

ON CONCEPTIONAL QUESTIONS OF THE DEVELOPMENT OF THE UNIVERSITY QUARTER IN GYŐR, HUNGARY

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HU ISSN 1418-7108: HEJ Manuscript no.: CEA-020503-A

Abstract

The town of Győr is situated halfway between the cosmopolises Budapest and Vienna, and in the nearby of the university towns of Graz of Austria, Bratislava of the Slovak Republic and Sopron of Hungary, too. On the basis of the decision of the Hungarian parliament in December 2001, the College "Széchenyi István" of Győr became a university beginning the date of January 2002. Through this decision, the discrepancy has been solved namely that the economically higher developed western part of Hungary - with the exception of Pécs - could be characterized only with some smaller specialized universities in Sopron, Mosonmagyaróvár and Veszprém, in the contrary of the eastern part of the country with universities of great importance having long history (Szeged, Debrecen, Miskolc). In the article, town reconstruction and architectural questions of both the near future and on long-term are dealt with, with special regards to the development of the evolution process of becoming university. A characteristic feature of the recent preparation works is that a possibly more complex and deliberate approach is required to the development of the university quarter. Proper ways of development are suitably to choose on the basis of comparisons of some alternatives, taking into consideration of the fact that harmonizing with the long-term development directions of the town district as a whole and a feed-back based mental controlling is needed during this step.

1 FROM THE 1970'S TILL OUR DAYS

The Technical College "Széchenyi István" of Győr was established in the beginning of 1970's through some steps.

The numbers of the teachers and lecturers, and of the administrative and office workers were determined in harmony with the number of regular students of 1200 and the number of university extension (correspondence courses) students of 800, and for a homogenous education of technical type, and then the buildings of today's were constructed in accordance with this target.

The change, to become university from a college, is in close correlation with the successful organization policy directly after the years of the 1989 political regime change, and with the introduction of new departments thereby sensitively reacting to the market requirements. Through this policy, the institution in Győr was pushed up on the way of prosperity, in spite of the recession and crisis in economy, dismissal of a significant part of the teachers could therefore be avoided, as well, in the contrary of other higher educational institutions of the country. Educational structure has basically been changed. New directions, new fields were introduced into the education of engineers, the Institute of Economy became one of the most popular branches with the highest student number, education started for legal practitioners, the fields of health and social work were also incorporated into the education directions, and the Győr Faculty of the Music College "Liszt Ferenc" was integrated into the College. A multidirectional connection (lectures, professional trainings, joined educations and tutoring) has been developed with the companies and factories of the town (Audi Motor Hungaria Kft., Integrál-H Építőipari Rt., etc.), demanding highly qualified work force that finished the education in Győr. Owing to the changes in progress, the number

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Figure 1: Favourable geographical position of Győr, localization of the university in the town structure (Source: Information CD of the college, 1998)

