A Template for a Media Commons Typology

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Keywords: Learning Environments Design, Classroom and Laboratory Integration, Technology-enhanced Learning.

Abstract: This paper proposes an adaptable *media commons* concept as a foundational element for the design of learning spaces. The concept is based on the possibility to create flexible and resourceful spatial situations that can structure pedagogical and creative environments. The essential core elements, spaces, and artifacts of the *media commons* project are equipped with technology that enable various multi-media venues and practices of information transfer. This auditorium-classroom-laboratory integrated scenario would basically act as a dynamic environment that would link pedagogy, creativity, and knowledge formation as a product of social interaction in a specific set of spaces. This position paper about two manifestations of the *media commons* project at the Rio Piedras campus of the University of Puerto Rico, is basically a research and development study proposal on typological variations of an ensemble for in-person and remote collaborative space -such as or similar to that of design studios, innovation hubs, and online forums and platforms- and their effect on creativity, participation and authority in a pedagogical setting.

1 GENERATION OF THE TEMPLATE

The proposal for a media commons project presented in the following paper is part of the research conducted by sTAND (Studies in Architectural Narratives and Digital Design), an initiative primarily interested in knowledge transfer through new technologies in the field of architectural design.

The development of a media commons concept is an applied research design exercise based on the idea of creating a system of spaces that aims to stimulate the senses, encourage exchange of information and offer opportunities for rehearsal, feedback, application and transfer. A combination of laboratory spaces, public forum, and community center, the Media Commons variations here presented are part of an effort that seeks to establish a network of active learning environments and foster the development of a strong community of users.

1.1 The Media Commons Concept

1.1.1 Media

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Media as a component of the media commons concept is understood not as something you can relate to, but something you have to relate in. In this sense, media is seen not only as the devices (hardware) or the programming (software) that enable the transmission of information but the combination of both in three-dimensional space.

The media commons concept is based on the belief that something completely unique happens in the area where media and space intersect with a pedagogical objective. Specific design strategies can be applied to coinciding channels, devices, tools, interfaces, ensembles and groupings in order to enhance their capacity to organize communication and transfer information.

1.1.2 Commons

The idea to learn in *commons* is the other important component of the media commons concept. Studies show that students tend to respond positively to environments that encourage interaction. Spaces can be designed to harbor characteristics that cause emotional responses that could either encourage or discourage staying and engaging.

In their quest to encourage consumers to occupy a space, marketing strategists and interior designers have demonstrated that certain groups of users prefer to stay in spaces with good levels of comfort and a carefully crafted aesthetic image. Interaction in these spaces is enabled with furniture that allows individual private seating as well as the formation of clusters of people. The *starbuck's effect* basically consists of the possibility to satisfy basic needs and desires such as eating, drinking and socializing with the integration of comfort, flexibility and high-speed connectivity.

1.1.3 Media Commons

The proposed concept is not an accidental combination of stylish furniture with apparent technology, but an organized set of spatial and formal components that generate active learning environments.

Media aimed to support individual and collective learning via connectedness is dispersed throughout the spaces, rather than being housed in a specifically denominated computer lab or digital classroom. Although optimized and zoned for specific activities, an array of invisible technologies can in fact, be brought into the space and made available to its users or commoners in a flexible manner. The proposed combination of the spaces and the relationships created between them is expected to be utilized across a broad range of curricular experience and to work as well as a self-directed environment.

The proposed model incorporates five spatial situations: a stage space or place for presentations, debate, and show-off; a passage space or lively area to drop in and move on; a collective space where learning as a social process is carried out; an individual concentration space for introspective communication processes; and a studio space for exploratory workshops and laboratories (Fig. 1).



studio space ploratory workshops, labs

Figure 1: Sectional illustration of the five spatial situations present in the media commons model.

2 APPLICATION OF THE TEMPLATE

2.1 Law School Library Interior Furniture Proposal

2.1.1 Description

The Law School Library Media Commons proposal was developed in a design studio course working in collaboration with a focus group composed of representatives from the library's administrative personnel and the school's faculty and student body. The programmatic components of the design include a reception area, a small conference/seminar room space, a studio/lab space, an auditorium space and an individual study room area.

2.1.2 First Level

The reception faces the main entrance and has an important and multifunctional role. It will house trained staff capable of providing in-person assistance as well as touch-panel information screens. Although daily scheduling and program information will be available via text/email messages for subscribers, users and guests at the reception area will be immediately aware of the day's timetable and room assignments.

Aside from the reception area, the first level also includes an auditorium space, a conference/seminar room and a studio/lab space (Fig. 2). Both the conference/seminar room and the studio/lab space can be isolated acoustically from the rest of the spaces.



Figure 2: First Level Elements, Media Commons proposed design, Law School Library, UPR.

The studio/lab space can be equipped as a multimedia/3d immersive environment. The studio/lab space is meant to address the need for spaces that enable remote collaboration as well as teaching with highly interactive, multi-user, digital multi-media. It is also meant to allow frequent transformations and accommodate several different types of activity during the course of a single day.

The auditorium space serves as a stage/passage/gathering area and has a dual function as a stairway that connects to an upper level mezzanine. The auditorium can be equipped as a webcasting/recording studio.

