RE-MEDIATION

Architecture and the Interface of Place

by

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Chelsea Campbell

Re-Mediation: Architecture and the Interface of Place

Master of Architecture 2017

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ABSTRACT

In the digital age, a cultural shift has arisen that privileges individual agency, leading to architectural repercussions in place-making. By contrast, a dissociation develops toward physical places that present as prescriptive, homogeneous, or superficial to its users. The architecture of place should progress from images of consumerism and containers of behaviour to become active producers of individual agency, mediated through the architectural interface. This thesis examines the design interfaces of institutional places, studying the relationships between agency and spatial structure. It introduces a contemporary reconstruction of place-making methods that involves the layering of ambient cues, shifting narratives, network connectivity, and dispositional identity in the architectural interface. Applying this method, the design project focuses on mediating the user's journey and opportunistic settlement in real-time and real-place. The result is an architectural interface that communicates a greater sense of agency, contributing to the heuristic formation of individual landscapes of place.

ACKNOWLEDGEMENTS

DEDICATION

For the digital natives,

Nolite te Bastardes Carborundorum

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INTRODUCTION

This thesis examines the necessary architectural repercussions of the cultural shifts proliferated in the digital age, particularly with regards to the notions of place. Today we are living in a society that is less structured by boundaries but more by connections, specifically due to the rise of the digital technologies. Chapter 1 explores this context of digital culture, looking to the various ways that it affects the user group of the digital natives, particularly regarding the increased value of individual agency.

Considering this context, Chapter 2 presents the position that successful place-making involves the mediation of agency and the individual experience throughout the design interface. The design research conducted throughout aims to uncover an architectural language that is better acclimated to the digital culture dominating western society, responding to the overarching value of agency in place-making. The theory work analyses the relationships between digital culture, social agency and place, particularly the correlation between agency and spatial structure.

In Chapter 3, the body of research begins with a critique of agency in architectural place-making, exploring instances of *place as an image* and *place as a container*. The critique concludes with an outline of the discourse of *place as a producer of agency* that this thesis advances. This thesis does not concern itself with democratic or libertarian architecture, instead focusing on the subtle affordances of everyday life and their presentation and proliferation through successful place-making.

From this critique and the researched relationships between spatial structure and agency, Chapter 4 presents a contemporary reconstruction of the methods of place-making to yield architectural interfaces that mediate agency. The layers outlined become active constructs that affect the agency of the user within the structure and are informed by the outlined research on digital culture as it pertains to each layer respectively. Through this layering method, agency in architecture grounds the individual in an embodied experience in real-time and real-place.

Chapter 5 presents the subject and scope of the design project – an architectural addition to the main building of OCAD University. An extensive critique of the existing two buildings on the site is given to inform the design of the addition, presented in the Chapter 6.

"I shall consider a crucial consequence of these technological transformations — the shift from a world structured by boundaries and enclosures to a world increasingly dominated, at every scale, by connections, networks, and flows. **This is a world of less rigid, more fluid and flexible relationships — of knowledge to action, of shape to materials, and of people and places."** [1]

- William J. Mitchell

1.0

CONTEXT

1.1   DIGITAL REALITIES OF THE DIGITAL NATIVES

In the digital age, ubiquitous devices regulate the rhythm of our daily lives. We answer to their various emanating tones, symbolic of the diverse range of communication applications available to us. We engage in controlled and direct interaction, scheduled encounters, and on-demand entertainment, leading to the cultural expectation of anytime, anyplace connectivity. We consistently participate in a disembodied experience through technological artifacts that mediate our interactions in virtual space. Though the widespread use of these networked technologies affects many aspects of our day-to-day lives, it is the long-term attitudinal shifts in culture that are the focus of this thesis, particularly in their impact on architectural ecologies and place-making.

< FIGURE 1.1 Concept collage featuring a digital native emerging from a virtual interface.

internet users	social media users	smartphone users	active mobile social users
3.419 billion users	**2.307 billion users**	**3.790 billion users**	**1.968 billion users**
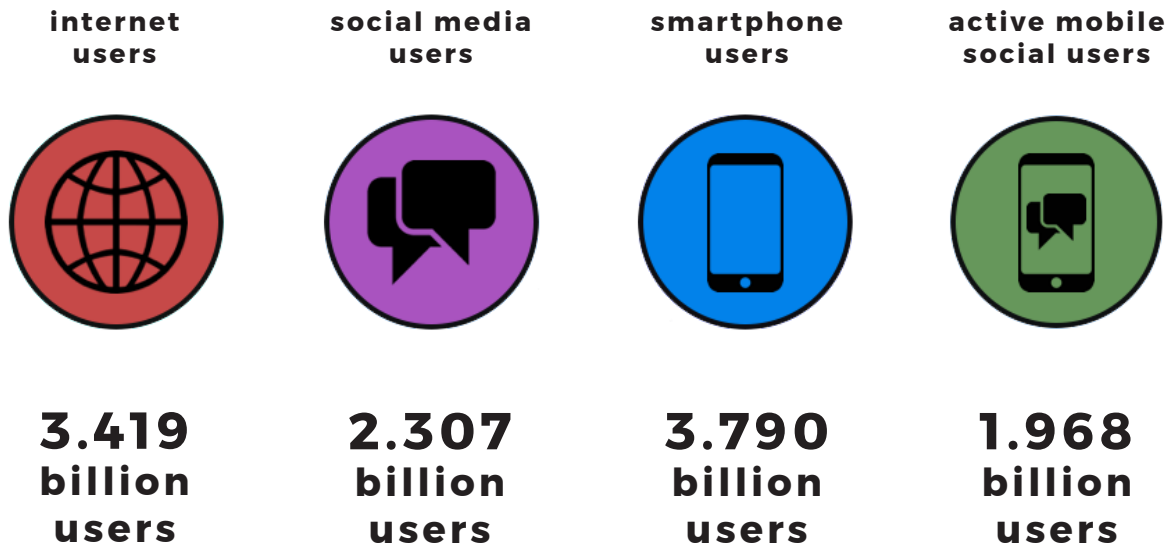
It is estimated that the average American adult is engaged with digital media for 12 hours a day

58% of total smartphone users don't go 1 hour without checking their phones during the day

FIGURE 1.2 Infographic illustrating the widespread use of ubiquitous computing, as of January 2016.

Personal computing, ubiquitous mobile devices, and wireless internet access have allowed for a greater virtual existence to be present in society. This is a trend that will only become more widespread as access to this dimension becomes more feasible and in many cases desirable.[2] Although the adoption of these mobile devices varies by nation, region, class, and gender, an increasing number of people base their businesses, socialization, and cultural exchange around forms of networked digital media. The statistics in Figure 1.2 demonstrate the widespread adoption of these technologies and the extents of their mediation in daily life.

Technological mediation is particularly noticeable in the millennial population, who grew up in post-industrial countries and have accepted networked digital media as a fact of life.[3] These "digital natives" experience this cultural imprinting from a young age, making them predisposed to these technological mediators. This term was coined by educational theorist Marc Prensky, whose characterizes this group in the following excerpt from his essay "Digital Natives, Digital Immigrants":

"Digital Natives are used to receiving information really fast. They like to parallel process and multi-task. They prefer their graphics before their text rather than the opposite. They prefer random access (like hypertext). They function best when networked. They thrive on instant gratification and frequent rewards. They prefer games to "serious" work."[4]

Distinct from user groups categorized simply by age range, the digital natives bring about a new user group that has a significant impact on the western cultural values moving forward. Architects should question how to design for this growing population, in anticipation of future digital generations to come. What does this digital culture entail, and how does this change our perspectives moving forward? As the next sections will show, the significant inversion lies in the increased value of individual agency.

