space to discussion.

The snack bar *'Gula'* is located near the student center.This area can be identified as the most functional space and most of the students use the space along the corridor and the small ramparts and summer hut located there for student's informal activities. In this manner even though an informal space has not been provided by the designer; the students have made use of the spaces to create an informal space for their activities.

Fig. 35 – Space formed in the snack bar.

Next we come to the small canteen located near the "Lecture block" with no major pedestrian access and a place where students could linger.

It also has two areas, an inner room and a terrace. The terrace overlooks the garden and major pedestrian path beyond. Students often sit in the terrace and have informal discussions or just watch what is happening outside or do their course work.

Fig.36 –The semi enclosed area in 'Lecture Block' canteen.

37

The inner room is also a semi – enclosed area and because of this space is not as popular as the 'Goda' canteen, thereby becoming another space that is not utilized to the full.

- **The student center**

In the University of Moratuwa the student center is located at the edge of the University premises on the ground floor rather than at the heart of the university. The student canteen, common room and the T.V. parlour, are located here. The indoor games area, union room and other welfare facilities are located on the upper floor. Find that all there spaces are arranged in an enclosed court yard. Which is not being used as it is an 'ugly' court yard. A path goes through the court yard to the play ground beyond but the tight enclosed atmosphere and the lack of a center place prevents the student lingering in it.
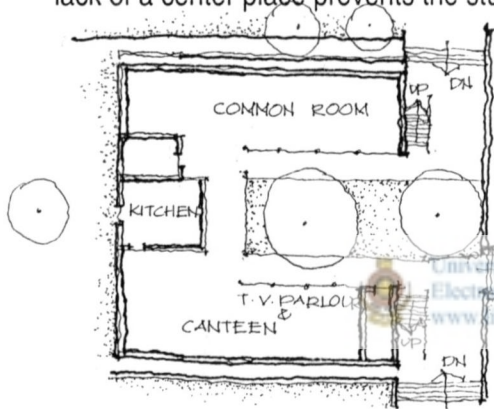
The indoor games area, union room and other welfare activities are also seen as neglected spaces and lack of a properly designed stair case leading to this location has led to its disuse..

Fig. 37 – Plan of the student center. (Not to scale)

The canteen of the student center is located in a dark and dingy corner and opens to the dead court yard and partly enclosed by the use of a grill.
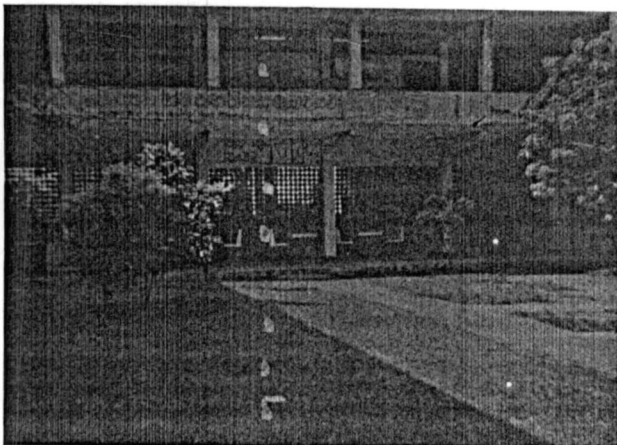
The common room is also a large space where the built – in seats were fixed at a later date and now contain not flexible spaces. This space is also mechanical and restricts student's freedom but yet the student uses it for their informal activities.

Fig. 38 Neglected courtyard used by students.

This common room also has a semi – enclosed grill. Which deprives the student of the opportunity to enjoy the beautiful view of the playground when using the Common room.

2.3   UNIVERSITY OF RUHUNA

2.3.1   Back ground study

The University of Ruhuna was established on 1st January 1979 by order under Section 24 of the University Act No 16 of 1978. It started functioning on 1st February 1984. One could say that it was born to fulfill the educational demand and supply the difference to satisfy the regional, social, economic and political needs.

Fig.39– Ruhuna University and its reflection.

The University was located in the village area called *Weellamadama* , which is very close to the developed town of Matara. The *Tangalle* highway was been the main supply route. This area is full of natural resources such as paddy fields, waterways, plantations, hillocks, and valleys and is partly covered by the magnificent Southern coastal area.
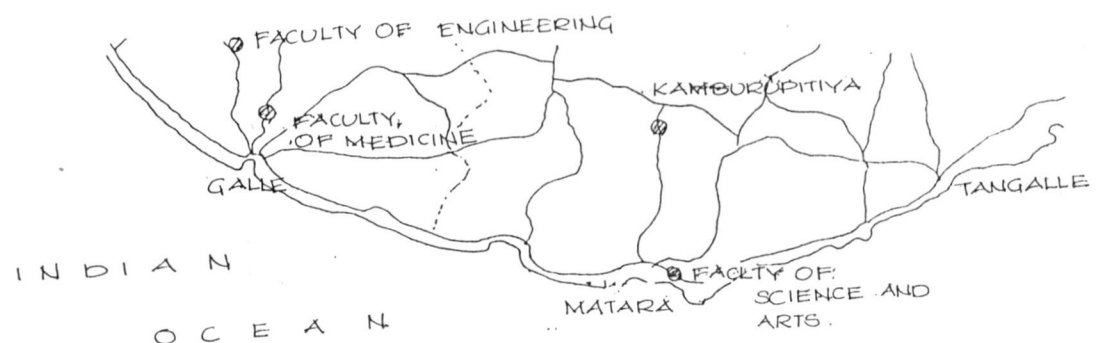
Fig. 40 – Location of the University of Ruhuna.
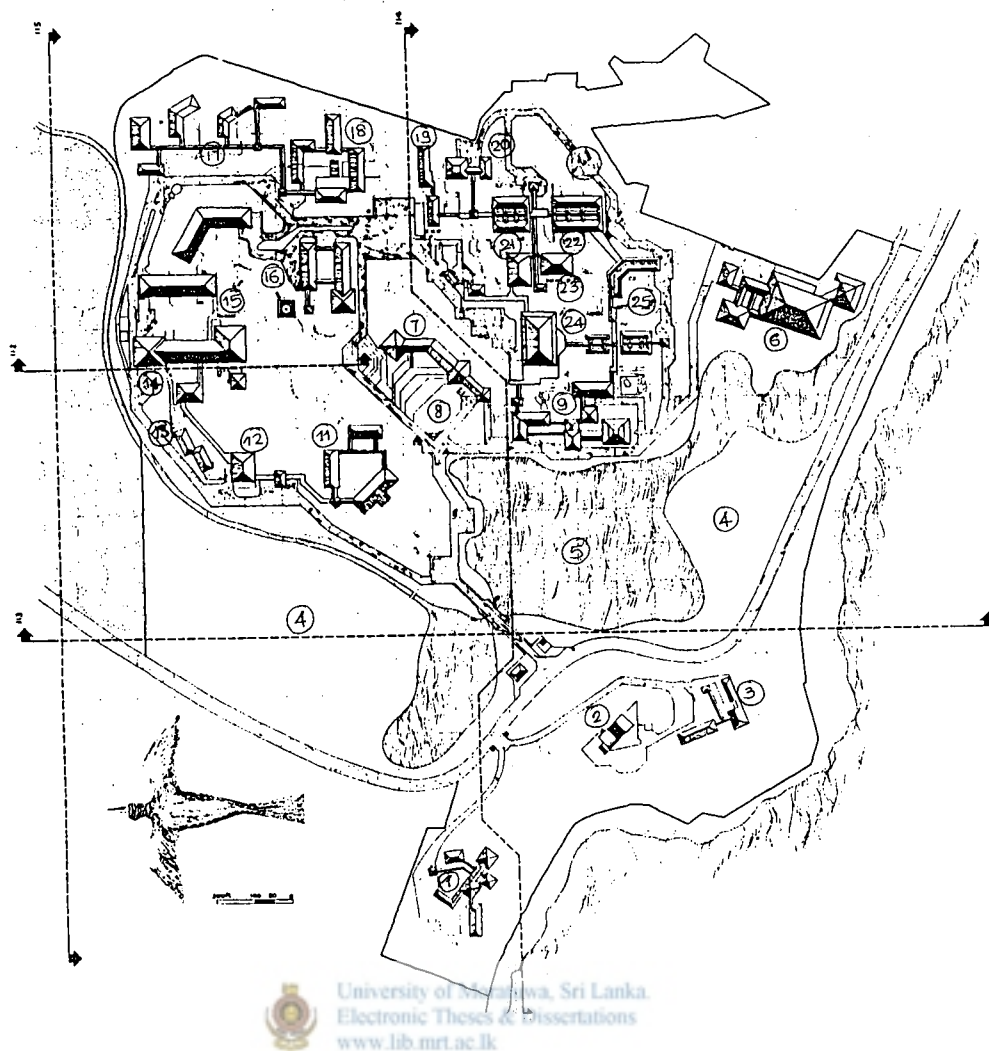
Fig. 41 – Lay out – University of Ruhuna. (Source: 'Geoffrey Bawa' book.)

