FROM THE ICONIC TO THE EVERYDAY: INSTITUTIONAL SHIFTS FOR STUDENTS AS CITIZEN DESIGNERS

ARUNAVA DASGUPTA

School of Planning and Architecture, New Delhi

THE ARCHITECTURE OF THE EXTRAORDINARY

"We come from a tradition of monument builders, but today we are almost entirely immersed in design for everyday environments. Where we come from is very different from what we do now." (Habraken, 2003) (Keynote address at the 6th Meeting of European Schools of Architecture, Crete, 2003, Nicholas J. Habraken)

While this observation by Prof. Habraken in 2003 may well be the underlying strain of architectural engagement today, the contradiction of indulging primarily with architecture that is 'special' against the 'mundane' everyday (as opined by Habraken himself) is still a continuing saga in the profession of architecture.

In the context of India as also, in various parts of this region, the preference for the iconic in architectural practice is a clearly established syndrome. All across the sub-continent, examples of 'high' architecture stand-out from the common ground of the urban fabric as testimony to the continuous fixation of our architects, builders, developers to create works of architecture that offer singular exclusivity as the distinguishing hallmark of each project. So far towns and cities of India have been dotted with such examples of 'extra-ordinary' architecture that strives to push that bit of 'extra' to the otherwise prolific anonymity of the ordinary fabric that engulfs them.

The trained architect and his 'designed architecture' has been till the recent past still a momentary urban phenomenon feature especially in the majority of the non-metropolitan urban centers including the small and medium towns in urban development parlance of the country.

Within metropolitan domains, the spectacle of urban imagery is however significantly different wherein competing and contrasting edifices of self-proclaiming architectural expressions herald the newness of each addition to the ever changing urbanscape. The overall ensemble of such collective manifestations has contributed to the unrestrained, often brutal staccato of architectural imagery that constitutes the visual and perceptible memory of such urban centers. In more ways than one, each one of these examples of striving architectural masterpieces stand aloof and alienated in the mainstream of the ordinary within which they find located. Importantly, (concurrently), the same holds true for architects and designers behind such creations (as exclusive and/or special members of the society of which they are supposedly part of).



Figure 1. Profusion of the Iconic - Gurgaon city

The affinity of architects towards the exotic and extra-ordinary finds its genesis in their younger exposures across different schools of architecture during the period of education and professional training. Almost since the beginning of architectural education in the country (in 1913) the inspiration and understanding of architecture through monuments and master creations have been the founding backbone of architectural training. While on the one hand, pragmatic considerations of utility and climate informed many of the design decisions on layout and planning, exploration of architectural expression on the other, revolved around the pursuit of the extra-ordinary or 'different'. Modernism brought along with it the idea of newness and the severance from tradition towards greater levels of import by way of international ideas and stoic expressions.

"In this model the architect is seen primarily as the maker of the exceptional product, for an exceptional occasion, and for exceptional use....." (Habraken 83)

PREVALING SCENARIO

The last two tumultuous decades of unprecedented developmental surge across the country has already established its distinguishing character of change in most urban centers. As India moves steadily from being a reticent participant of the global (economic) market network towards a more definitive focal position with respect to the world around, ripples of transformation emanating from quickly graduated world cities to the rural hinterland has been clearly palpable. Connected with this wave, has been both the transfer and infusion of new blood into the senile arteries of the erstwhile dormant architectural scene across the breadth of the country. The resultant expression of sudden creative (read 'mega') outcrops mushrooming at frenetic pace from seemingly any vacant space available has already started altering the contemporary urban skyline in most towns and cities. New modes of transport spearheaded by endless concrete serpents as overhead metro corridors forcibly inserted within erstwhile quiet city segments have brought in sudden restlessness and connected speculation. Monstrous aero cities around hurriedly 'globalized' airport terminals along with overnight townships, SEZs and 'industrial parks' are swallowing valuable, fertile agricultural land especially around metropolitan centers displacing thousands of farming households towards uncertain perils of a life of migration. New forms of entertainment, heralding new building types - the mall and the multiplex are making their ubiquitous presence within every kind of urban fabric across every scale of urban concentration. All along, the constituent components of healthy urban environments and connected processes remain silent victims to the onslaught of the capital driven development juggernaut that is today sweeping the Indian urban scene.