1.2   NEW FORMS OF AGENCY:
EMPOWERING THE INDIVIDUAL
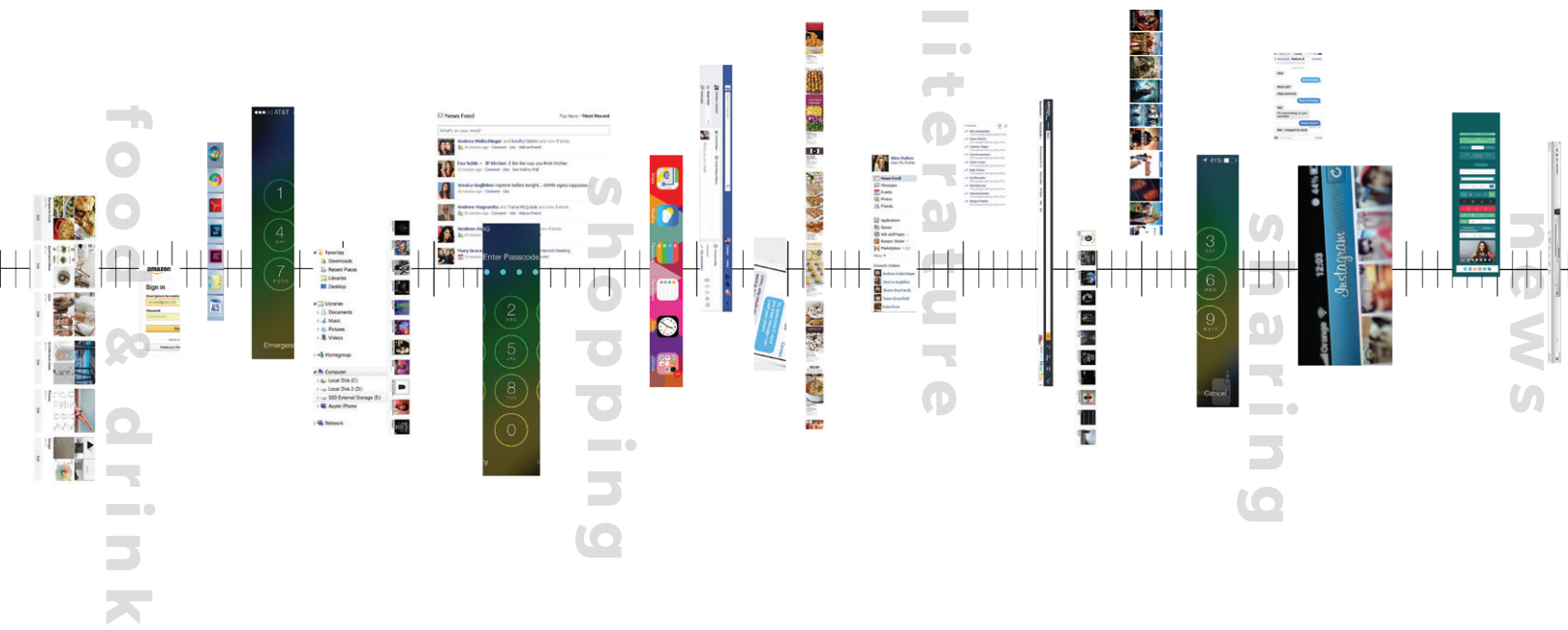
The digital age has created new and more easily accessible methods of communication, content sharing, and personal operations, mediated by electronic devices. While being able to cater to needs and desires on a more individualized level, it has also encouraged a shift toward a more collaborative society from an operations standpoint. The digital age recognizes the individual while providing fluid connections to their respective networks, creating digital platforms as places to connect.

Consequentially, the pervasive connectivity generated by digital networks has engendered a cultural shift based around the multiplicity of personal operations. Online places are acting as mediating agents for a more personalized user experience than was previously possible.[5] This is a culture that values networked social participation, individual choice and accessibility. While some technology theorists regard pervasive digital devices as products of capitalization and mass production, it is also widely advocated that these devices are "harbingers of non-conformity, individuality, and autonomy, providing user-consumers with greater control over their lives and interactions with others."[6] As a result, these ubiquitous digital devices have lead to an increased sense of individual agency. Architects should respond to these changing network ecologies, recognizing the increasingly important relationship between agency and the individual in contemporary culture.

FIGURE 1.3 Rhythm mapping illustration of technological mediation throughout the day.

1.3 THE PROLIFERATION OF FLEXIBLE AND MOBILE LIFESTYLES

The digital era enables the human experience to unfold at an accelerated rate, leading to an asynchronous rhythm of a city -- a circumstance that particularly concerns architectural theorist William Mitchell.[7] Paul Virillio echoes this concern, positing that "the almost-instantaneous availability of "real-time" information challenges our conventional understanding of the experience of the here-and-now."[8] Ubiquitous computing overcomes many of the limitations of the physical world, with electronic counterparts loosening the need for distinct spatial relationships. Unbound by geometry or geography, online places enable us to rely on our local communities less and less. "The spatial operations of pervasive digital media seem unconstrained by the usual geopolitical boundaries and architectural artifices of rooms, walls, and floors."[9]

FIGURE 1.4 Photographic walkthrough demonstrating the flexible use of digital devices in different places across Toronto

Consequentially, the proliferation of flexible and mobile lifestyles is a source of new tensions in the realm of architectural design.[10] These include drastic changes with regards to office, education, and retail building typologies, particularly with regards to the rhythm and location of operations. "It isn't that we all turn into full-time telecommuters; face-to-face interaction still has its important uses. But work hours and location become far more fluid and adaptable to changing circumstances."[11] Thomas Horan addresses this in his principles of recombinant architecture, stating that the challenge is to "recognize this mobility, yet provide grounding physical designs that facilitate multiple forms of communication, both face-to-face and remote (synchronous and asynchronous)"[12]

This flexibility and increased sense of individual agency is informative of our changing network ecologies, particularly manifesting in the physical, functional operations of many institutions. The organizational notions that these institutions thrive on have begun to loosen as a result of globalization and ubiquitous communications (Figure 1.5). In his book titled *Digital Places: Building Our City of Bits*, Horan describes the digital age as "a historical period characterized by the widespread destructuring of organizations, delegitimation of institutions."[13] People can operate in society from a distance without being bound to particular places. As a result, the quality of the space they choose to inhabit should be more highly considered, with the inhabitation of place being less tied to obligation and more to desired atmosphere. This brings about the need for versatility, variation and heterogeneity of spaces within a building. With the programmatic distinctions of place becoming less prescriptive of the activity that takes place within, places are heavily reliant on the architecture to communicate

behavioural appropriateness, facilitate interactions, and ground its users in a persistent context. With this in mind, it is becoming more possible for new forms of agency to exist within architectural interiors from a programmatic and functional standpoint.

By contrast, it is increasingly more clear when and where we are limited by the structures reminiscent of a social past. Dissociation arises in physical institutional places, whose typology often presents as prescriptive, segregating, or superficial to its users. These rigid structures reveal a sense of stasis in physical environments due to the homogeneity of experience and dissociation from its subjects. Prescriptive, mundane experiences conform and confine the individual with little imprinting on their perception of place.
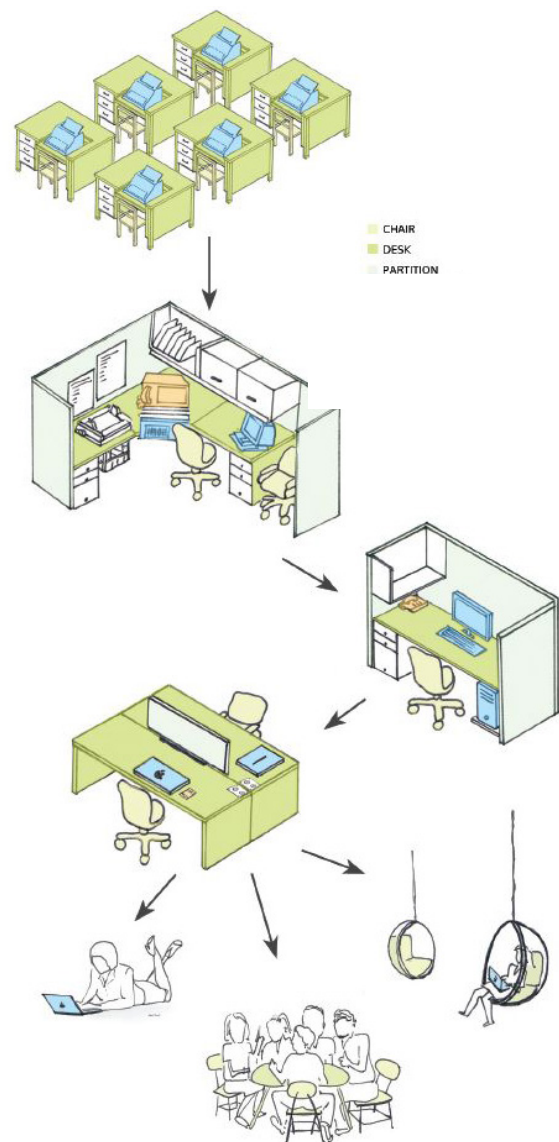
FIGURE 1.5 Diagram illustrating the adoption over time of digital devices in the work place and their contexts of use.