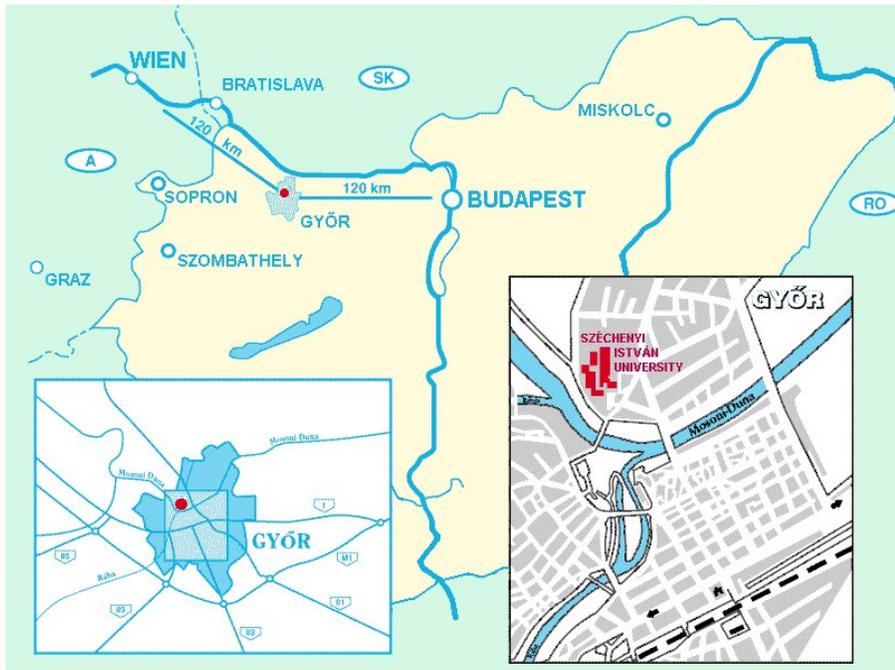
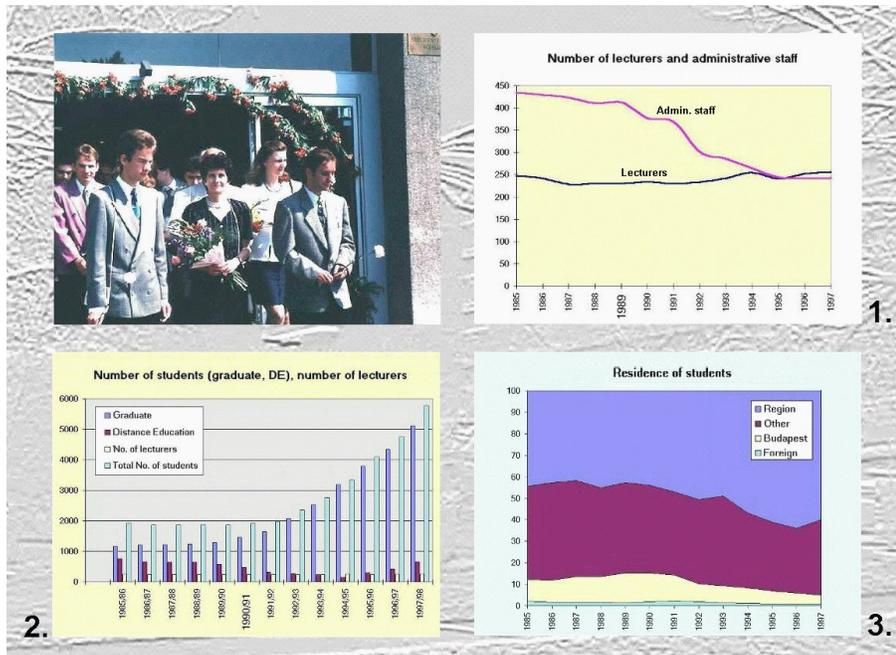


Figure 2: Aerial photograph of the College "Széchenyi István", 2000



Figure 3: Diagrams of Success of the College becoming now University, 1985-1997 1. Decrease in the number of administrative workers in comparison with that of the lecturers 2. Increase in the number of students 3. Increase in the number of students from the region North-Transdanubia (the north-western country part) (Source: Information CD of the college, 1998)



of students on the institution has been increased up to 8,000 and it is to anticipate to reach even 10,000 by 2004.

2 DEVELOPMENTS THINKING IN TOWN-SCALE RELATIONSHIPS AND SUITABLE DISTANCES OF TIME

A development process of large dimensions has been started when becoming university that is in connection with the expansion of the broader surroundings, i.e. with the development of the town district "Révfalu", and even with the future construction and building of the so-called "Small Ring-Road" of the town which represents a town-scale step in improvement. The development of the future university (University "Széchenyi István" of Győr, abbreviated henceforth as SZE) through responsible way of thinking using an add-on way of solution (i.e. by erecting a new building or attaching a new section) cannot be successful, there is a need for harmonizing local developments not only with long-term expansion ideas taking into account the whole area of the university but with that of the whole town district concerned, as well as for a feed-back based mental controlling - otherwise the institution cannot reach, in spite of all well-meaningness, the deeply desired results of European quality showing on-coming prosperity. In order to avoid it, not only the situation of the main building of the SZE must be taken into consideration but the vision of the future university as a whole is going to be foreseen, as well as the structural interrelations and connections with the town district as a unit going to be renewed through the planned "Small Ring-Road" continue to be re-evaluated - even if only on the level of schematic drawings.