- Residential zone
    1. Bachelor quarters
    2. Presidents lodge
    3. Visitors lodge

- Common amenities and recreational zone
    4 Play ground
    5 Lake
    6 Student center
    7 library
    8 open air Theatre
    9 administration
    10 Coffee shop
- Science zone
    11 Mathematics Dept.
    12 physics Dept.
    13 work shop

14 Physics Dept.
15 Chemistry Dept.
16 Faculty complex
17 Zoology Dept.
18 Botany Dept.

- Art zone
19 Sinhala and Philosophy Dept.
20 Lecture room
21 Lecture room
22 Tutorial rooms
23 two Lecture theatres
24 Three Lecture theatres
25 Common Lecture theatres

2.3.2. The lay out

All activities are categorized in to the given Zones. They are the Science Zone, Arts Zone, Administration and ancillary facilities Zone, Recreation Zone and Residential Zone. These are the Zones, which are located in *Wellamadama.*

Apart from theses Zones the Ruhuna University provides three other Faculties. These are the Medicine, Engineering and Agriculture faculties in *Karapitiya, Hapugala – Galle* and *Kamburupitya* respectively. These three zones function under the main Ruhuna University in *Wellamadama* as three University Colleges.

A hierarchical order can be seen among the Zones of Ruhuna University. The most important Zones; which are Administration and the Library are located at the center and the other Zones are arranged around these Zones.

In considering the university zones it is found that all games are located in one block of land and there is no physical obstacle to divide these zones.

Fig.42 –The University community concept
Showing Sri- Lankan identity

The advantage here is that students can move with ease   among other students in any of the zones if they wish to. This gives a very good inter relationship among, the different Faculties and helps social, educational and unity of faculties relatively satisfactorily.

In studying the layout, one feels that the main task of the designer of this University was to create a University community incorporating the concept of a national and regional identity.

The building styles selected are more suitable to the tropical climate and have been arranged systematically by using the steps of the site. These buildings incorporate Sri Lankan elements such as the roof. The colonnade arrangement changes the style by taking   into account the behaviour of each zone.

Each zone has an identical character of its own, so the students are able to get different, experiences in each different zone. Most of the buildings have wide corridors around the buildings which provide plenty of free space for student activities and also helps to reduce the massiveness of the building. This way the University environment acts as a living village consisting of small houses, which have combined with the trees and the natural environment.

Fig. 43 – A view of the steps leading to the wide, open corridors where students combined with nature.

The building orientation has been used to obtain to the maximum the natural views at different levels. The most important factor is the use of site topography; valleys   and hillocks, to define the activity pattern of each zone.

Fig.44 – Buildings mixed with natural environment.

42

The Natural resources have been well preserved while using modern technology and in making planned decisions. Most of the buildings are located at the boundary therefore a large unutilized open space has been kept, probably for future expansion and students social activities. This allows enough space for student relaxation. This also prevents the growth of tight spaces, which may impede student activities.

2.3.3. Informal spaces with landscaping

In this university we find that a number of informal spaces such as lobbies, canteens, pathways, courtyards, and student center have been provided, making it functional for informal activities. The main landscaping elements are naturally preserved by sitting the University buildings in their midst. This gives a pleasing appearance to the University and also provides a good environment. For student leisure and study informal activities. Abandoned paddy fields which have been converted into a natural water way has become and important landscaping feature of the University. It gives a mirror image of the university when viewed from the entrance.

Boulders and different types of textures improve the natural quality of this university and they have been well placed to facilitate student behaviour. (Informal discussions)

Fig. 45– Natural boulders used for informal activities.

• **The pathways and walkways**

The paths have been arranged mainly to form an access to each zone by using valley areas. This has helped to reduce human effort to reach the building. A part from that internal corridors is frequently used as paths, which link the buildings.

43

Fig. 46 – Built -in seats around the trees.

Most of the sections of the major pedestrian paths of the university are quite dull due to lack of activities on it's edge, as well as the lack of shady trees. In fact a wayside shady tree is the beginning of an *"Ambalama"* (Resting place). As khan says,

"...An Ambalama a should reflect the spirit of the men who rest under a shady tree".

(Khan, 1955.)

The students use this *'Ambalama'* to conduct their social activities, mainly to relax and to have discussions with others. These small buildings became popular with the students

Fig. 47– Students use *"Ambalama"* for social and educational purposes.

At Ruhuna University monotony of the corridors are broken down by the differences in the intensity of daylight. In fact light in patches from one side at short intervals are very pleasant.
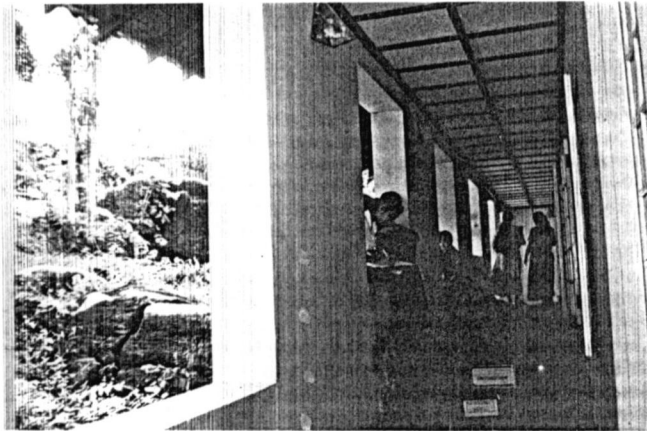
The sequence of light and shade gives a chance to pause and glance around and break down the feeling of the endless dead corridor.

Fig. 48 – The 'light' and 'dark' at the corridor.

The identified sunny corridors are very pleasant and wide. The narrow columns make free and lightness. Therefore they give students a cosy place to linger and settle down. Most of the corridors contain built in seats and steps over looking the natural views. These give students an opportunity to settle down to carry on their informal activities.

Fig. 49 –The 'pila' - View of Sea and Coconut garden.

Some places are created like a verandah, which has a similarity to the 'Pila' of a traditional house. It gives a feeling of security as well as a feeling of freedom and home environment.

- **The lobbies**

Most of the lobby spaces are vast and function well. Built in seats have been provided in these areas. Most of the lobbies are open, dynamic and give quality to the lifelessness of the space.
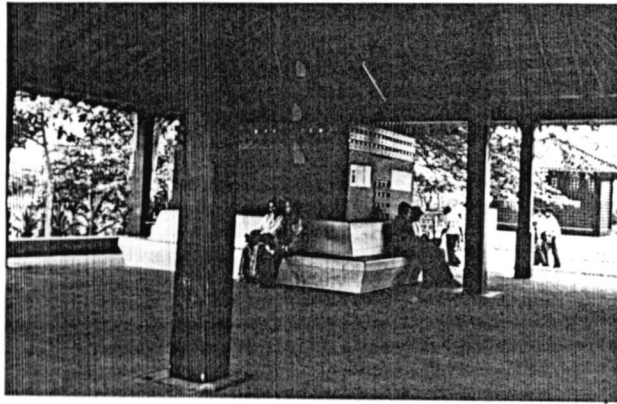
The main entrance lobby is also more open as in the '*Ambalama*' concept, and the center contains the built up seats. Therefore most of the students use it for their informal activities.

Fig. 50 –Built - in seats arraigned in the Main Entrance lobby.