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13. Horan, Thomas A. *Digital Places: Building Our City of Bits,* 3. Washington, D.C.: ULI-the Urban Land Institute, 2000.

The architecture of place should progress from images of consumerism and containers of behaviour to become active producers of individual agency, mediated through the architectural interface.
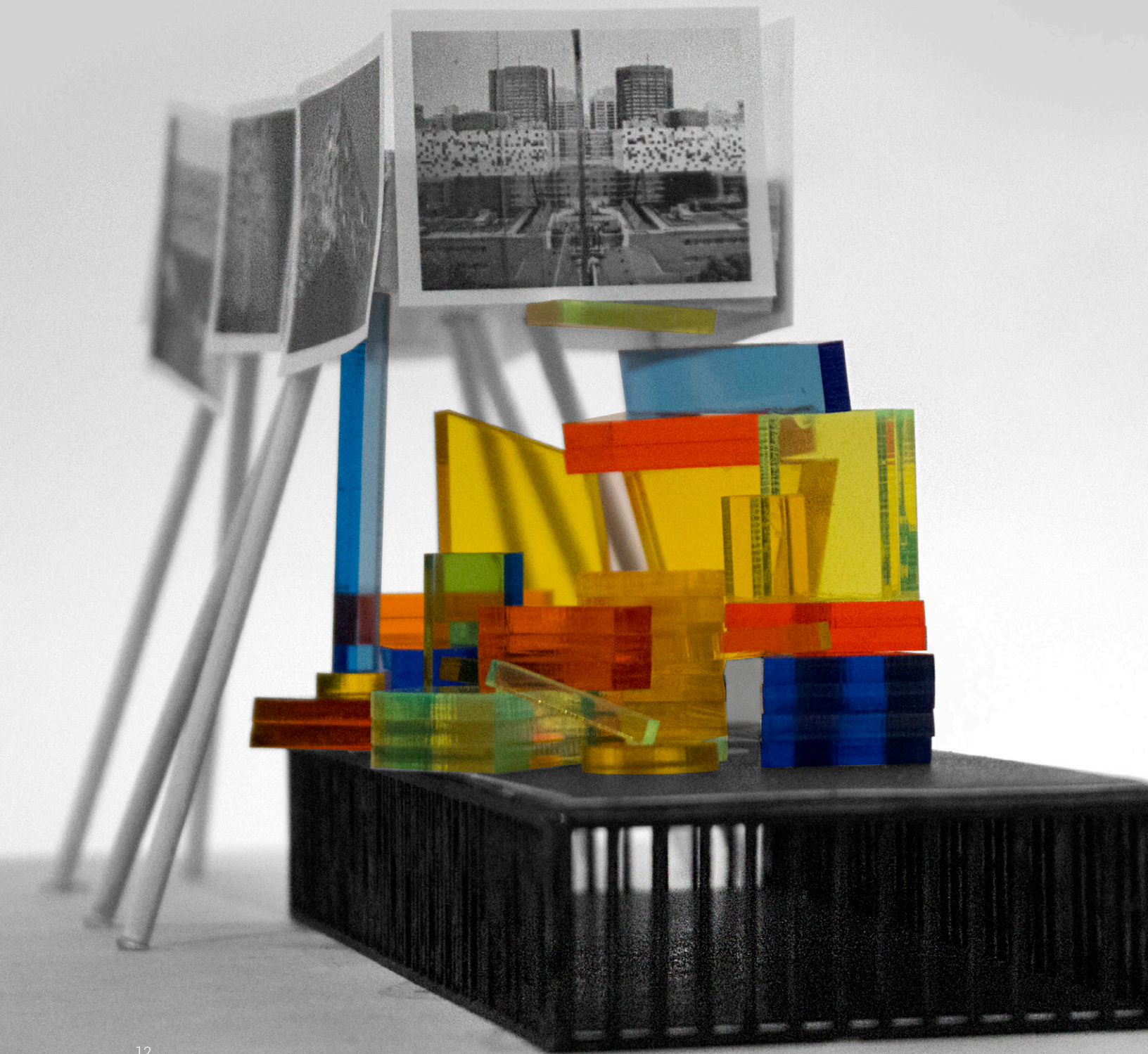
2.0 Re-Mediation

2.1   CRITICAL POSITION

This thesis posits that the critical role of architecture is to be the active mediator of individual agency, responding to this cultural value that is characteristic of the digital age. The architecture of place should progress from images of consumerism and containers of behaviour to become active producers of individual agency. For the purposes of this thesis, re-mediation does not turn to architecture as a remedy, but rather as re-mediation, to mediate again.

< FIGURE 2.1 Photo of a conceptual model integrating the thesis position within the massing of the design project
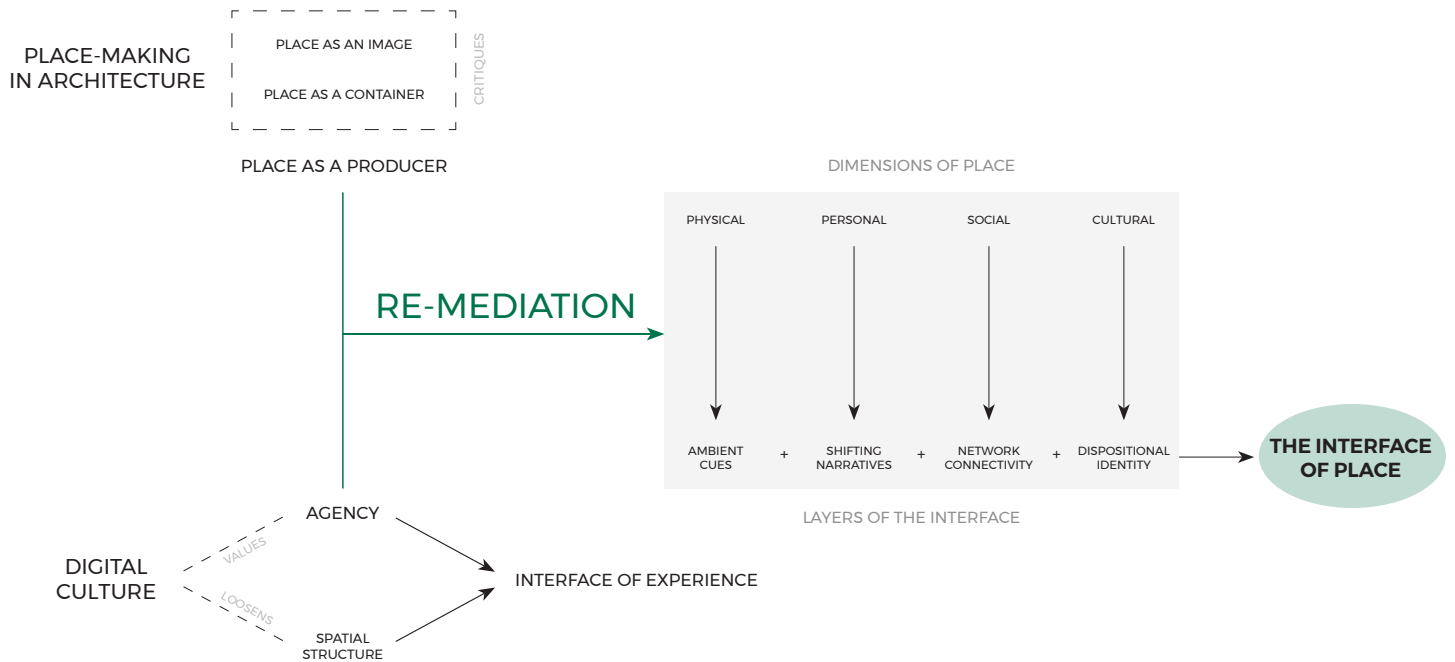
FIGURE 2.2 Diagrammatic breakdown of the theoretical approach.