The General Settlement Plan valid for the town Győr at the moment provides only limiting terms for building on the great block ground-plot of the university, and separate plans were prepared for the inner development of the area. Numerous constructive things were formulated for this university area in the latest edition of the detailed General Settlement Plan and Construction Proposal as early as in 1992 (e.g. the surfaces for pedestrians were separated from the roads and parking places situated below), but the planned campuses, anyway, have their own driving forces since they do not agree and harmonize with the town structure in the nearby. In the detailed Settlement Plan renewed in 1995 there was no

Figure 4: Approachability of the University is going to be very favourable and definite after the building of the local so-called "Small Ring-Road" (marked with blue), in comparison with the situation arisen through the forced by-pass of the Downtown with pedestrian traffic (ed. by: A. Somfai)

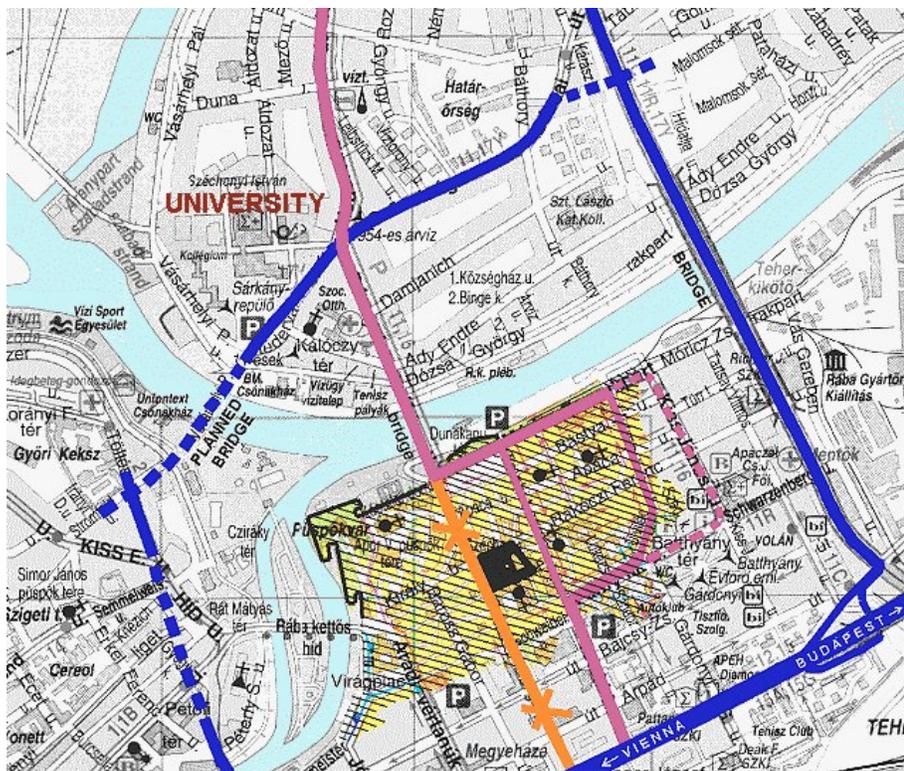
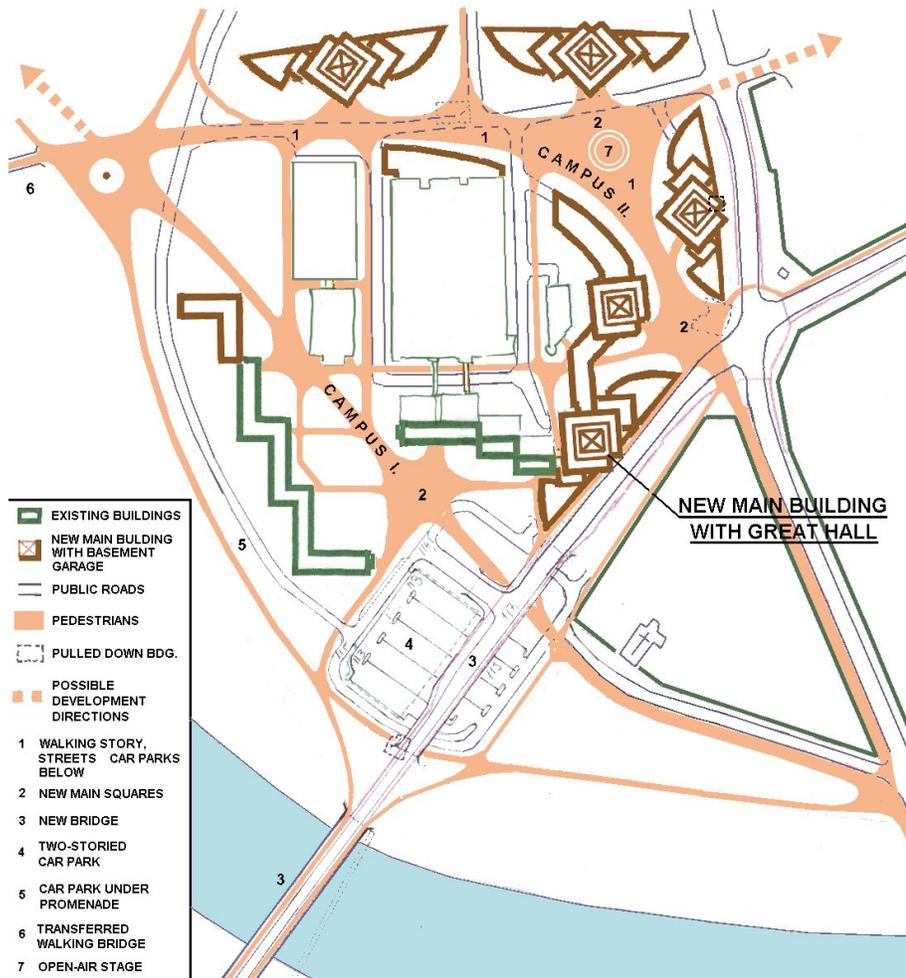