Consumption or Contribution

Schools of architecture have got entwined into this increasingly consumption-driven economy, manifestations of which are visible in the prolific surge of capital flows inducing unbridled developmental changes across the sub-continent. Following the urge to be in touch with the times, design studio problems have encapsulated this new urban/ development paradigm, defined by global markets and consumer preference through new projects in sites of such forces. The growing clamor for students of architecture and fresh graduates from newly established MNCs on Indian soil has redirected design studio exercises to cater to 'the market' and create design students equipped to handle the same. As the consumption of the city space keeps spiraling skyward though markets of real estate, explorations within the design studio have picked up cues symptomatic to these fresh trajectories of change sweeping across the range of urban settlements dotting the country. Oblivious of the impending impacts of such engagements, the design studio steadfastly maintains its comfortable distance from anything that may start becoming uncomfortably complex, while heroically partnering these contemporary directions of change through newer territories of creative imagination. Architects and student designers willy-nilly become pro-active participants in this consumption driven, market-oriented engagement of city space that recognizes the iconic and the branded as true bench-marks of 'competitiveness' and 'worth'. Somewhere, the possibility of a contribution driven exploration of designers within city space, amidst these fluctuating conditions of their own context, remain marginalized if not abandoned.

Distanced From The Real

Exercises within the design studio encourage unfettered imaginations of individual creativity and self-expressions as the building block of architectural explorations. What have been glaringly missing all along are two fundamental factors that determine 'real' projects - people and costs. Selective simulations of the real in consonance both with studio objectives and tutor's dreams/affinities have remained the consistent characteristics of the educational program. Thus the design studio as arenas of simplified reductions of the world outside and the apparent creative 'mastery' of the studentdesigner in such a condition has clearly been the determining factors to the prolonged disengagement of the architecture student from the complexities of the real. The comfortable ease with which each successive studio (in each successive year of architectural training) dealt with higher and higher scales of design projects strengthened the belief of creating 'at will' and solving all problems of humankind. The 'halo' that begins to form at the entry portals of the architectural school around the student architect gets progressively larger and correspondingly impregnable as the years go by. The graduating architect emerges as the 'special one' as an answer to the clamor for the specialist in today's career driven society.



Figure 2. Student project - third year of undergraduate program

That good architecture in school does not necessarily mean grand and that higher complexity of problems is not synonymous to larger project sizes have rarely been the guiding framework of most architectural training in schools across the country. A few of the more serious, thinking institutions have albeit realized the pit-falls of exploration of the extra-ordinary and incorporated appropriate shifts in erstwhile trajectories of their educational paths. Most however have continued the relatively convenient, glamorous way ahead.

"A" or "a"

The propensity of practitioners and students of architecture to prioritize their engagement in the production of the iconic extends outwards from the aspirations of power- brokers(?) in today's societal hierarchies. It is through the agency of the rich and the powerful, be it wealthy elites, ruling governments, corporate houses that architecture with a capital 'A' (Upton 2002) becomes the natural outcome and hence the focus of architectural engagements at majority of instances. This trend and affinity to promote and therefore produce such edifices of glory and glamour has remained the continuing strand of design choice-making both within architectural offices/ practices as well as the design studio. So while the Bilbao in Spain and the Birds Nest in Beijing along with many others from the same family remain the quintessential source of design imagination to scores of young design minds, the experiments of barefoot architects in Thailand and India or bamboo architecture in Columbia remain distant domains of references in most design studios across schools and colleges of the sub-continent. Architecture with a small 'a' that surrounds and engulfs us in our everyday pursuits of existence is left untouched and unnoticed by the academic and professional world of architecture. If at all, the idea of a slum rehabilitation project in Dharavi, Mumbai or an eco-tourism project in coastal Kerala makes appropriately correct noises of attention and benevolent offering while escaping the detailed nuances and underlying complexities of the real conditions that constitutes such arenas of engagements. The small 'a' of everyday architecture though prolific in its presence in all our day to day lives remain isolated from the sophisticated gaze of our design tutors contributing to the growing alienation and gradual indifference to the complex realties of the world of which we are a part and product of.