In some of the lobbies   different spatial qualities are generated. The corner spaces formed by projection of pillars are used to generate a warm   and cosy quality that would help certain students to have discussions comfortably.
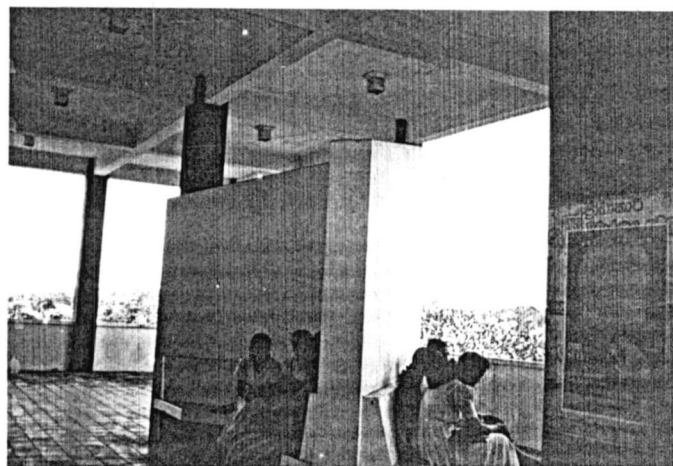
Fig. 51- informal spaces open to the terrace
of Arts Faculty building.

The staircase lobbies function well because, the lobby is extensively opened and from its sides open to the corridor and the courtyard beyond.

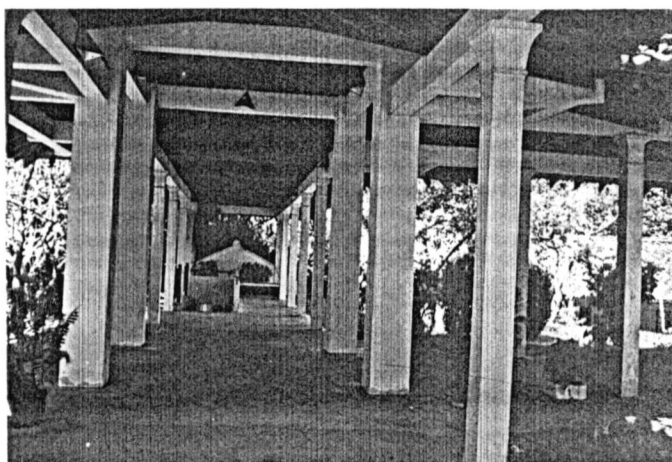Fig. 52 – Wide corridors and narrow columns used for informal discussions.

Thus we have traced how space has helped to develop the interaction of a student with his environment. We have seen how some lobbies have been created as transitional points or end of the path, so that it was comfortable to linger and settle down.

Fig.53 – Open, dynamic lobby creates informal spaces

Fig. 54 – Used of natural boulders in lobby.

- **The open spaces, Terraces and court yards**

Open spaces are provided at several locations at various levels. Greenery is used for landscaping along with bushes and small plants and built in seats are designed for informal discussions.

The Ruhuna University is made up of beautiful terraces, and trees of different textures are located at different levels, so that from these terraces a massive view can be seen.

Fig. 55 – Open terraces used for informal activities. (Open-Air theatre)

Open terraces with grass give a natural quality and free spaces for the students' informal activities such as street dramas and musical shows.

Courtyards are utilized in this University and students sat under the trees and along corridors. Facing the courtyard gives an open and dynamic quality as in a traditional house. Therefore students are able to relax here during their leisure time in a space created for their informal discussions.
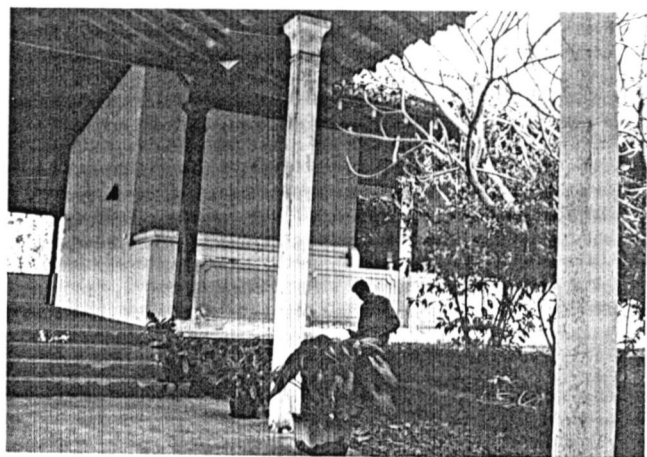

Fig. 56 – Courtyard creates a calm environment for students' relaxation.

- **The students center and canteens**

Canteens and student centers are place where students are commonly gathered to spend their leisure time. There are two major canteens but the student center canteen is the most functional because of the great difference is location. The science students have to travel a longer distance to reach them, because this canteen is located at a higher level and closer to the art zone, but the student center canteen is closer to the main road which ends up at these centers.
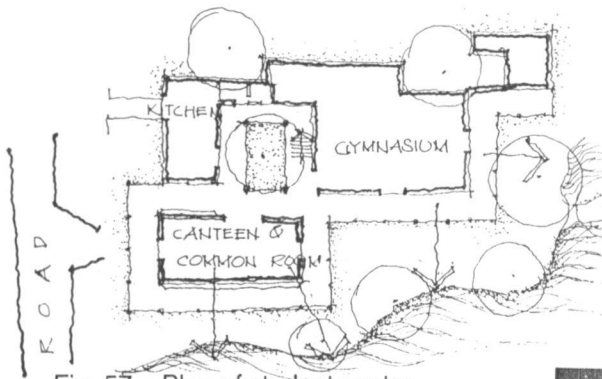

Although relatively small a number of students populate in this University. This consists of a Canteen, common rooms and gymnasium. This combines the student social activities to each other and is helpful to student environment.

Fig. 57 – Plan of student center.
(Not to scale)

The small inner courtyard is also semi enclosed. The students use the verandah but not the courtyard. It has become merely a light well.
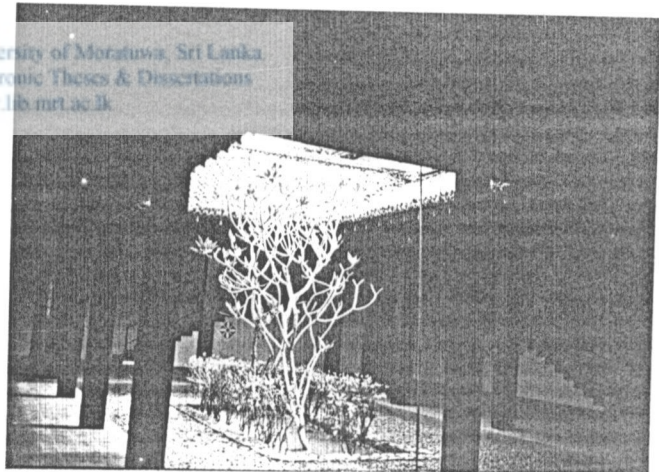

Fig.58 –Courtyard of students center
provides different experiences.

The student center canteen faces the open green space and therefore gives an open dynamic quality. Hence students often sit in the canteen and have informal discussions or do their course work or just watch the world go by.
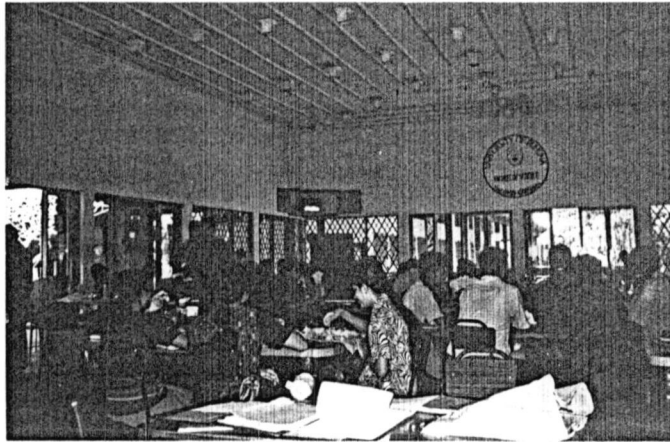
Fig. 59 - View of open canteen facing natural views.