The theoretical approach from which this thesis was built is illustrated in Figure 2.2. Examining the design interfaces of institutional places, this work studies the relationships between agency and spatial structure. It is a reaction to the attitudinal shifts proliferated by the digital age while responding to the decreased power of stratification within many institutional typologies. The significant inversion this thesis proposes involves a shift from designing for collective, deterministic behaviour to designing for diverse possibilities and individual intent. It takes a subversive stance to heavily striated configurations based on spatial efficiency and institutional control. Through these changes, it recognizes an evident constant amidst variables, that one of the great pleasures in life is the discovery of affordances in place. Successful places are those in which the individual can experience agency in the architectural interface and built environment.

The proposal involves reconstructing the known methods of place-making to communicate a greater sense of agency through the layering of ambient cues, shifting narratives, network connectivity, and dispositional identity. These layers mediate social agency in idiosyncratic ways, influencing the heuristic formation of Individual landscapes of place. Focusing on the lived experience, the design privileges the journey and opportunistic settlement in real-time and real-place, responding to this culture of nomadic, flexible lifestyles.

How can an architecture respond to the influence of digital culture in place-making?

RICHARD COYNE

WILLIAM J. MITCHELL

MARTYN DADE-ROBERTSON

THOMAS A. HORAN

BRANDEN HOOKWAY

MALCOLM MCCULLOUGH

MARC PRENSKY

digital culture

DONNA GOODMAN

KAZYS VARNELIS

RAY OLDENBURG

MANUEL CASTELLS

architectural place

EDWARD RELPH

KELLER EASTERLING

How can architecture become a more active mediator of individualized experiences?

ELIE DURING

YI FU TUAN

social agency

ANTHONY GIDDENS

KIM DOVEY

DELEUZE AND GUATTARI

DONNA WHEATLY

STAN ALLEN

BILL HILLIER

How can public, institutional places be designed to become producers of individual agency?

FIGURE 2.3   Theory research overview diagram

2.2   RESEARCH SCOPE

The design positions taken in this thesis are a reflection of the researched relationships between architectural place, digital culture, and social agency. By studying the connections between these fields we can begin to create a progressive architectural response to place-making in the digital age. The primary literary influences are outlined in Figure 2.3, with their direct influence elaborated on more clearly in the research body. From this background theory, the design research on architectural re-mediation can begin to form. The design research conducted throughout responds to the research questions listed in the diagram.

The vehicles that this research takes includes sketches, diagrams, and models, each exploring various design aspects that branch off these research questions.

Throughout this text, the term "design interface" is used frequently. Here it is employed as a relational term that evaluates the architectural composition with respect to the agency experienced by the users. The architectural interface governs possible activity in spatial presentation and active use. Its constitutional layers speculate on how architecture can communicate agency, looking at the user interface of buildings to study the varied balance between power and empowerment, interaction and isolation, control and freedom. These points both respond to the cultural shift as well as outline the necessary principles of architecture that contribute to successful place-making in today's society.

The design interface produces and mediates a capacity for agency that is experienced in a subliminal level of awareness.[1] The architecture of this design interface acts as an agent, mediating choices in the experience, and shaping an individual's perception of place as a result. In this sense, we move from an architecture that produces behaviour as the *machine for living in* to an architecture that produces agency as the *interface of experience*. From this conceptual shift, we can begin to design places that are more conducive to facilitating a digital society.

YI-FU TUAN'S DIMENSIONS OF PLACE

Physical   related to materials, structures and environmental features

Personal   related to the feelings, emotions, and memories we associate with a place, with the personal knowledge and background we invest in the place while making sense of it.

Social   related to social interaction and communication within the place, to the sharing of resources and memories, to social co-ordination and ethics, etc.

Cultural   related to the rules, conventions and cultural identity of a place.[6]

FIGURE 2.4 An outline of the dimensions of place as described in Yi-Fu Tuan's theory.

2.3   A LENS FOR PLACE – CAPTURING THE LIVED EXPERIENCE

Places are a contextual reflection of our society – with the architecture standing as relics of our artistic and technological time period. "Buildings are great communicators, informing on the political, social and moral ideals of those who built them and affording possibilities and restrictions on the communities they serve."[2] It was French Sociologist Marcel Mauss who first put forth the idea of place as a "culture localized in time and space."[3] Given this position, it is necessary to redefine the way architects go about designing for place.

This work acknowledges that the primary difference between space and place involves the experiential; space is objective and involves physical or quantifiable measures, but place is subjective and stems from a greater social context of experience. This aligns with place theorist Kim Dovey's views of sociality and spatiality. From his 2009 book, *Becoming Places:*

"A large part of what distinguishes place from space is that place has an intensity that connects sociality to spatiality in everyday life. We can say 'do you have enough space' but not 'do you have enough place?' While a space may have physical dimensions, it is intensity that gives place its potency and its primacy."[4]

This definition extends far beyond places simply defined by repeated use or habitual contexts, looking to the inner engagement and memory of the user. Philosopher Yi-fu Tuan's theories align with this definition, with his work concentrated on the experiential perspective, while emphasizing the importance of recognizing affordances in the environment. According to Tuan, "to experience is to learn; it means acting on the given and creating out of the given."[5] For the purposes of this thesis, the aspects of place that will be explored stem from his dimensions of place: physical, personal, social, cultural as outlined in Figure 2.4. A contemporary reconsideration of these will be addressed in the layered approach to interface design presented further on in the research body.

This experiential view contrasts many widely known theories of place based on the realms of memory, the genius loci, ontological perspectives, or other approaches that deal with critical regionalism. Of these theorists includes Christian Norberg Schultz, who is "interested in the relationship between presence (what we believe to be true of ourselves) and architectural expression"[7] His ontological view focuses on the meaning and art of place, rather than from the perspective of the users. These views are regarded as essentialist in the respect that they are stabilized, primordial, and reflect a reduction of place to a whole. This contrasts the theory of place presented here as it ignores the social and cultural constructions of place.[8]

Edward Relph shares many of Tuan's views with regards to place, particularly in the power of architecture to organize intentions, experiences, and actions spatially.[9] However, he privileges the sense of home rather than the journey and concentrates on the feelings of insideness and outsideness as determining factors of place.[10] This gives his theory a sense of revered nostalgia of place, a condition that Dovey expresses as dangerous to the future of place:

"The desire for some simple return to authentic local roots in 'place' has been shown to be enmeshed in practices of cultural domination. Ideologies of essential, deep and unchanging meaning have a conservative and stabilizing effect on formations of identity, they are repressive of difference." [11]

This thesis is advancing Tuan's notions of place as the perspective of experience, while emphasizing the journey and selection, privileging these nomadic lifestyles that have surfaced. It rejects the view of place as a surface level analysis of locational features, instead looking into the depths and complexity of the experience lived by the digital natives. The design of architectural interfaces should take into consideration the subjective perceptions that are likely to form, governed by the overarching ideas presented through the dimensions of place. According to place theorists Harrison and Dourish, "Placeness is created and sustained by patterns of use; it's not something we can design in. On the other hand, placeness is what we want to support; we can design for it."[12] With their theories in mind, supporting place-making in the digital age calls for a revisitation of the experience of place.

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"Action is structured and shaped by streets, walls, doors, and windows; it is framed by the decisions of designers. As a form of discourse, built form constructs and frames meanings."'