A Question of Priority

Within the comfortable confines of the simulated physical city/setting in the design studio within which the studio exercise gets located, the student mind hovers beyond the real into the imaginary. Such flights, though important as creative engagements do not necessarily converge in addressing real issues in real conditions. The distance that all studio exercises keep with economic/monetary consequences of design action as well as also the simulated people profile called 'user-group' that designers casually refer to proclaim the above disconnect with fundamental determinants of architecture in the real world. That good architecture emerges as much from the cycles of everyday economics, politics and societal dynamics as from individual flights of imagination is yet to be acknowledged, let alone experimented with. In fact, in a recent study, covering the last five years of architectural thesis topics chosen by students of



Figure 3. Student Project for an Office Building

final year architectural program of a leading school of architecture, it was revealed that the preference for selecting a potentially iconic as well as exotic building project ranging from the 'BMW Factory in Chicago' or the 'World Trade Center in New York' far out-weighed individual priorities on projects like the 'Stone craft Village Center near Alwar' or 'Kathputli Nagar Slum Rehabilitation at the other end of socially significant explorations. In addition to this, the ratio of projects defined within metropolitan city conditions as compared to smaller urban centers appears overwhelmingly skewed towards the former. Projects in rural domains attract less than 7% of the total number of thesis projects considered by students in the last 5 years. This, in a country which is presently more than 70% rural while ironically stressing on being one of the fastest growing economies in the international scene.

After graduation, the disengagement of the past five years from real life, in part or in full, generates another set of inner contestations within the fresh architect. The 'rosy' picture of a beautiful world at their creative command in which they believe to be in total control steadily gives way to progressive reawakening and new exposures. Pushed around by the constant grind of the everyday with complex and unpleasant webs of interactions, the dream world of the young designer confronts the unimagined constituents of the world surrounding them. Their temporary disassociation with this world makes it that much more difficult for them to return to and work within. 'This is not what we were taught in architecture' is so much of a recurring refrain from a fresh architect after tasting the first

dose of reality that the significance of such a deep and widespread feeling is conveniently ignored or dismissed as inevitable. The classroom and studio within the architecture school is not the real world.....to deal with that requires yet another training elsewhere!

TOWARDS AN ALTERNATIVE TRAJECTORY

Public Space as Repository of Everyday Learning

Indian habitations, as with many other such in this part of the world thrive on 'space' as their primary domain of public lives. Even under the severity of climatic influences, outdoor space-based patterns of urban and rural living have characterized most conditions of human engagement with their physical setting. Over thousands of years of pattern formation, such public spaces become therefore, immemorial repositories of public function both as every day and the ritual. With time, the stunning diversity of social life that characterizes our civilizations unfolding each day in these spaces has percolated to the very core of every constituent component of the space. As layer upon layer of altered patterns of living in consonance with changing time and values get juxtaposed on each other, every space becomes an archaeological marvel to be unearthed as living evidence of the multiple, simultaneity of human life that remains interwoven within such spaces.

Saturated to the brim and overflowing in chaotic complexity, public spaces in the Indian settlement become therefore the most valuable arena for engaging with the ethos of our contexts. Lessons from such engagement could potentially become the backbone of any study and hence design of physical environment (especially architecture) that chooses to ground itself within the 'real' nuances and processes specific to our kinds of societies leading our kinds of lives spanning centuries of development and change. Earlier, built form in most occasions has offered to provide the inevitable backdrop to the theatre of urban life in public spaces. Traditional city fabrics till date epitomize the continuous, yet diverse, experiential flows created by the unified seamlessness of built form enclosing and enriching an unimaginable range of spatial formations. Interrelatedness rather than independence, inclusivity rather than exclusion, conformity rather than difference, continuity rather than newness - all these attributes once embodied this collective ensemble of humankind's largest creation - the city. The few (and they were but a few)striking pieces of built artifacts that stood out as focal objects in space as markers of experience, memory and association served as deliberate punctuations to connect and orient participants of the space more wholesomely and meaningfully towards a long term bondage between civic life and civic space.