The large-scale gymnasium hall comes nearest to depicting Architectural elements. Its wide corridors are open and used by the students for their leisure activities.

Fig.60 – Informal spaces made by the students at the sunny corridor of the student center.
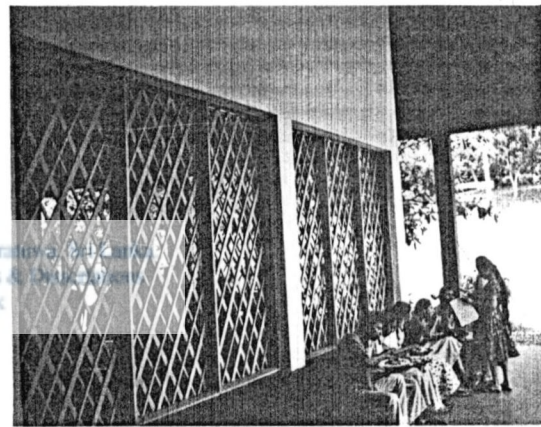
Fig. 61 – Out door pillars used as part of Student center canteen.

In this study, we have tried to show the major role played by informal spaces in a University design. We also tried (discussed about popular or neglected) to examine the informal spaces that have been provided in the Universities use have chosen for a decision and now proceed to analyze what we have observed in this study in the hope that it will be a worthwhile contribution to designers of university informal spaces for maximum benefit to the student community.
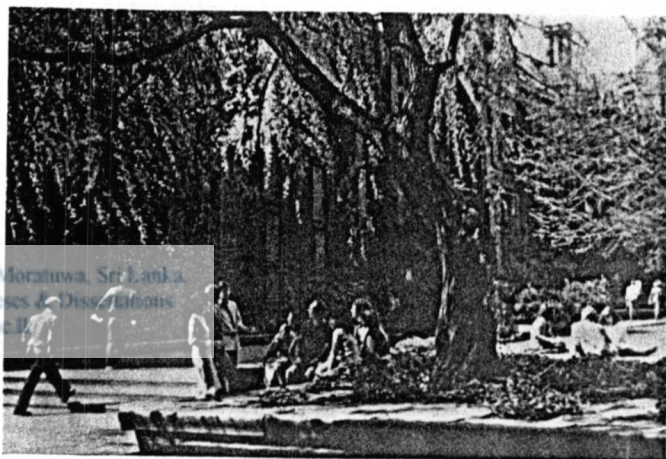
CHAPTER THREE

COMPARATIVE ANALYSIS OF THE ROLE AND FUNCTION OF THE STUDENT'S INFORMAL SPACE.

CHAPTER 03 - COMPARATIVE ANALYSIS OF THE ROLE AND FUNCTION OF THE STUDENT'S INFORMAL SPACE.

In the case of informal spaces in university environment the pattern that is related to communal activities of users, are the appropriate patterns of events. Architecture it self could not form a community but it certainly could encourage the development of a community by providing ideal settings. These settings in the university are informal spaces. Therefore spaces provided for common rooms and canteens are for equally important are successful university education.

In this chapter tried to understand the role and function of the student informal spaces as related to their behaviour pattern under previous case studies. Identified the various usage and functionality of the students' informal spaces in theses selected universities. Therefore, find that while some informal spaces have been neglected others have functioned well and students have adapted to their informal spaces.

For the proper function of informal spaces in a University emphasis should also be made on spiritual qualities such as centre location, enclosure, continuity, landscape and use experience. In the study of selection of spaces in the Universities I have selected for examination. I have sought to identify these spiritual qualities in the spaces under study.

The difference for this functionality or neglect are explained and analyzed in this chapter directly under the impact of layout, informal spaces with landscaping as well as the specific experience given by the space itself.

3.1   IMPACT OF LAYOUT

Strong arguments that can be brought are the above stated statements. That is university environment should be a place where the students thinking powers and creativity have to be improved. Thus university environment is the combination of buildings and the surrounding spaces, which are available, to it. Robet Somer indicates,

"...Learning is poor and students begin to hallucinate in a monotonous environment1".

(Robet Somer, P. 84)

Therefore, from the early stage of the design of the layout of a University, it is important to consider good functionality and the correct approach should be used to create the informal spaces in University layout right form the beginning of designing.

A previous chapter considered the layout study of university of *Sri Jayawardanepura* . It shows the expression of the Buddhist temple environment as achieved through its architecture. The layout in (Fig.- 04) Therefore the layout it self manifests the sense of order and highly disciplined arrangement of the elements and rigid geometrical, highly formal like ancient monastic layouts. But, the large open fore court in this layout helps to create student informal activities and this may be to likened to square type universities.

The basic idea of this campus is to provide enough space as open areas; so the university i.e. centered around a large green area and the extra activities. Have been located at the center.
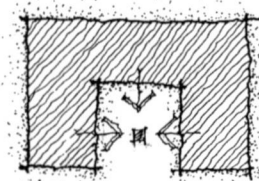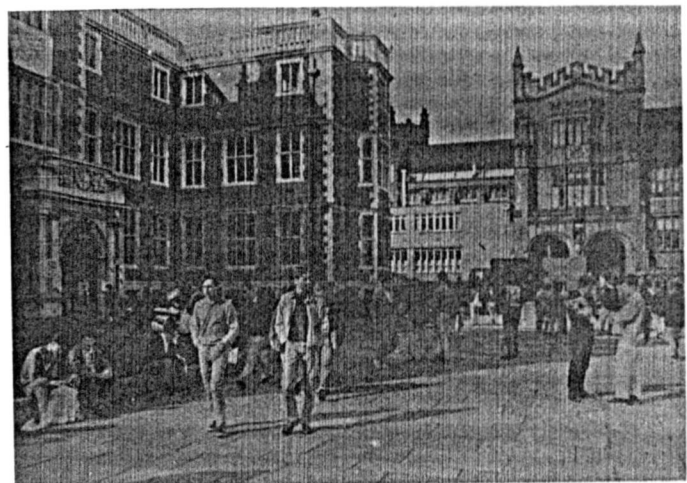

Fig. 62 – 'Square type' University.

Fig. 63 – View of the quadrangle at the University of New cattle-upon-Tyne.

The administrative, Lecturing and common centers have been built around the open space. This open space helps student to have informal discussions and social activities.

Although this University gives an impression of the basic concept of the 'Open square' its buildings are disconnected and do not create the informal spaces; indoor and out door but the students have adapted their informal spaces by using the spaces available to them.

The University of Moratuwa has emphasized the technical education based layout (Fig. 20) and therefore all buildings are disoriented.

The layout has created 'tight' spaces and in considering the layout it has basically not emphasized on the students' informal spaces. I have discussed this in great detail in the case study of the University of Moratuwa.

At the University of Ruhuna, the layout has paid alteration to the creation of informal spaces for students. As (Fig. 41) these characteristics too have been studied in detail in the case study of the University of Sri Jayawardanapura.

Identifying the main University activities and putting them into hierarchical order makes it much easier for zoning the activities. Each identified activity must have identical separation but it should not be isolated. It must have a proper connection without any obstruction to its linkage; Administration, Academic, Student social facilities and all activities are categorized in to the given zones. Corridors and pathways should link each zone. So that the university is properly interconnected. Such a university layout would be the focus for creating the living village concept. The geometric pattern, which evokes a sense of belonging, is effective for the communal activities.

According to the case studies, the university of Sri Jayawardenapura does not provide this pattern and the University of Moratuwa used these pattern only in certain places. The University of Ruhuna shows the best example of the use of the geometric pattern concept.