Figure 6: Detailed Settlement Plan of the prospective university, 1992 (prepared by: Architect Csaba Virág)



Figure 7: Schematic development proposal for the university quarter, its buildings, space and traffic organization (ed. by: the university quarter, its buildings, space and traffic organization A. Somfai)



3 INVESTMENTS OF TODAY AND OF THE NEAR FUTURE PLANS

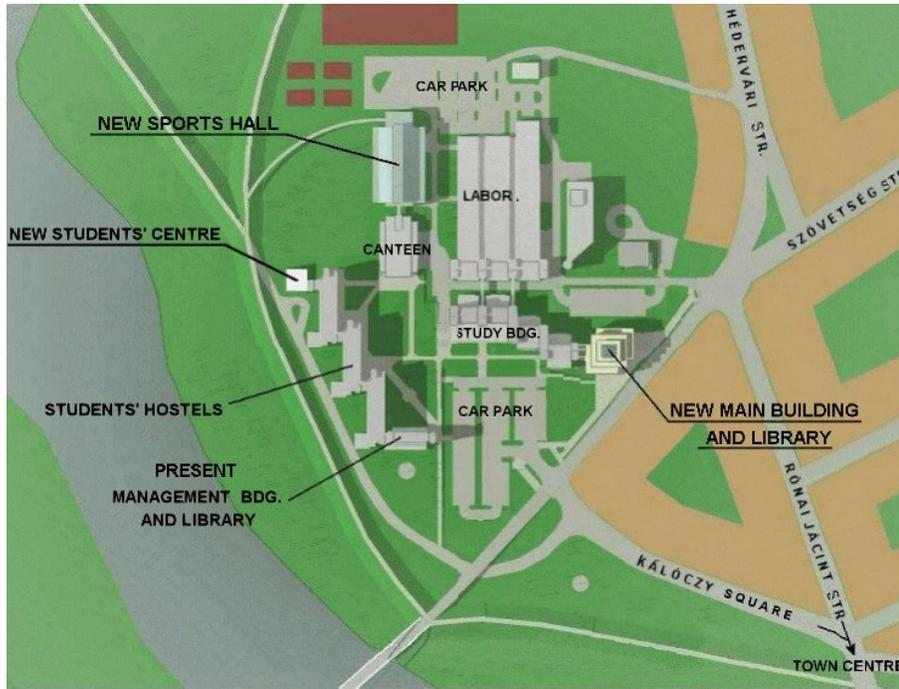
In connection with becoming a university, construction and building works of the university hall for sports and other events has started in December 2001. Three buildings were bought and are under reconstruction in Győr in order to increase the accommodation capacity of colleges, hostels. Erection of a new main building including a library is planned for the next-coming years, as well as establishing of a new students' centre (the old one is today in function on insufficient ground area and in an ineffective way). The very first steps should be the supplementary heat isolation of the hostels used and renewal of the door-and-window system and of the shadowing system of the existing study building in the reconstruction process of the existing block of buildings.