- Kim Dovey
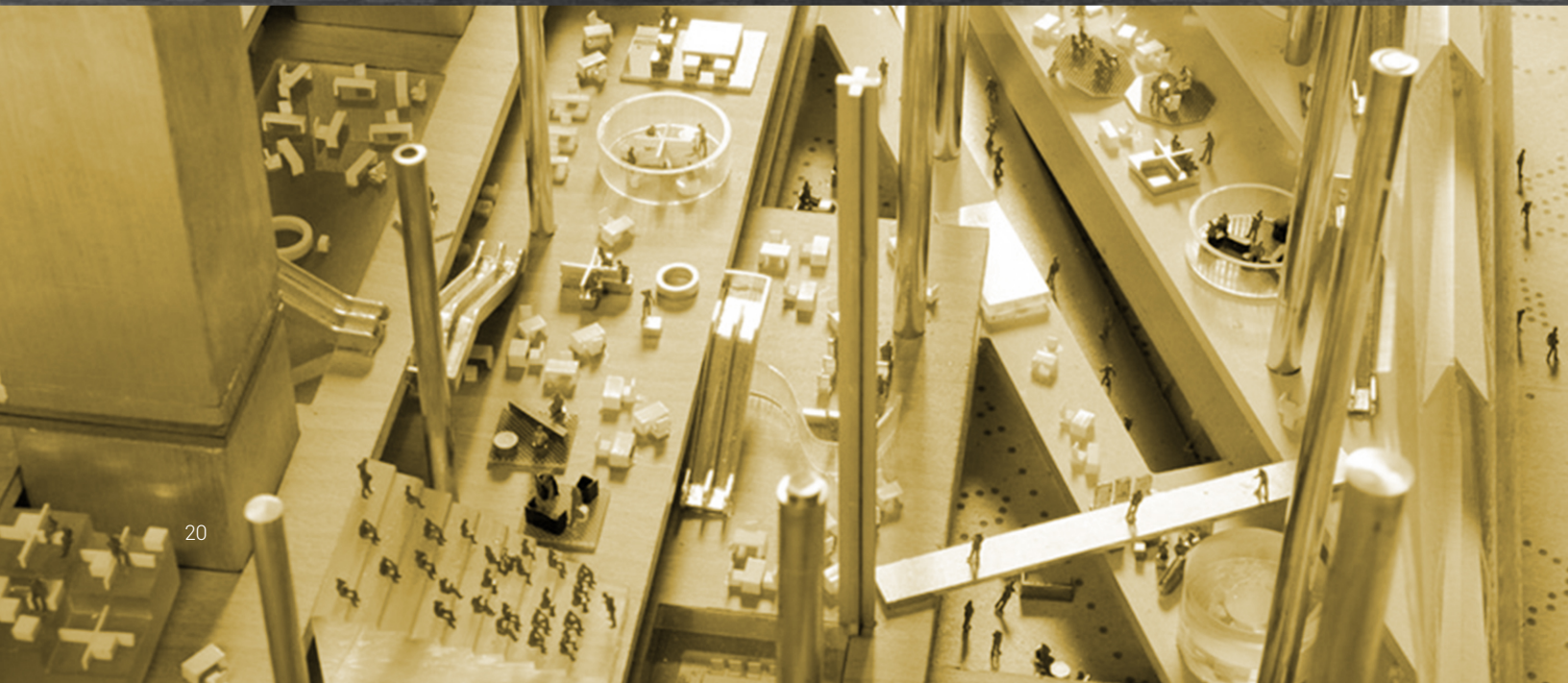
3.0 AGENCY, PLACE, AND THE ARCHITECTURAL INTERFACE : A CRITIQUE

Before beginning to design for agency in the digital age, it is prudent that a critique of current practices of place-making be explored. It is particularly of interest how places are experienced by their users and what the underlying intentions of their creators incite. Places as images act as icons that often lend themselves as a backdrop to capitalist motives, promoting consumer activity and the monetization of place. Places as containers refer to those of stringent institutional control, where the configurations are set by the governing body to distill certain behaviours of the population within its structures. This leads up to the precedent research on *place as producers*, with the aim of creating new forms of social agency geared toward a more accurate view of the contemporary attitudinal perspectives. This section explores how places act as devices of power, where the capacity to act is more strictly controlled, and devices of empowerment that reflect individual experiences of place.

< FIGURE 3.1   A collage of images introducing the critique of places as imagers, containers, and producers (top to bottom).

3.1 PLACE AS AN IMAGE OF CONSUMERISM

Architects have adopted many different strategies of working within digital culture, many of which glorify the image through the integration of the screen. Initially, it was media theorist Marshall McLuhan who argued that it was television that transformed society from a verbal to a visual culture, which increased an individual's self awareness and sense of connection to the larger world.[2] However, the onset of the digital age amplified the context, location, and range of use of these screens, often times transforming public space. A statistic by Displaybank shows that over one billion small-format LED panels for smartphones and 0.5 billion large-area TFT LCD panels ship from east Asia in a single year.[3] The large-scale applications of these screens proliferate an architecture of digital media in the literal sense, privileging the digital as a material, letting the built form come secondary.

Transforming facades into monitors can move quickly from a decision driven by creative and innovative notions to one that propagates a capitalistic vision of society. Kazys Varnelis reflects on the social condition of the privatization and virtualization of public space, stating that "individuals (are) becoming less and less citizens and more and more consumers."[4] The integration of media screens and facades in the built environment is a means of seduction, a practice which attempts to manipulate the subject's interests and desires.[5] These advertising supergraphics are feeding a consumeristic culture, creating places that act as images of material offers rather than producing an experience of real agency. Donna Goodman expresses this in her book "The history of the future":

"The design of Internet sites had an impact of the design of real cities, were the concept of the street was redefined as a continuous flow of consumer information. At night, the lights of Time's Square, Piccadilly Circus, and Tokyo's Shubuya district present huge advertisements of films, fashions, and other products, in video projections or computerized images. Redeveloped using montage techniques as a sequence of projected images, the character of those areas is no longer defined by the architecture of the street but instead by graphic media... Collectively, they expressed the idea of a consumer theme park, activated by projected texts and images."[6]

TOP TO BOTTOM

FIGURE 3.2 Shubuya district, Tokyo, Japan

FIGURE 3.3 Times Square, New York, US

FIGURE 3.4 Piccadilly Circus, London, England

When architects combined computers and media systems with the façade, they either agreed to express the corporate identities of the building owners or contributed to the environmental noise created by the mass overflow of information already engulfing the built world.

This ideology of the image is further propagated through the use of social media. Iconic places are captured in images shared across virtual networking platforms, forming purely visual associations between image and place. This makes the lived experience of place become less privileged, granting knowledge of the experience through a two dimensional reference frame. It becomes a marketing technique to design for place as an icon that digital culture can share in, influencing the celebrity of the place through its online presence. Place theorist Christian Norberg-Schultz puts forth the criticism that the built world is dominated by gimmick and novelty, where many architects are overly focused on trying to put forth a unique visual aesthetic, in many ways branding themselves.[7] This commercial branding through media-worthy framing casts the image as a shallow view of digital culture, not responding to the attitudinal shifts that are present. It focuses on the visual memento of place rather

than the importance of experience which ultimately resonates deeper within digital culture. This longing for a unique, individualized experience is echoed by digital theorist Malcolm McCullough in the following excerpts from his book, Ambient Commons:

"With so many new relations among windows, screens, frames, and facades now filling everyday space, watching has become less important, and foraging has become more so. Having more options improves the chances that you will find enough interest somewhere. Often you can discover that without the concentrated effort of dedicated search."[8]

The time of designing place as the image has passed. Future design should be focused on creating opportunities for this "foraging" to take place. This creates an architecture that produces agency, rather than image. Looking beyond these literal integrations of digital technologies, this thesis aims to create a cultural response manifesting more subliminally through spatial reconfigurations in a non-augmented environment.