Thus; could say that to encourage communal spirit in universities, informal learning spaces should be enhanced by articulating their enclosures and their centralized form. These places, which cater to needs of various activities, could be linked by paths, which provide various characteristics, which encourage strolling and lingering. The other major activities such as offices, laboratories and lecture halls are situated along these paths opening off them.
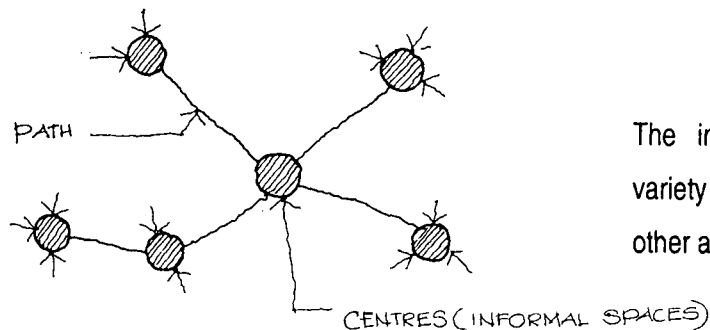
The informal spaces which provide a variety of sorts could be located among other activities for example.

Fig. 64 – Informal spaces and it's integration.

Small informal group gathering (informal spaces) in spaces, which are, located among classrooms and lecture halls for informal discussions. A cluster of students informal work places around faculty offices to make a common area which may increase informal interaction between students and faculty.
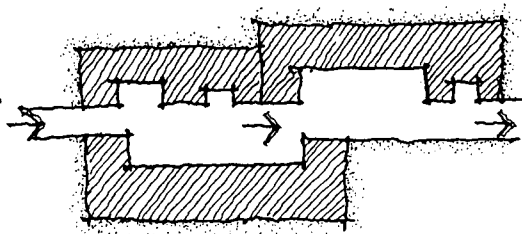
Identified certain spaces contained in a central position, which is enclosed but also provided for continuity thereby providing a space for informal activity.

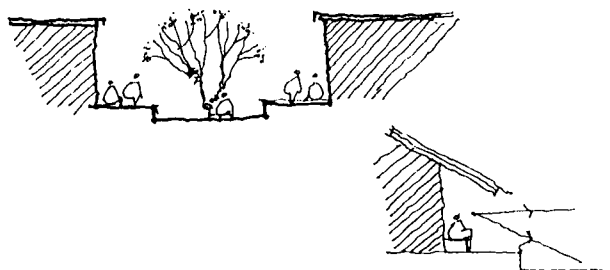Fig. 65 –Informal spaces along the path way.

Fig.66 – The built facade gives
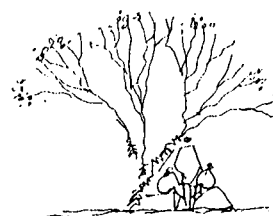enclosure to informal spaces.

Fig.67 – The trees along the informal.
spaces strengthens the enclosure.

The building scale is an important factor in creating informal spaces in the university because it serves a certain vertical model and also affects the function of the informal spaces.

The major buildings of the University of *Sri Jayawardenapura* are complex and massive. Thus they do not provide the informal spaces through the vertical development.

The University of Moratuwa which also has massive buildings provides some spaces created by the informal activities in vertical access form. The Architecture department lobby and corridor in (Fig. 29, 25) is an example. The university of Ruhuna has scaled down the size of its buildings and it's lightness and the lack of rigidity gives a feeling of calm and serenity to the atmosphere. It has also used pavilion type of buildings and small clusters of buildings familiar to a tropical country environment for its informal activities.
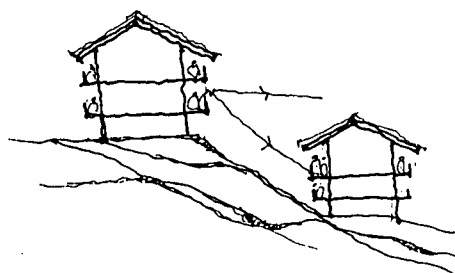
The importance of the idea to use these pavilion type buildings in this universities, is that they consist of small individual models, which can be joined together to create large functional areas. They also provide more flexibility than multi – storied massive buildings. Enough natural ventilation and lighting can also be obtained by using these buildings. There fore it would be more helpful to in the creation of an informal discussion environment.

Fig. 68 – Pavilion type building create communal spaces and shows the vertical special continuity.

Thus see how a thoughtful application of the basic
concepts of layout and scale of the buildings have
provided or not provided proper informal spaces for
the student community.

Fig.69 –Example of community living.

3.2   IMPACT OF INFORMAL SPACES WITH LANDSCAPING

Dober indicates the importance of the landscape thus,

"...A campus without landscaping is as likely as an arch without a circumference, an arch without a keystone, an ocean without water"

(Dober R. Richard, P. 26)

The University environment must be engaged with it's landscape not only for increasing it's beauty but should also assist   student relaxation and create spaces for informal discussions.

Try to identify, the usage of informal spaces with landscaping patterns in the universities and selected for this study.

Observed that the University of Sri Jayawardanepura has responded to nature in certain aspects for instance by creating the open fore court to look like a pleasure   garden of ancient times (Fig. 05) The students carry their activities mostly seated on the ground, thus creating an open and dynamic space for themselves.   But by and large as stated earlier the buildings have failed to respond to the natural environment.

The University of Moratuwa has not responded much to its natural environment.   For example the civil engineering building is located near the bank of Bolgoda lake (Fig. 21) Thus could have had enchanting spaces with beautiful views creating an unforgettable experience to the user. Unfortunately this rare opportunity has been wasted by locating laboratories on this lake side blocking the view. As pointed out earlier the existing boat yard is not designed to be a place where students linger but rather for utilitarian purpose. (Fig. 33)
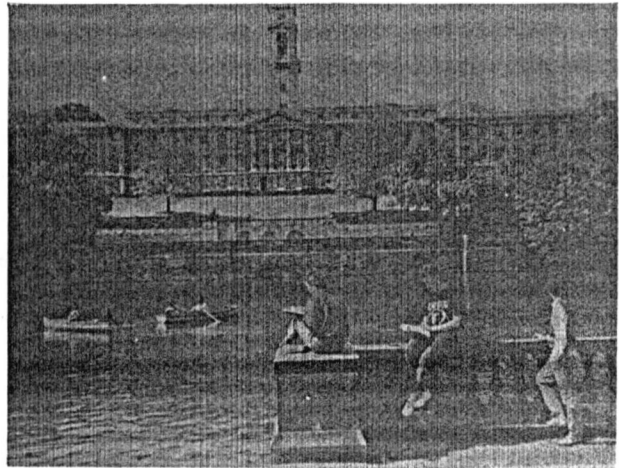
Fig. 70 –Tsing University responds to lake.   Fig. 71 – The boat yard at
                                                     the University of Nottingham.

The University of Ruhuna on the other hand   has basically responded fairly well to its natural environmental qualities   such as   topography, trees and lawns and water ways,   (Fig. 43) In this manner it has helped to create informal spaces and improve the opportunities for student relaxation. (Fig. 49)
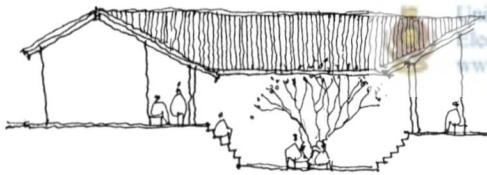
Fig.72 – Enclosure space creates for
        student's relaxation.

The use of the site for the university building and the related activities is important. Maximum usage also depends on the orientation of the university buildings, which help to create a feasible environment for the informal activities of the university.

The orientation of the building is related   to the activity and surrounding environment qualities. Therefore the proper orientation of buildings and their activities help to create pleasant ideas to the

students by harmonizing with nature. The University of Ruhuna is the best example of depicting this special quality by using technology in landscaping to provide informal spaces for the student.

The traditional eastern University subscribes to the view that university education is based on the belief that it is "learning with nature". They used shade trees arranged open spaces for the informal activities of the University (Fig. 56). These aspects have been emphasized in previous case studies where it was shown that such a pattern was familiar to Sri Lankan culture and human behaviour patterns.