2.1.3 Second Level

The second level has an area designated for individual study and a mezzanine/passage area that looks into the auditorium space (Fig. 3).



Figure 3: Second Level Elements, Media Commons proposed design, Law School Library, UPR.

2.2 College of Natural Sciences Outdoor Pavilion Proposal

2.2.1 Preliminary Schemes: Permanent Structure

The Law Library Media Commons, basically an interior furniture project, was reconfigured as a freestanding pavilion in order to accommodate a new set of site requirements presented by the faculty of the College of Natural Sciences. The pavilion proposal consisted of fixed concrete structural elements and a roof/terrace slab that incorporated existing trees and responded to building alignments. Through the incorporation of semi-enclosed exterior spaces with some enclosed interior areas the pavilion housed the same programmatic components as the law school proposal.

2.2.2 Preliminary Schemes: Movable Structures

An alternate proposal for a completely removable installation was prepared as requested by the College of Natural Sciences. The design concept for the installation consisted of the flexible aggrupation of two constructive elements: stage/room towers and seating platforms. The towers could house interior spaces and act as structural elements for the support of large-scale media walls. They could also be connected to increase contiguous interior square footage as needed. The seating platforms could be set to configure an amphitheatre space or be placed in numerous other arrangements.

2.2.3 Final Version: Fixed + Movable Elements

The College of Natural Sciences eventually selected a location for the project that due to administrative and regulatory conditions needed to incorporate elements from both previous preliminary schemes. In this new scenario, the steps component of the media commons was conceived as a fixed element to be installed on an existing slope. The multi-use interior and exterior spaces would be housed in a removable structure placed at the base of the slope (Fig. 4).



Figure 4: Elements, Media Commons proposed design, College of Natural Sciences, UPR.

2.2.4 Fixed Elements: Steps

The fixed seating area of the outdoor auditorium component is basically a series of small concrete retaining walls. These retaining walls will be arranged in combination with the existing slope to create steps and the seating areas. In terms of its construction, some of its horizontal elements would be poured in place and others could be pre-cast much like large-scale stadiums seating situations. Enclosing and space defining elements in this area (for the creation of a control room area, a backstage and the refurbishing of the existing solid side wall) would be built with outdoor-resistant materials and would safely carry the new electrical infrastructure.

2.2.5 Movable Elements: Lightweight Pavilion

The multi-use component of the media commons will be built as an easily dismountable lightweight framework. The open ground floor of the multi-use space area allows it to be easily configured for any of the transitory activities, such as gatherings, exhibitions, discussions, screenings or workshops. The continuous concrete floor slab on the ground area integrates the foundations needed at the base of the lightweight structure columns and can also incorporate precast concrete tiles that would allow water to permeate through. Additional ground floor area could be provided by a removable wood plastic composite decking.

The upper level of the lightweight structure will be connected by a ramp/catwalk to the top of the seating area. This level will provide space for the interior enclosed spaces of the multi-use component of the project. Its floor, vertical window surfaces and roof components will also be dismountable. The roof component will feature as well skylights with flexible shading systems such as fabric screens that span between the structural framework and act as light diffusers.

3 PRELIMINARY CONCLUSIONS

3.1 The Media Commons as a Possibility for a Typology

3.1.1 New School Prototypes – Interior/Exterior Construction

Applying the original set of ideas intended for the law library interior project to the college of natural sciences exterior location resulted in the

stage space place for presentations, debate, she	ow-off
passage space	individual concentration
lively place to drop in and move on	introspective process of communication
collective space	studio space
learning as a social process	exploratory workshops, labs

Figure 5a: Sectional illustrations of the five spatial situations present in the media commons model.

development of a wider range of options to accomplish identical programs. Regardless of the fixed and movable components, the combination of the spaces that constitute both proposals provide five typical situations meant to help configure an active learning environment (Fig. 5a, 5b).



Figure 5b: Sectional illustrations of the five spatial situations present in the media commons model.

3.1.2 New School Prototypes – Building Clusters

The strategic aggregation or clustering of media commons components could produce a unique kind of building environment (Fig. 6). This new architectural setting would allow space to become a special component of a curricular experience and impact the school's overall learning environment.



Figure 6: Possible cluster organizations of the media commons model.

3.2 The Media Commons: Research and Development Opportunities

3.2.1 Learning Protocols

The Media Commons concept creates the need to incorporate different sets of learning approaches/interfaces for each of the five active learning environments and their possible range of combinations. Research and development must be carried out in the field of protocols that need to be designed for the relationships between specific users and providers with the space and the technology for each area.

3.2.2 Classroom/Laboratory Integration

The Media Commons concept also presents an opportunity for research and development in the field of interior design with an emphasis on the integration of technology. The concept depends on the possibility that the design of flexible and resourceful settings that structure pedagogical environments can be attained with careful consideration of adaptable parameters in terms of the configuration of seating, lighting, acoustic, and audio-visual furnishing systems.

3.2.3 Information Science

The transfer of information exists in a cultural and social context. The design and evaluation of networked, multi-media environments for educational endeavour such as the Media Commons concept must be cross-examined through a multi-disciplinary lens which would include main thematic areas that would range from computer science and information systems management to cognitive psychology.

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