Site As Studio

Detached from their personal affiliations, isolated from family conditions, removed from the real world, the architecture student within the contemporary design studio discovers a new place of alien requirements and unfamiliar norms. The diverse and rich cultural

milieu to which each of the student belongs, reflecting their origin from various parts of the sub-continent, gets juxtaposed with an overwhelming new "culture of the architectural discipline". This new culture over time overwhelms the intrinsic individual and the embodied self towards a programmed homogeneity of universal value systems prescribed in the studio environment. Led by the tutor and his team of design experts, the contours of the new cultural idiom get established as the operational framework of engagement and communication. Quite often, the physical journey needed to traverse by the fresh student to enter the portals of architectural education usually located in big cities becomes symbolic of the mental and cultural distance that is necessary to be bridged simultaneously from their familiar origins and cultural associations to the hallowed precincts of the academic world. Rarely, the commencement of this educational path starts with the recognition and therefore, the connection of individual students with their own resource of experiences. In a country like India, where cultural diversity and social heterogeneity becomes the primary asset for academic discourse, this vital bank of personalized experience and knowledge systems remains untapped and gradually eroded.

The possibility of a personalized journey into the creative realm of architecture gets limited due to this dominant cultural frame. A reconnection with the world outside, immersion into their individual rhythms of personal and public life, confrontation of the collective uncertainties and fluctuations of the public discourse, positioning within the contestation of everyday drama provides an alternative route towards an enlivened and re-energized student mind with respect to real situations encompassing our settlements. This trajectory clearly requires a re-assessment of the studio as the central space in nurturing the student's creative agency. No longer can the internal, controlled and comfortable sphere of simulated simplifications of the real as the primary domain of the architectural explorations can remain valid. From such an encapsulated make belief world of the studio space, there is a definite need of an outward shift into the real world. The site as studio - be it the city, neighborhood, public space, plot or spot, becomes then the primary domain of creative action and intellectual exchange for any nature of design engagement at any scale of involvement.

In this condition, the student and tutor both re-visit the real, rediscover the world of which they were already a part of and re-establish their own threads of connections which had severed upon entry into the special world of architecture. The re-location of the student and tutor into the everyday world restores the continuity in individual alignments of the academic scholar with the societal processes that surround us. The "real", challenges and beckons creative minds in multiple directions provoking restless interchange between the designer and the setting. This dynamic oscillation of thoughts and ideas comprehending constraints and possibilities simultaneously as response to the embodied experiences of the designer in such situations allow for a vibrant dialogue towards creative contribution for the same.So, how could public everyday space be a part of academic engagement in studio-based programs of architec-

ture schools? How could personalized associations with individual city spaces or neighborhoods become vehicles of possible design contribution? How could the majority of the rural that defines our country be brought into the frame of a consistent focus of design application? This paper discusses briefly four experiments conducted through the last few years at different levels of inquiry as basic reference for deliberating on the same. These experiments moved out of the conventional bracket of defined studio activities and encouraged the studio team into an unaccustomed immersion of themselves with the realities of the everyday. This version of the paper outlines all four cases below and highlights the first one to be followed later with the other three in the final paper.

EXPERIMENTS

Case 1: Public Space as mediator of collective urban engagement through the prism of Public Art - A multi-dimensional endeavor to participate creatively in larger discourses of urban development, environment and everyday city space.

Case 2: A student-driven exploration of their own personal engagements with city space and everyday cycles albeit with their individual but diverse constitutions of the self. Re-discovering urban life through multiple imaginaries nested within chosen urban spaces as dynamic and positive settings.

Case 3: Focusing on and cultivating an empirical body of knowledge that captures and draws lessons from experiences and complexities of our kinds of societies. Defining neighborhoods towards ideal Housing environments in the city by re-engaging with own neighborhood residents across age and gender groupings for differentiated narratives of residential life in the city.

Case 4: Exploring the Architect's role beyond the city through a sustained and pro-active engagement with multiple stakeholders of rural settlements under transition. Participating in a long term, need driven community based program to assess prevailing directions of change in ecologically sensitive remote, tribal Himalayan villages while contributing collectively to a stronger, sustainable path ahead.

Case 1

On a cold winter evening in December 2008, the city of Delhi became witness to a set of miraculous events across some of its most popular spaces. A gigantic Persian carpet rolled out into one of Delhi's most neglected but beautiful Mughal gardens of yore. A ship sailed into the fore-court of the Mayor's office called the Town Hall in the heart of the old city. A lighthouse beamed down flowing images of one of India's sacred northern rivers. A British-era gargoyle in a subterranean room within a public library began spewing out water from the nearby river. Vultures danced amidst criss-crossing high beams of encircling car headlamps around one of the busiest traffic roundabouts in the city. A recently uprooted tree was dis-

covered precariously hanging atop the ruins of an erstwhile British bungalow in the central business district (CBD). All this and much more.......