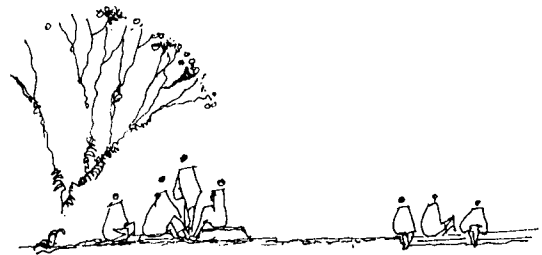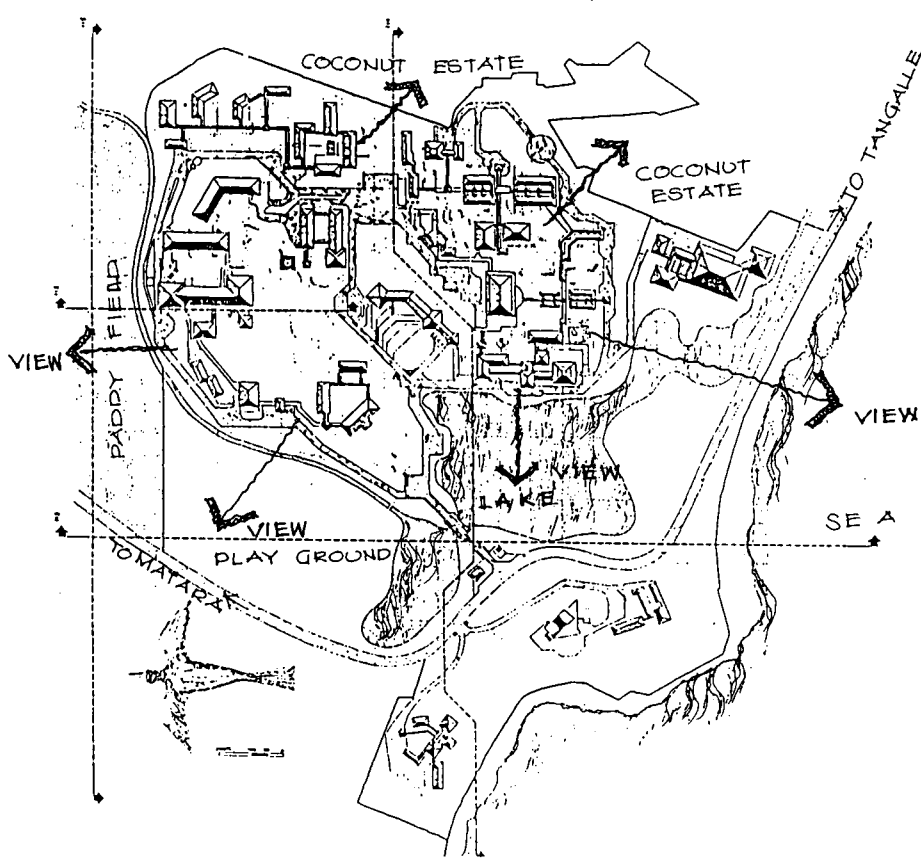Fig.73 – Human beheviour pattern of informal activities.

Fig. 74 –, University of Ruhuna responds to natural environment,

Fig.75 – Master plan diagram (1991) KOC University Istankbul, Turket, fitted to the site to take optimum advantage of views, vistas, Mierolimate.

These studies of the universities selected have shown the importance of informal spaces such as pathways, courtyards, open terraces, student – centers, lobbies and canteens and identified how the positioning of various constructions could result in the creation of strong characteristics in the informal spaces of these selected universities.

- **Path ways and walkways**

A walk at the best of times is of relaxing. To walk in a shady out door path with a variety of places to linger along then adds to the pleasure of the walk.

The university of *Sri Jayawadenapura* identified the two major direct access paths and connected the unplanned path net work . In these major paths find that there are shady trees covering the edge of the paths This natural shady cover has been used by the student to create space for their informal activities. (Fig. 06)

In the University of Moratuwa observed that there is not proper access through a clear path network. However tree covered paths in between buildings provide a comfortable atmosphere and at the edge of these paths where there are a variety of spaces students have lingered and made use of the concrete benches and steps and trees to make own their informal spaces. (Fig. 22)
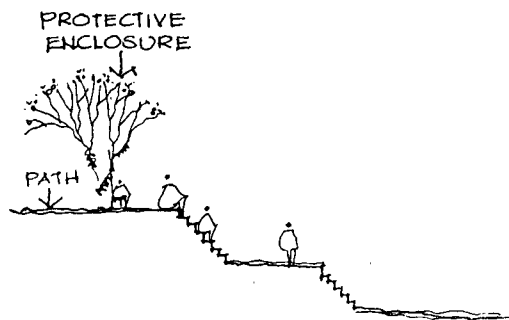
PROTECTIVE
ENCLOSURE

PATH

Fig. 76 – Stair seat

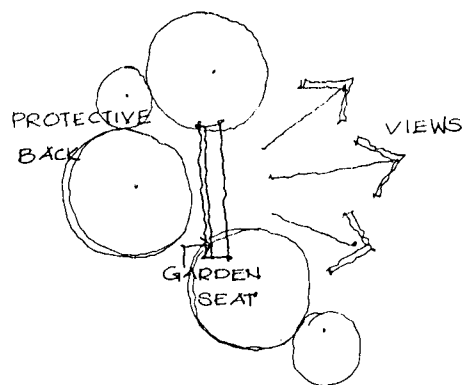PROTECTIVE
BACK

VIEWS

GARDEN
SEAT

Fig. 77 – Garden seat and vista.

Fig. 78 – Seating arrangement to promote contact communication and informal, social life in pleasant surroundings.

The University of Ruhuna , used the shady trees pathways and linked up the buildings well. They also provided concrete benches and natural boulders under trees along the pathways for informal discussions. (Fig. 46,45) The *'Ambalama'* also created a resting place for the students' used. (Fig. 47)

Fig. 79 – Open dynamic resting-place
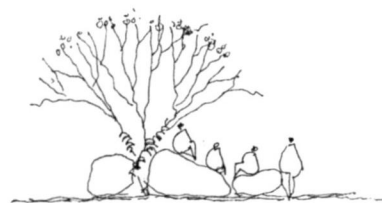
Fig. 80 – Natural environment linked with informal activities.

Here the buildings as well as their areas including the open staircases which leads to the upper floors have direct access from a path and the number of entrances open to the path will continue to increase. Therefore people will use the path more often and it will become 'alive'. But a large conglomeration of departments and heavily centralized academic faculties do not allow people to use the outdoor paths much. Infact they tend to discourage social interaction of the public. The different uses of indoor corridors have been identified in previous discussions of case study.
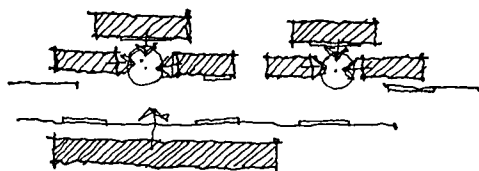
Fig.81 – Informal spaces are arranged
around the built - up area.
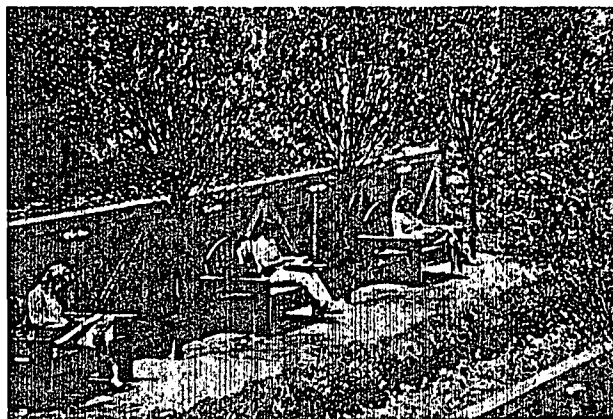
Fig. 82 – University of Washington,
tiered seating in an out door landscape.