Sources of investments planned for the near future (source: Handbook of Institutional Investments "Intézményberuházási Kézikönyv", December 2001)						
	Modules by priority of the higher education institution	Investment sources (gross values, in Million HUF) (at an exchange rate of HUF 250 = USD 1)				
1	2	3	4	5	6	
		Development program	Own sources	Sources from sale of real assets	Sources obtained from the town	TOTAL
1	New main building and library	1 750	440			2190
2	Investments of informatics	110	50			160
3	College-buying	1160				1160
4	Students' Centre	80				80
5	University hall for sports and other events		150		1 060	1 210
6	Reconstruction of existing buildings	600	360			960
	TOTAL	3 700	1000		1 060	5760

4 PLACEMENT ALTERNATIVES OF THE NEW MAIN BUILDING AND LIBRARY

The predecessor of the young university in Győr, the former Technical College "Széchenyi István" was built on a huge block ground plot, on the location of the erstwhile so-called "Torkoskert" (i.e. "Gourmands' Garden) in the early 1970s on the basis of the plans of Professor Mikl's Hofer DLA. This unit of buildings toned through all concrete and glass elements, having been arranged into the existing lean and rectangular raster-geometry, cannot be left out of consideration at the placement of the new university buildings and at formulating their characteristic look. The orientation of the composition raster of the building unit into the direction north to south should be questioned even today, owing to the effects of excessive sunlight, as experienced. It must be noted that a complex feasibility pre-study has been recently prepared by the Faculty of Architecture and Building Constructions of the institution about the supplementary shadowing (that totally lacked) of the existing buildings - but it is thought to be of the

Figure 8: Actual new investments in progress and those of the near future (ed. by: A. Somfai)



same importance that care must be taken well in advance on the protection against sunlight (and because of the new main town road to be constructed in the near future, against the increased level of noise load) at the time of erecting these new buildings, as well. Establishing a new university main building is justified alone by the present number of students, too. The study room capacity of the university is suitable for 3088 students at the moment but there are only 7 study rooms with an individual capacity of more than 100 students. This means the narrowest bottleneck can be observed during the education schedules (time-tables) owing to the capacity of the lecture rooms. The library is now rather small, and is not sufficient for satisfying the requirements of a university. The target is to reach an optimal allocation of the function: main building and library, through detailed analysis and comparison of three arrangement alternatives. At Alternative I (cf. Figure 9) it is remarkable to emphasize the recognition of its importance since its approachability of the university from the direction "Mosoni-Duna"-Bridge (over the Danube-branch) shall at the very least be so significant (if not more important) after having finished the construction of the "Small Ring-Road" than today through the road junction at the street "Rónay Jácint" being assumed the main entrance. On the basis of the functional building connection possibilities, however, the localization of a building (the so-called Danube-Gate- House, "Dunakapu-épület") at the future bridge-head cannot be considered as lucky.

The main building situated at the streetline-break of the university walkway Rónay-street (Alternative III, cf. Figure 11) seems to be the most successful and lucky solution on the basis of town structural and functional considerations, as well, but this placement is embarrassed by the study building owed by the university (the former famous "Holler" tenement house built in 1925) - its demolition can only happen in a later period.

The chosen solution is Alternative II, direct broadening besides the existing Study Building (cf. Figure 10). This would happen based on the empty field situated by the existing building, and any further extension should be made with the broadening of this building in question in a later second phase to the streetline-break of the university walkway Rónay-street - with erection of a university and/or exhibition building. The function of an exhibition area is fully absent from the town of Győr, in spite of the fact that its necessity in the close nearby of the university can be proved both on the basis of the construction plan of Csaba Virág of 1992, as well as upon the opinion of the well-respected Professor Rechnitzer published in the local newspaper "Kisalföld" in November 2001.