Figure 4. Public Art in Delhi

Delhi was being introduced to the idea of Public Art at a scale that has never been conceived before. Curated (assembled) together as a festival of public art called 48°C Public. Eco. Art, the name alluding to the rising temperatures of the city as an outcome of the deteriorating state of the Delhi's environmental conditions. Twenty five art projects by artists from across the world and from various corners of the country converged to discuss with citizens at large, issues of urban environment using urban space as canvas through the prism of public art over two weeks. Set within the capital metropolitan city of Delhi, 48*C Public eco-art project was the first experiment of its kind bringing together the vexing issues of the city's environmental conditions and prevailing trajectories of urban development to its citizens through the medium of contemporary public art. More importantly, the experiment unfolded itself in the public domain of the city extending across some of the most popular historic and central urban settings of Delhi. At another level, the project also brought together a diverse range of professionals, academics, environmentalists, commentators and artists upon a common platform of exchange, debate and interchange around possibilities of closer and stronger inter-disciplinary contribution to the above issues in our cities today. Within this team, the Urban Resource Group – a team of students, alumni and faculty of one of the schools of architecture in the city, undertook the responsibility of exploring city spaces at one level and 'presenting' them to invited artists while documenting, analysing and reflecting on the processes of urban dialogue and public engagement with artists, technicians and social scientists at the other.

To begin with, members of the Urban Resource Group searched city spaces and researched urban histories to discover and compile a

range of spatial characteristics and everyday content of 'popular' urban settings. Findings of this study formed the ingredients of the city canvas that shaped and documented understanding, opinions and interpretations of the prevailing status of Delhi's urban environment encased within the selected urban spaces as the critical foundation for a venture of this kind. The next phase of involvement by the group included traversing selected city spaces with visiting artists and re-discovering the nuances of everyday public life as citizen participants of urban space with their own constituent cycles of day to day activities. The third phase of the project needed the team's involvement to locate public art concepts conceived by individual artists within the specified spaces in collaboration with the artists themselves as well as curators and city authorities with regard to their final production and implications on urban functioning during the period of the festival. The technical production team, in partnership with the artists and Urban Resource Group members then combined to execute the conceived works and connected site development requirements for the festival to unfold. The final phase of the project involved a documentation and analysis of the processes of public engagement that occurred before, during and after the stipulated days of the festival. This documentation, as mentioned earlier, started with the mapping of individual spaces and everyday life while moving on to its transformative sequences as the different facets of engagement through the production of public art works unfolded. Observations and interactive conversations with the everyday user in the everyday cycle of such spaces were juxtaposed with the stated intent and conceptual frame of the artist as attempted in the art work. The degree of public engagement with art works during the festival and the memory of the same, if not a deeper connect, was explored through directed questionnaires, interviews, visual documentaries, etc. to capture the dynamic relationships that got created because of and in interaction with the art projects. Substantive exchange through a formal public symposium entitled 48*C Conversations simultaneously brought the diverse actors of this interesting festival into multiple levels of intellectual interchange around the issues of Delhi's urban environment and developmental choices.

All along, the studio space inside the cool environs of the college campus became the space for collective reflection and a venue for cross-sharing of experiences, opinions and lessons from the intense individual or group-based engagements at 'site'. Strategies for newer aspects of involvement, debates on the expanded role of the designer, exchanges on the prevailing urban scenario, comparison of differences in urban conditions across public spaces, testing new methods of communication and representation for a non-design audience.....most such tasks that were outside the normal course of 'studio-work' started taking pre-dominance within the allotted time for studio projects. The studio space was but an extension of the 'real' studio at site which students had chosen for themselves and immersed into. The art works were creations of design in city space by artists as authors but by all others as co-authors contributing together in collective harmony to the significant task of engaging as creative citizens with their own city.