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FIGURE 3.5 Digital Natives at the Royal Ontario Museum taking the same photo of the iconic crystal angled above. This photo captures the precursor to the repetitive circulation of the same image as a banal visual memento.
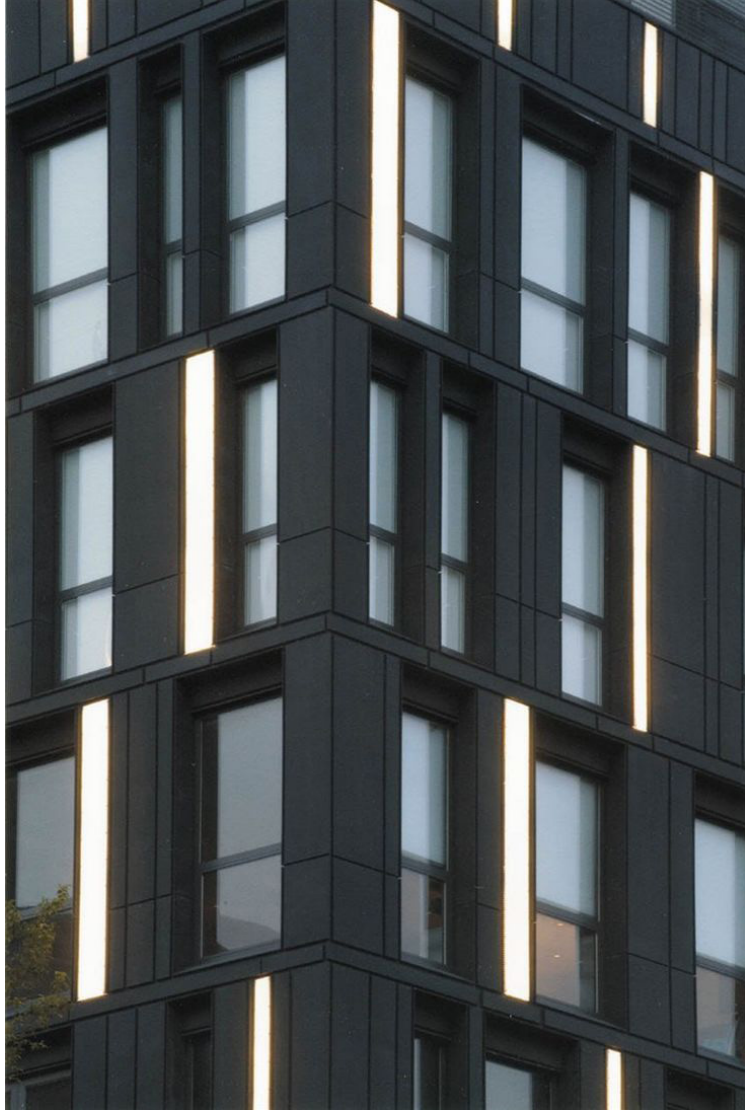
FIGURE 3.6 Pixelism facade, featured in the Porterhouse building in NYC by
SHoP Architects

3.2 PLACE AS A CONTAINER OF BEHAVIOUR

The next section of critique moves from the commercial blitzkrieg of the digital image to the heterogeneous and controlled experience as presented in the institutional context. It would appear that contemporary architectural style is a mixed bag of iconic architecture executed by "starchitects" that stands out from its context, combined with the rigorous repetition of affordable elements imposed by pixelism (Figure 3.6).[9] The significance of spatial context on the experience of place is becoming lost across the race for acknowledgement or efficiency of resources. This is a primary fear of place theorist Edward Relph, who fears "the casual eradication of distinctive places and the making of standardized landscapes that results from an insensitivity to the significance of place".[10] Relph suggests that "placelessness" is a result of a mass acceptance of similar values and techniques of efficiency taking priority over effective place-making. This leads to the "undermining of place for both individuals and cultures, and the casual replacement of the diverse and significant places of the world with anonymous spaces and exchangeable environments".[11]

This is true of the universalist style that is increasingly used in contemporary urban construction. It has largely come about due to capital-driven development that thrives off of repetition, regularity and modularity.[12] The minimal differentiation between spaces and network singularity lead to a conformist experience that is typical of early institutional and commercial buildings. The mass production and easy fabrication of these unitized designs makes for a homogeneous experience, lacking the distinctive features that could ground the user in a relevant background. Traditionally, institutional organizations themselves thrive off of the control of activity and production within the building, making their architecture a tactical device. "Global capital and bureaucratization label everything, and in doing so tend toward making everything the same. Or at least they suppress difference."[13]

According to Kim Dovey, "Places are programmed and designed in accord with certain interests — primarily the pursuit of amenity, profit, status, and political power."[14] It has been an overriding goal of public, institutional architecture to invoke power over its subjects through the physical structures of their architecture. The spaces that architects are commissioned to create for them stand as a tactic to locate people, organize them in place and constrict them to appropriate conduct.[15]

This is particularly achieved through the use of manipulation.

> "Manipulation is a form of coercion which operates primarily by keeping the subject ignorant. The exercise of power is made invisible to its subject and the possibility of resistance is thereby removed. The subject is 'framed' in a situation that may resemble free choice, but there is a concealment of intent." [16]

For instance, though presenting as a free place, the café follows its own designed structures of access, profit and branding. This thesis reacts against this use of place as a corporate formula for power. Other devices include domination which invokes large scale characteristics of intimidation, authority which uses operational and institutional frames, coercion which mediates social interactions through spatial fragmentation, and seduction which aims to alter the desires of the subject altogether such as art.[17]

Buildings are continuously called upon to create the illusion of freedom, while maintaining a level of control and operational surveillance. For instance, the open plan office buildings offer the user the ability to move freely in the space and make contact with other workers more easily. However, this configuration also offers the higher authority a view of its workers activity, with minimal privacy in both visually and auditory respects (Figure 3.7). The opposite condition based on a cellular spatial structure (Figure 3.8) is highly striated and enforces a "strict choreography of everyday life and social encounter."[18]

According to Giddens' theory of structuration, architecture is considered a form of structure that frames social action and mediates situations of agency, primarily by relationships of enabling and constraining.[19] Places are "the frameworks of possibility within which our capacities are realized or not."[20] The next section speculates on how places could be with a decreased power of stratification within the institutions, expressing a more fitting approach in digital culture.

FIGURE 3.7 Image of an open plan office in full view by authority

FIGURE 3.8 Image of an office building featuring a striated spatial layout.

3.3   PLACE AS A PRODUCER OF AGENCY

This thesis looks to advance the discourse on agency in place-making by deconstructing the current notions of stratification within institutional architecture. This involves a shift towards place as a producer of individual agency rather than a container of behaviour that is reminiscent of a less liberated time. Architecturally, this progression toward agency began with the post-modernist reaction against formal, austere, and homogeneous modern architecture.[21] This was the beginning of recognition towards diversity, multi-cultural simultaneity, and future identities at play in the architecture. Furthermore, the branch of deconstructivism, which emerged in the mid-1980's, involved the fragmentation of existing building typologies to yield innovative and socially progressive designs. This period is characterized by the work of architects as diverse as Frank Gehry, Peter Eisenman, Zaha Hadid, Bernard Tschumi, Coop Himmelb(l)au, Daniel Libeskind, and Rem Koolhaus.[22]

It is through this movement that the breakdown of traditional power structures was made possible. Major theorists that advanced the notions of spatial agency within the architectural discourse include Stan Allen, Gilles Deleuze, Felix Guattari, Bill Hillier and Julienne Hanson. According to Deleuze, the world is formed by 'flows of desire' where 'lines of flight' take precedence in the realm of experience over points of order or stability.[23] In his early work, "A Thousand Plateaus," he states that spatial structures consist of a contrast between spaces that are smooth, belonging to rhizomatic networks, and striated, belonging to tree-like hierarchies.[24]

"The interconnected permeable network is a spatial structure that is connective and rhizomatic rather than divisive in function. Spatial examples here include places that are structured to maximize exchange, choice and encounter — the open plan office, city grid or permeable field of market stalls. Yet spatial structures are always a mix of tree-like and rhizomatic. By and large, public spaces are more rhizomatic and private interiors are more tree-like."[25]

This classification of spatial patterns was a precedent to the theories of space syntax proposed by Bill Hillier and Julienne Hanson. Space syntax relates human beings to their inhabited spaces, studying how certain configurations yield

particular social behaviours, and in a more broad sense, express cultural meanings.[26] Hillier believes that architecture is a mediator of social behaviour accomplished through spatial genotypes – "clusters of spatial segments structured in certain formations with syntactic rules of sequence and adjacency."[27] The three most basic patterns that are integrated into building design are linear, fan and net (Figure 3.9).