Figure 9: Alternative I: Double broadening, i.e. a new building at the bridge-head ("Dunakapu-épület") and the supplementation of the present Study Building. Covered interconnection between the existing Hostel and the Study Building is also wisely proposed. (prepared by Dipl. Eng. Arch. Csaba Rosta, chief research-worker)

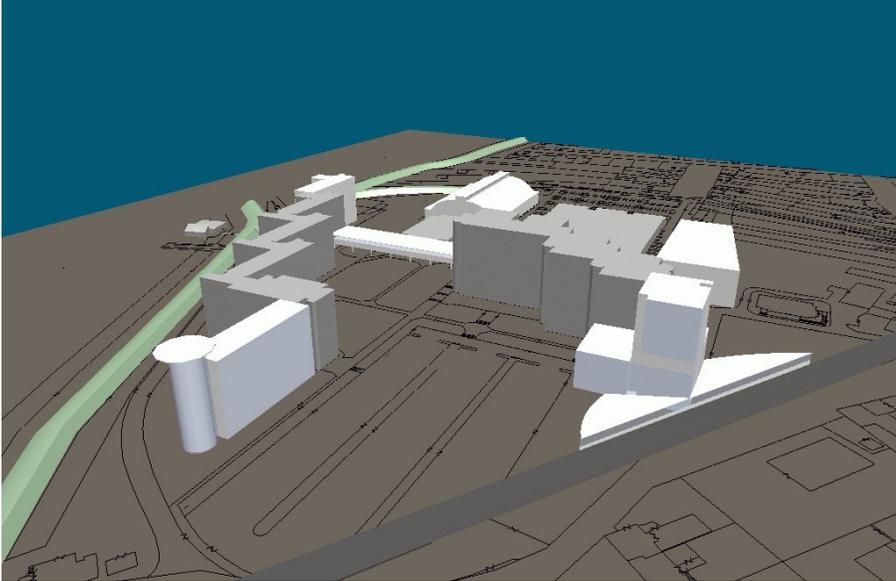


Figure 10: Alternative II: Direct broadening of the Study Building - the functionally best considered solution.(prepared by Dipl. Eng. Arch. Attila Somfai, assistant professor)



Figure 11: Alternative III: A new eminent main building inserted into the axes of the university walkway at Rónay-street. On the picture, other alternative objects of later developments are also showed. (prepared by Dipl. Eng. Arch. Győző Cserhalmy, research-worker)



Figure 12: Above: The memorials coin on the occasion of the change from college to university. Under: A detail from the existing lean unit of buildings, and a possible future picture with the Small Ring-Road and new main building (computer simulation view designed by: A. Somfai)



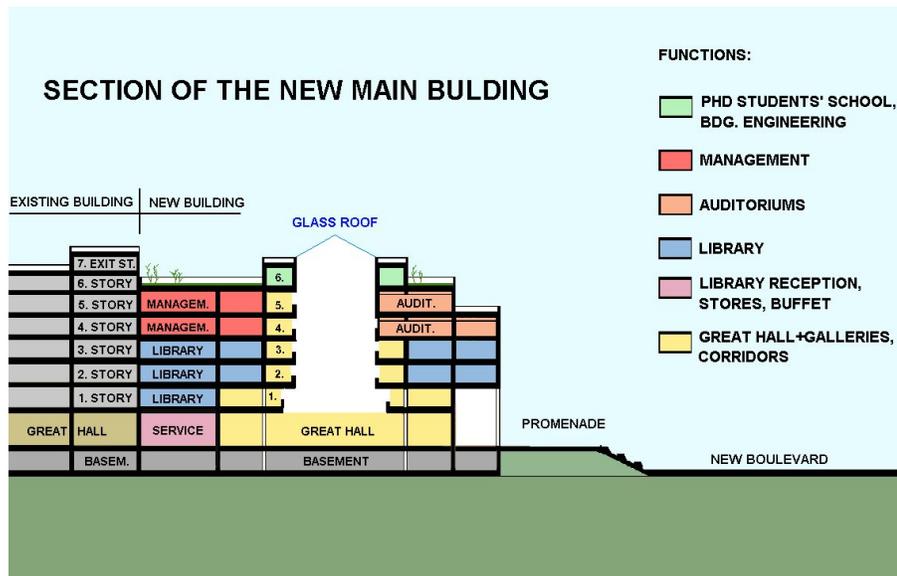
5 THE NEW MAIN BUILDING INCLUSIVE THE LIBRARY

This new main building and library is intended to be an object with the value of denotation and even symbol deriving from its offensive location near to the axes of the future town main road between the districts "Sziget" and "Révfülu". Its target is to offer contribution to better satisfaction of the number of students increased up to 6 times high of that a decade ago, and besides, to give solutions to the requirements of the university with expressively new characters and new quality. The 4 main functions of the main building are divided so that of the planned ground- space of totally $5000 m^2$, library is going to be placed on $2500 m^2$, and the rest is going to be used for rooms of study and management-administration, and those for the PhD-education.