The corridors of the University of *Sri Jayawardanapura* are mostly narrow and monotonous. As such they have failed to perform their function to provide adequate space for student use there fore, can consider them a failure. (Fig. 11)

In the University of Moratuwa, wide corridors have been provided, but some of the corridors are gloomy and ugly and have been neglected. Certain buildings however have wide sunny, open dynamic corridors. In some floors of this buildings built – in pillars have been placed at intervals along the corridors. Students often gathered together in these places and therefore the monotony of the corridor has been broken to a certain degree (Fig. 25)
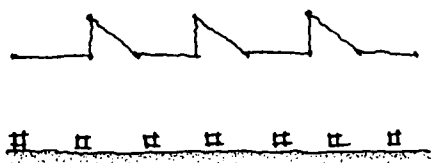
Fig.83 - Monotonus corridor
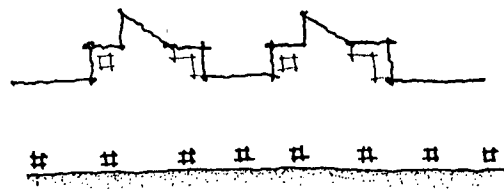
Fig.84 - Monotony broken corridor

The University of Ruhuna has open, dynamic corridors and wide corridors and narrow columns making a free and light atmosphere. (Fig. 52) There are a few monotonous corridors whose monotony has been broken by use of different day light systems and creating space for informal activities along the corridors (Fig. 48)

Fig. 85 – Open corridors helps freedom.

The sunny corridors have been created to give the student a pleasant and cosy place to gather among other things at Ruhuna paths and walkways have helped to assist in the flow for University activities .

Fig.86 – Path ways breaking monotony.

Paths (indoor and outdoor) have been mixed with the landscaping elements to create a good impression of the university and also to be used for student leisure activities.

- **The lobbies**

Lobbies are spaces mostly used for gathering a crowd or waiting in transition. In lobbies different spatial qualities are generated.

In the university of *Sri Jayawardanepura* lobbies have created a gloomy environment and have gone out of use and are neglected (Fig.13) on account of its vast, mechanical and enclosed quality.

In the University of Moratuwa, too most of the lobbies have been neglected, because of the failure to utilize the basic geometric pattern mentioned previously in this study. Most of these lobbies are also extensively enclosed. Thus the enclosed space minimized interaction of a people with their environment. (Fig. 28)

Some of the lobbies are functional and provide an open, dynamic quality to provided space for informal activities. For example the lobby of architecture department (Fig. 29)
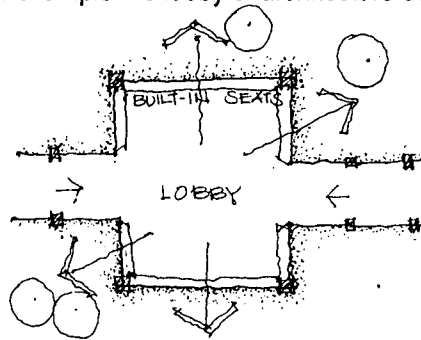
Fig. 87– open lobbies function well for informal activities.

In Ruhuna University most of the lobbies function well. Most of then are open dynamic in quality and design providing for space to conduct informal discussions. Pillars and built in seats have responded to natural views by their openness (Fig. 50) and enclosed lobbies have not been used much. Therefore these lobbies have generated a warm and cosy quality for student comfort.

- **The Open spaces, Terraces, court yards**

In previous chapters, identified the various uses that can be made of terraces and open spaces as well as courtyards for informal activities. The courtyards are private outdoor places where people can sit under the sky and enjoy the sun; perhaps also plant flowers.

In the University of Sri Jayawadanapura much use has been made of open spaces, but poor designing has resulted in preventing free movement through the nature. This has resulted in poor quality designing of the courtyards of this university and created an ugly quality leading to neglect (Fig. 09)

The University of Moratuwa on the other hand has used its open spaces haphazardly thereby wasting more open spaces, which could have been provided. The existing open-air theater has also proved a failure due to lack of designing in its location. (Fig. 32) Most of the court yards are neglected, because the activities around the court yard are not suitable. (fig. 30) Therefore, students have adopted their spaces along the corridors and center the of court yard to suit their purposes (Fig. 31)
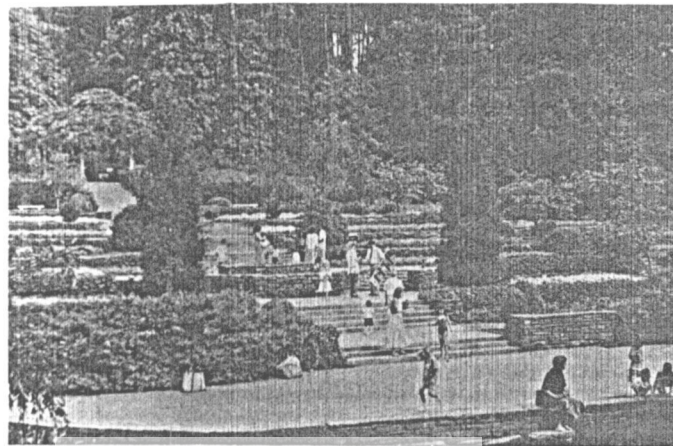
Fig. 88 + Used of terraces, Duke University.

The Ruhuna University has responded satisfactorily to the natural environment such as topography, trees and waterways. Open spaces are provided at several locations and act various levels to provide maximum use of the natural terraces (Fig.55)

The courtyards are of a well open, dynamic quality and successful landscaping techniques have been used. These spaces hear a traditional 'house' concept. The students use these spaces for their relaxation group discussions and other social activities (Fig. 56) and incorporating natural landscaping elements such as boulders and trees for these spaces. And other thing, thought about creates the space and lace. For example, two fundamentally different kinds of out door spaces are identified; the positive spaces and the negative spaces. The positive space is partly enclosed to the extent that it's area seems bounded in closures. Thus a positive space is so poorly defined. They are residue left behind when the buildings are placed on the land.
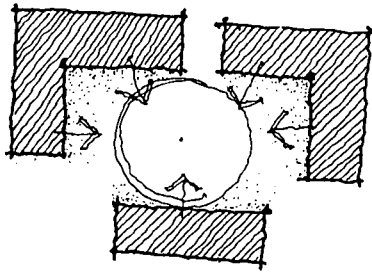
Fig.89 -A positive space. This space can be felt.   Fig. 90 – Negative space. This space
It is distinct a place.   Is Vague amorphous 'nothing'.

- **The canteens and student centers**

These are the places in the university where we could conduct informal discussions. Such discussions are much more pleasant in comparison to formal discussions. In fact these moments are the most memorable in our university life.

The Sri Jayawardanapura University, out door canteen functions better than the other indoor canteen because of its open dynamic quality (Fig. 16). The student center is not so functional because it is situated in a building, which can be described as an introverted building not providing an open, dynamic quality. (Fig. 18) It does not provide suitable access for entrance and as a result there is much waste of spaces.

In considering the canteens of these Universities the 'Goda' canteen of the University of Moratuwa is more functional that the other canteens. It is located at a central position in the University and the open terraces can be used. The terraces give an ideal setting for discussions of Great Spirit and provide a sense of comfort to students' minds (Fig. 34)

Fig. 91 – Open, dynamic quality important for leisure.

Fig. 92 – Space formed in the center with open and dynamic
quality restaurant, University of Essex.

In these Universities the student center is more functional in comparison to that of Sri Jayawardanapura University. However, the upper floors have been neglected, because they do not provide the facilitate other proper access. All these spaces are arranged around and enclosed courtyard, which is not being used, as they do not provide an open, dynamic quality. The common room is also of a mechanical quality and is not used much by the student's comfort for informal activity (Fig. 38)

The student center of the Ruhuna University is situated at the end of a major pathway and is therefore more functional than the other selected universities student center. The common room, gymnasium and welfare activities revolve round the student center. They are linked together in an inner – center courtyard (Fig. 58)

The student center canteen, which is situated along side the student center at the edge of the path, is the most popular canteen at Ruhuna. It provides a dynamic, open quality with maximum usage of spaces to provide to informal activities. There are wide corridors surrounding the areas and pillars have been built to face the natural environment. All in all it seems to be a place of relaxation for the students. (Fig. 61, 60) There is another canteen situated at a higher level, which gives a beautiful view of the sea and other natural surroundings such as the paddy fields and coconut plantations beyond.

The use of space has been used much more effectively here to create an university environment and to provide a certain aesthetic value for students' informal activities. In this analytical study of selected Universities I have studied the various aspects of informal spaces provided by them together with their shortcomings and successes.

This study has shown that by and large the student of the Sri Jayawardanapura University have used their natural environment for their informal activities. For instance by sitting on the ground in the fore – court to carry on their informal activities.