Institutional Shifts

From the current pre-occupations of architectural inquiry in schools and colleges across the country, a movement towards the alternate scenario discussed above, requires necessary institutional shifts at multiple levels of application. Apart from the larger and more essential question of disciplinary isolation from the significant socio-economic, environmental and political dimensions of the development discourse, central issues within the discipline of architecture requires critical reform and connected strategies. Till today, architectural education is continued to be formally seen as an extension of 'technical' education at par with and in relation to, engineering disciplines in the country. Except only, at selective institutional cases, the discipline maintains its overarching alliance to engineering systems and technology which, with the prevailing boom of accessible global knowhow is getting further reinforced by the day. The corresponding dialogue with the realms of social, political and environmental sciences, humanities and the arts especially again in the current scenario of developmental upheavals triggered by capital flows in the country, is woefully weak and insufficient to prepare design students to adequately respond to the times. Creative pursuits, on one hand and technical 'updating' on the other has kept the vexed questions around poverty, equity, identity, accessibility, sustenance, environment, all outside the primary engagements of the design student within his academic domain. Much more today, if not earlier, these questions cannot, and should not be addressed from within closed compartments of any knowledge sphere but through a collective convergence of connected disciplines working towards a wholesome contribution for the same. Architecture has far too long enshrined itself within the technology fortress from where periodic creative outbursts of outstanding iconic marvels from star architects around the world keep providing the much awaited ripples of imagination and motivation to even more starry eyed students waiting eagerly for the next big one!

"The alternative model sees the architect engaged in the cultivation of the everyday environment that was taken for granted in the past. In this model the result is not static but must change and grow over time. It is not an exception to but reality itself. It is full of meaning but not a symbol for society. This alternative model is based on the awareness that monuments will eventually grow in a healthy built environment, yet that a healthy built environment can never be made out of monuments." (Habraken 1983)

Institutional shifts for such an alternative model needs to frame a "pedagogy of engagement" rather than the preference for production as has been the story this far. A redefinition of the design studio provides the primary point of departure for this alternative route. Using the experience and lessons of the introductory range of experimental design engagements over the last decade, as mentioned earlier, incorporating the idea of an 'exteriorized' studio space positioned within the everyday, a basic set of possible shifts from the conventional to the experimental is offered (refer following Table). This set is by no means exhaustive, but indicative of the directions of change that the prevailing studio format could step into.

Propelled by the contextual specificities for our societies in this

part of the world, it is premised that the stated shifts could begin a more meaningful and significant connection between our society and designers. The nurturing of young minds towards adopting the role of citizen designers for today's society and for their entwined futures is seen as the inevitable way forward for a more humane and sustainable period ahead.

"We must teach our students to position themselves both temporally and spatially beyond the confines of the drawing or computer screen.

As designers, they need to develop an intimate relationship not with the world of the page or screen, nor even with the forms and surfaces portrayed on them, but with the potential corporeal and multi-sensory experience of the emerging spaces."

The formative steps for such a collaborative engagement between our villages, towns and cities on one hand, and students as citizen designers on the other, are offered here for deliberation and inquiry.

Conventional Studio Pattern		Experimental Possibilities
Tutor-centric Formulation of Studio Exercise evoking instruction response from students		Student driven discovery of personal engagement possibilities ("Choice") provoking individual choice-making
Uni-dimensional ("one problem fits all") strategy for design studio		Multiple priorities of engagement leading to diverse range of design problems
Hypothetical or 'selectively real' site locations with significant degree of assumptions for change		Real site locations with negligible set of assumptions for change
Neutralization of contentious conditions of real settings as secondary to 'technical' problem solving tasks and therefore indifferent or oblivious of ground-level complexities	\longrightarrow	Active member of the contested domains of spatial processes leading to defined positions on prevailing scenario of engagement
Disengagement of self with physical/ social/cultural economic contexts as a resultant of simulated, simplified definitions/assumptions of settings (Distanced!)	→	Embodiment of self as participant of everyday processes driving the need/ urge towards change from real, felt issues at site (Immersive!)
Students as performers of problem-solving actions with corresponding rewards for resolution of problems by tutors monitoring such actions		Student-tutor teams together addressing both problems and opportunities gener- ated out of site engagements. Rewards oriented towards significance of design contribution (rather than problem solving)
Studio groups (students and tutors) seen as a homogenous collective of skilled technicians addressing obvious/stated problems of built environments	\longrightarrow	Studio group seen as a diverse (heterogeneous) collective of disparate entities combining together to address obvious and unforeseen issues of built/social environment
Relies on unanimity, conformity and convergence of design priorities and choices	\longrightarrow	Thrives on difference, debates and divergent notions related to design priorities and choices

Table 1. Required Shifts in Prevailing Design Studio Formats