"The network structure is defined by its multiple and lateral connections, many possible pathways through it and dispersed control. The linear or fanned structure controls circulation and social interaction in certain key spaces. The degree of control of a given cell is the degree to which access to other cells must pass through it….The networked or rings structure offers many possible pathways and diverse encounters — the flow of life through space is only loosely controlled." [28]

LINEAR

FAN
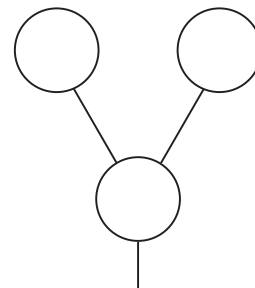
NET
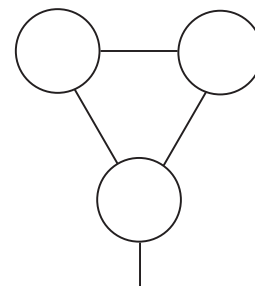
FIGURE 3.9 Linear, fan, and net spatial genotypes outlined by Hillier and Hanson

31

The network genotype is the most promising to employ in achieving a high level of agency for the user. Through providing an initial starting point, Hillier's work is deterministic and scientific in nature, putting too much emphasis on planning rather than design. Other architectural elements such as materials, scale, and atmosphere all influence the agency experienced in place, as well as inform the identity of the place through its disposition. The concern for experience moves beyond the notions of configuration in the theoretical shift from architecture as objects to architectural field relations. This theory was pioneered by Stan Allen in 1997, describing fields conditions as a spatial matrix that maintains the identity of diverse elements while presenting a unified scheme (Figure 3.10).[29] Fields are focused more on the localized contiguous connections rather than large-scale geometric forms, interested in the experience through space from a human perspective. Allen proposes that 'permeable boundaries, flexible internal relationships, multiple pathways and fluid hierarchies are capable of responding to emerging complexities of new urban contexts."[30]

Architects need to extend the method of space syntax, which focuses on systematically arranging spaces according to behavioural criteria, to include the contextual factors that influence such behavior. This creates a network of activity systems that emphasize intentionality over behaviour, offering a higher level of user empowerment. "Intent shapes perception and, with it, discovery of affordances - possibilities for action afforded by objects or environments; conversely, intent is itself shaped by the presence of known affordances."[31] This notion greatly affects the field of architecture, even more so with prescriptive programming in design becoming less influential. Architecture as the agent involves an aspect of tacit control and has often been used by institutions as an enforcer of its principles.
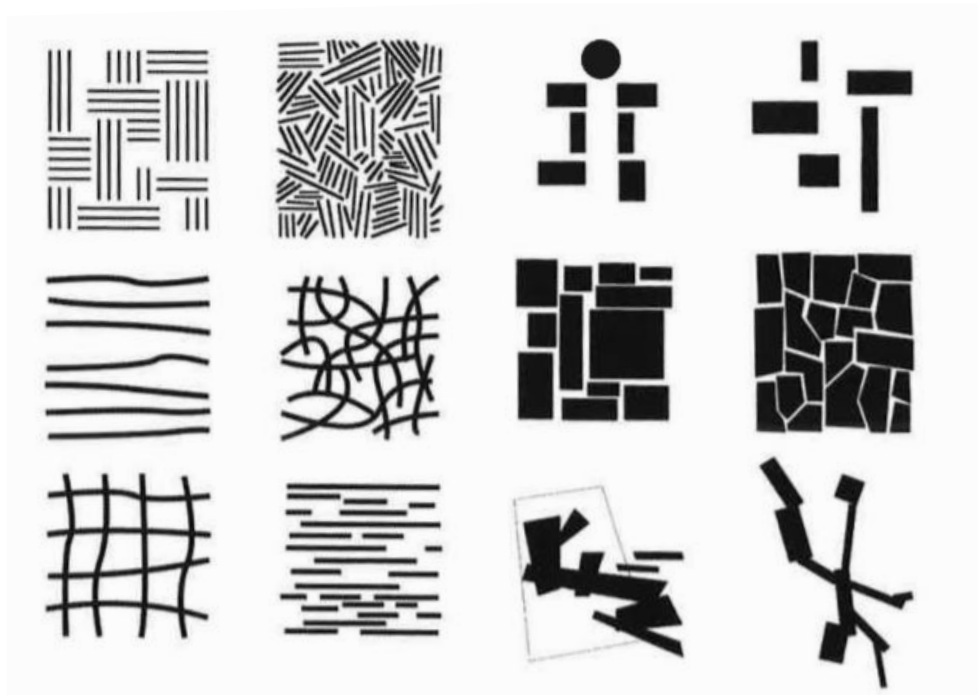
FIGURE 3.10 Stan Allen's Field Diagrams as seen in his 1997 work, "Field Conditions"

Inspired by the theories of field as architectural liberation, one specific deconstructivist architect began making new forms of spatial agency the primary driver of his firm's work. Rem Koolhaus' firm OMA (Office for Metropolitan Architecture) claims to put forth "an architecture of emancipation"[32] According to Kim Dovey:

"He seeks to challenge practices of social reproduction as they are embedded in architectural ideology and spatial programme. Programmatic innovations include the production of fields of social encounter, new functional juxtapositions and forms of spatial segmentation designed to resist social reproduction and enable certain 'freedoms'." [33]

The firm's designs look to form new ways to promote the happenstance encounter, with the design ordered around potential trajectories of movement, action, or event. This is demonstrated in a current project by the firm, the Axel Springer Campus. This building was inspired from the printing company's shift from print to digital media, and creating a new office that reflects the informal and flexible environmental shift proliferated by a digital workplace (Figures 3.11-3.13).[34] He looks at programming as indefinite and tries to resist his architecture becoming a diagram for institutional structure and control of its inhabitants. Referring to his interior designs as "fields of play" or "artificial landscapes", he looks to create opportunities for socializing similar to those of the public city street.[35]

In light of these theories, this thesis builds off the notions of network and field configurations, while considering potential opportunities of action. While used as a planning tool, it is against a fully deterministic approach of syntax, considering alternative appropriations of space and random encounter. Though frames of space do not solely determine activity, they do provoke certain action and can influence behaviour. Through the right method of structuring spaces, there can be increased agency. Through increased agency, the architecture of place-making can be brought into the twenty-first century.

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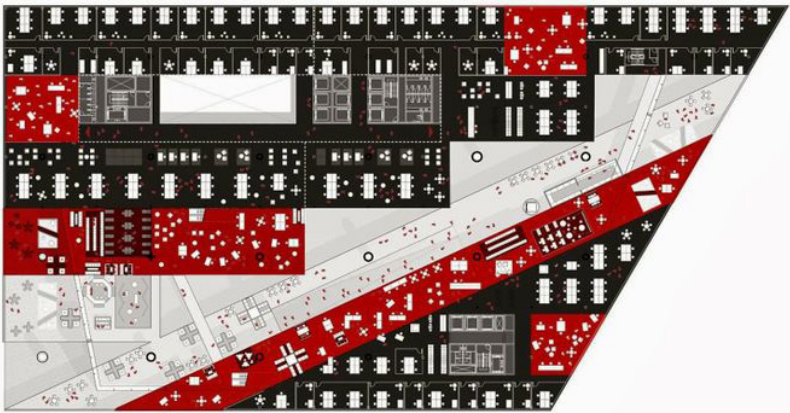
■ formal
■ informal

TOP TO BOTTOM

FIGURE 3.11 Model of the Axel Springer Centre demonstrating the fields of play.