On the other hand the student of Moratuwa University have to the most part created their own spaces for their informal activities. However in doing so they have disturbed the normal arrangement of furniture such as desks, chairs and other equipment, which could give, leave a bad impression of the University when viewed by an outsider.

Especially of the Ruhuna University; we have seen that the university has incorporated its natural beauty into its spaces. Therefore the students have benefited from this and use it in a more relaxed fashion.

In making a comparison it seems that the Ruhuna University has provided most of the facilities available to make the spaces of the University useful to the student in enjoying their informal activities.

Tried in this study to evaluate the best possible spatial qualities that world give the maximum benefit to the student community to conduct their informal activities. Having done this evaluation it has been possible to identity the features that make a lobby a student center, a canteen or any selected spaces such as terraces and pathways provide the facilities that would enable a students to "study with nature" and fulfill the requirement for University education.

CONCLUSION

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In ancient times the tree was the hub of activity in community life. The communal spirit which evoked a sense of protection, tolerance and understanding among people was evidenced by their participation in informal discussion under the village tree. They listened very attentively to the orator and gave him maximum attention.

Therefore we may say that learning is not merely acquisition of information; but it encompasses formation of attitudes and values, which is termed affective learning. This affective learning is an important aspect of university education because it develops the intelligence of the students.

Affective learning primarily take place in informal spaces such as pathways, lobbies, courtyards, canteens and student centers. The informal spaces make an important contribution towards, communal activities at the Sri Lankan universities. It assists in changing students' behavioural patterns in order to develop intellectual and emotional maturity, giving psychological satisfaction.

Basically, there are two kinds of University establishment, they are the institutions totally designed for universities and those institutions subjected to change to form a university, with these changes an unsatisfactory situation has developed in the new establishment with the need to cater to the growth of social and architectural needs of its society.

In my case studies I have identified both popular and neglected spaces of selected informal spaces. Some converted mute places have been used for informal activities, but this type of places are more pretensions and are not real to their own nature; the students do not, show an attachment to these spaces, which do not contribute to create the sense of place; they have therefore adapted their own spaces which facilitate the stimulation of their own "Sense of Place"

Under this situation, the Sri Jayawardanapura and Moratuwa Universities are important in exemplifying how much of these change, fit into the university environment.

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These Universities show how buildings have been merely designed without any proper thought given to their surroundings. Therefore, we see a haphazard situation inside the University where student informal facilities, such as canteens, lobbies, pathways, courtyards and student centers have not been positioned in appropriate locations.

A little corner place in a sunny passage over looking a garden calls out that it is not a place to pass through but a place to pause at. When we hear that call, we begain to linger and settle down, and then perhaps bring a chair or two to make the place more cosy. Therefore the place does not need a name to 'indicate' what it is. Yet it could earn a name for itself, according to the way the user experiences it. Thus, this little corner place in the passage could be a lobby to one person while to another it may be a common room, a meeting place or merely a part of the corridor or a combination of all these.

In this case study the designed University is important to get an idea of the existing situation of informal spaces; how it was overcome and what were the failure of informal spaces in re – designing the University. This was achieved by identifying the strengths and weaknesses in the informal spaces of these Universities in my case study.

In a University, the design approach of informal spaces must be successful specially in student behaviour patterns, building style, scale, landscaping, layout and other designing considerations are of importance to the student.

In most cases the designer does not utilize the landscaping and the informal spaces created by the designer are not satisfaction.

A building plays the main role of any kind of activity. In University buildings the important elements which give the identification of the University while creating suitable spaces for informal activities, also provide a sign of imagination to the outsider in understanding the inside activity as seen from outside.

Eerosaarnen once wrote to his friend and mentioned the importance of the Architects' role for the university design as;

> "... I think it is a great advantage of a group of buildings could all be done under the responsibility of one architect. Different areas at a campus can have different characters but we could start more unity within each area. I am beginning to long for monotony."

<div align="right">(Eerosaarnen, P. 08)</div>

The above quotation indicates the architects responsibility when designing for a University.

A mixed architecture belonging to several architects sometimes could badly affects university education, students behaviour and the informal spaces in a University by reason of the variety of their designers which may bring about a clash in the final result.

To identify the entire reason for the successful function or the neglect of the informal spaces of the university environments is a difficult task within a short frame of time. A wider study, which examined the experience of people who play different roles in the educational community in a variety of usage of informal spaces and university student behaviour, would have given other and firmer conclusions. Such conclusions may help to explore the possibility of developing and approach for creating informal spaces consciously and authentically.

In the purpose of this presentation is not to put forward any guidelines for future action. My aim is simply to provide a basis on which guide lines. Could be based upon when considering designing for universities with special emphasis on informal spaces in Universities in Sri Lanka.

BIBLIOGRAPHY

BIBLIOGRAPHY

(1)   A. Rapoport   -   House form and culture prentice – Hall, Inc. Englewood, Clifts, N. J. 1969.

(2)   Alexander Christoper   -   The timeless way of building New York, Oxford University Press, 1979.

(3)   Abeysekera R.   -   The Island, 1994 , July 13th.

(4)   B. Russel   -   Principles of social reconstruct education, U. K. Hazel Watson and Viney Ltd., 1980

(5)   Bornheimer G. D.   -   The faceout higher education, Ilino is, The intorstate printers, Inc. 1973.

(6)   Bringgs. Asa.   -   University planning and design, London, Browne Michael et aled, Bastford, Inc, 1976.

(7)   Casson H. N.   -   Brain building for achievement. ADB Taraprerala sons & Co. Ltd., 1975.

(8)   Canter David   -   Psychology and the built environment, Kent, white friars Press Ltd., 1979.

(9)   Gangne R. M.   -   The conditions of learning, Holt, Rinehart and Winston, Inc. 1977.

(10)   Green C. W. B .   -   "Learning to Design", Madras, B. G., Dual an 10, 1934

(11) Krasner L. - Environmental design and Human
behaviour N. Y. Pergaman press Inc. 1980.

(12) Kirshnamurti - Education and the significance of life.
London, Victor Gollancz Ltd., 1973.

(13) Lynen Kevin - The image of the city,
Massachusetts, Mit press, 1960.

(14) Lewcock Ronald - "Modern Universities", MIMAR, No. 42.

(15) Muthulingam S. - Educational Psychology, Jaffna,
Aseerratham press, 1983

(16) Micheal D. Stephens and - University for a changing world,
dawid Gordon W. Roderick and charls
publishers, Newton abort, London,
Vanconver, 1975.

(17) P. Warren - Encyclopedia Britanion, Chicago,
Encyclopedia Britanica Inc.

(18) Perera L. S. R. - M. Sc. Dissertration, Faculty of
Architecture, University of Moratuwa, 1986.

(19) Perkins. J. A. - Higher education, U. S. A. Washinton, U. S.
Information agency, 1973.

(20) Radhakrishna - Occasional speeches and writings,
Delhi, publication division, 1956.

(21) R. Sivalingam - Tagore . The educationalist journal of the
national education society of Ceylon, Kandy,
Ariya Printing works. 1961.

(22)   Ralph E.   -   <u>Place & Placelessness</u>, London,
                                           Pion Limited , 1976.

(23)   Richard P. Pober   -   <u>Campus design,</u>copyrigh in 1992 by John
                                           Wiley and sons, Inc; Amarica

(24)   Shultz N.C.   -   <u>Existence space and Architecture,</u>
                                           London, Studio vista, 1971.

(25)   Turner, P. X.   -   <u>Campus,</u> An American Planning,
                                           Tradition, Massachusetts MLT. Press, 1984.

(26)   University of Moratuwa   -   Sri Lanka, <u>Information for under</u>
                                           <u>graduates</u>, 1991.

(27)   V. H. H. Green   -   <u>British Institutions,</u> 1960

(28)   V. S. Nammuni   -   <u>Assessment in Architectural design</u>
                                           <u>education.</u>   It's role in facilitating learning
                                           unpublished thesis for M. Arch. University of
                                           New castle , 1977.

(29)   -   The International council on the
                                           future of the University writing. 1973.

(30)   -   University of Stirling (Prospectus),
                                           Notts, Mansfield, Linney's Esl, 1986.