The main hall (aula) of the present Study Building, owing to its immoderately prolonged space and chased ground-plan is not able to fulfil the functions awaited - e.g. events and arrangements must be organized on a small area, and orientation is not enough and definite for the guests arriving. On the other side, the main hall (aula) of the planned new main building - by reason of its near-square ground-plan ratios and high mood owing to its atrium-type space - is going to be a representative central place of the new university, giving space to graduation ceremonies and award admission events, and other celebrations of significance. The inside arrangement of the new main building can fully be accommodated to the basic functions and activities, as well as requirements aimed (education and research, library work, university management). Instead of the bibliotheca of today working separately on a small place, a new regional library of high quality should then be established and developed, having direct contact with the Study Building and showing thereby a very significant increase in the total quality mainly for the university students.

After its construction, the new main building shall not be further developed in height in the future. Certain modifications concerning the ground-plan (e.g. enlargements, joining with new building, first of all on the northern side) can, anyway, occur in some next-coming years. The possibilities of later developing construction or further changes must be taken into consideration, however, in our days, both during establishment works regarding the inside space arrangements, and at fixing the solutions for the outside connections (of road and pedestrian traffic, parking place orientation). Being ambitious when working out the architectural details, designing the interior decoration or planning the installation shall result

Figure 13: A possible cross-section of the future main building with the aula (preliminary sketch prepared by A. Somfai)



in improvement of the living and working conditions. This should mainly be transmitted by deliberate planning of the building, as well as the quality of the mobile and fixed furniture and installations, coverings, etc. Special attention should be given on ergonomic solutions, and other aspects of interest are the behaviour against cleaning, changeability, variability and possibility to be modified (e.g. greater ratio of mobile furniture, against the built-in furniture within the existing buildings). Extraordinary care shall be taken to the harmony designed with using scientific results in colour-dynamics and shade-psychology, regarding the material choice and colours of the new building, of its installation details and furniture. (Colours play an important role, too, in wilful information-providing and orientation-giving, besides the esthetical and psychological characters and features of the individual shades, e.g. the stories may have different and individual colours on floors and walls.) The quality in architecture and interior design should be complemented with use of art products - sculptures, pictures, other decoration works and green plants. Taking into consideration the revolution in informatics, the number of electrical and computer network connections is higher than the average value inside the office rooms, the library reading-rooms, on the lecturers' desks and tables. In each lecture room a projector shall be integrated, and on the long run, each university (study) room is going to be equipped in a similar way. Through systematic considerations when installing protective tubes and mountable covering and cabling systems, wall drains and wall canals, the so-called "intelligent building" is under preparation - with regard on telephone, television, internet, and building mechanics and supervision systems shall be united into a uniform one. Our target is to keep abreast of the technical challenges and the information explosion of our times, but at the same time it must not be forgotten that the strength of personal contacts between lecturers and students can be compensated with nothing - and worthy spaces with comfort value are now wished to be established.

6 EDIFICATORY RESULTS

At the development of the University "Széchenyi István", it is inevitable needed to think in interrelations in space and time, instead of addition or supplementary connection of one or more new objects, in harmony and agreement with the development ideas of the town district, through continuous refining of the vision for long and very run on the whole area of the university quarter. Development and improvement decisions can be optimised with working out and comparison of some alternatives. A development may not be one-sided - numerous existing functions must be improved through proportional development in relation with and at the same time of the multiplication of the number of the students, and - which is more - requirements of new type in connection with becoming university (PhD-School, exhibition hall,

etc.) must also be recognised. But that all is not enough, since additional supplementary needs (trade objects, hotels, etc.) coming from the "outside" should be acknowledged and promoted in establishing. An overcrowded area of buildings in the university quarter must be avoided therefore newer and newer reserve areas and grounds should be looked for well in advance, for the purposes of developments in the very long run (e.g. the place of the present area of the border-warden barrack or by the riverside of the "Mosoni-Duna" dead channel). It is of great importance - besides the basic connection to the pedestrian and road-type "arteries" of the town, as well as the development of the mass traffic tools - to establish connections with the areas on the other side of the "Mosoni-Duna" and the sport and recreation facilities there (through e.g. building a pedestrian bridge into the direction of the walk-forest "Püspökerdő", i.e. the future Town Grove, "Városliget").

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