FIGURE 3.12 Diagrammatic plan of the building featuring the juxtaposition between formal and informal office spaces created.

FIGURE 3.13 Render showcasing the digital valley created to connect the office branches.

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"The aesthetics of everyday experience depend less on prepackaged units of transmitted entertainment and more on the discovery, navigation, and engagement of local affordances." [1]

- Malcolm McCullough

4.0 RECONSTRUCTING PLACE IN DIGITAL CULTURE

The previous critique — outlining the lack of agency in architecture — revealed that places where agency is experienced resonate highly with the user in digital culture. In order to design for this, the architectural dimensions of place should be re-visited in light of this cultural shift. This chapter explores a contemporary re-construction of Yi Fu Tuan's dimensions of place — physical, personal, social, cultural. The resulting architectural interpretations will be explained in this chapter and referred to henceforth as the four design interface layers: ambient cues, shifting narratives, network connectivity, and dispositional Identity (Figure 4.2).

< **FIGURE 4.1**   Photo of digital natives playing in La Fontaine Monumentale — a public space in Paris punctuated by whimsical landscape design

TUAN'S
DIMENSIONS
OF PLACE

LAYER OF THE
INTERFACE

PHYSICAL

AMBIENT CUES
presenting the interface

PERSONAL

SHIFTING NARRATIVES
navigating the interface

SOCIAL

NETWORK CONNECTIVITY
interacting in the interface

CULTURAL

DISPOSITIONAL IDENTITY
defining the interface
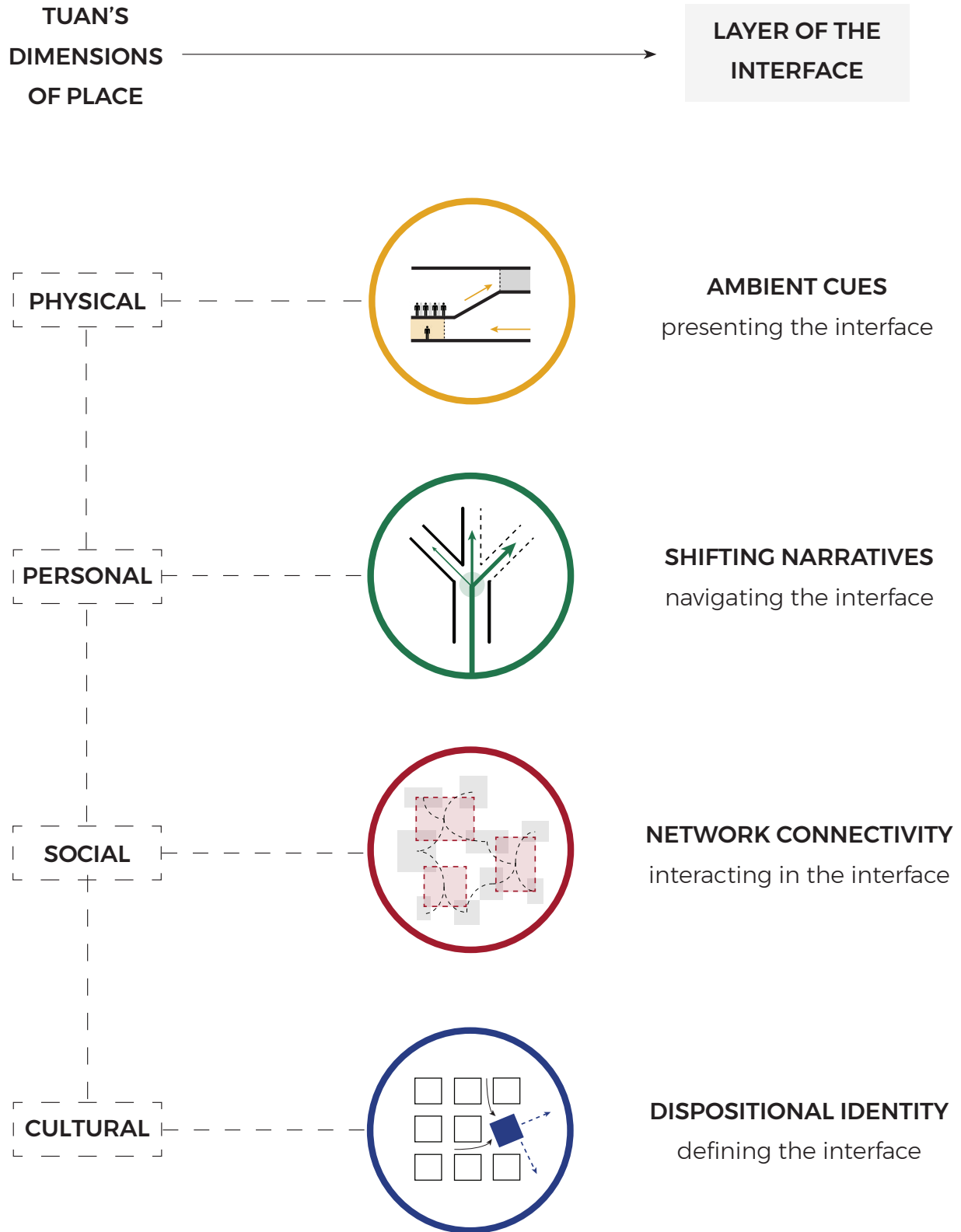
FIGURE 4.2 Diagram explaining the proposed
reconstruction of the dimensions of place.

Ambient cues extend the physical dimension of place to provide spatial information to the user through subtle gestures. Shifting narratives advance the personal dimension of place, individualizing both journey and settlement through opportunistic junctures. Network connectivity focuses of the social network in real-time and real-place, facilitating a spectrum of experience from individual autonomy to ubiquitous connectivity. Finally, dispositional identity attends to the cultural dimension, recognizing the importance of heterogeneity in the spatial field and creating diverse realms of atmosphere that imprint on the user's perception of place.

The importance of these dimensions dwells in their layering – the integration of these principles, overlapping in indeterminate ways to form a new method for place-making. Together, these layers mediate our agency in idiosyncratic ways, influencing the heuristic formation of Individual landscapes of place. By revisiting the facets of place-making, a new architectural language can be created that better represents a more contemporary, digital context. This process leads to an architecture of increased agency, fit for use by digital natives and future digital generations to come.

It is important to note that these dimensions have not been developed across an analogous field with digital platforms. Instead, they focus on creating hubs in physical space that facilitate the types of interaction, agency, and community life proliferated in the digital age. By designing with these layers, the architecture becomes an interface, rather than a machine, focused on the indeterminate experience of the individual and the paths they may carve. The architectural interface becomes integral as the individual both physically and mentally curates their experience of the place, defining its significance as it punctuates the rhythm of their lives.

The following sections detail the reconstructed dimensions of place, their architectural applications, and their significance in the interface of place.
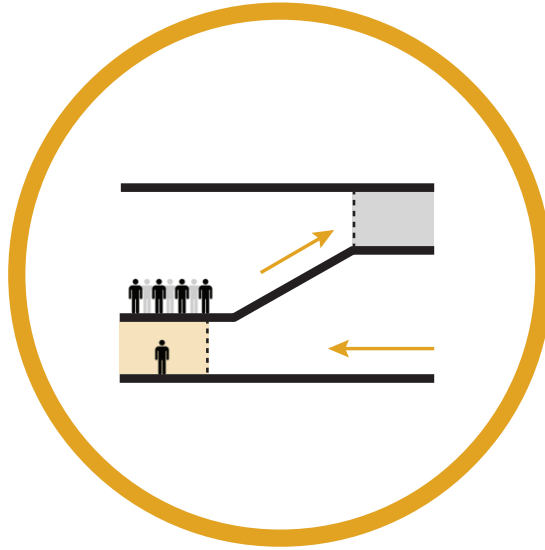
4.1   AMBIENT CUES – PRESENTING THE INTERFACE

Possibilities present themselves as interventions in the spatial field. In the age of information superabundance, architecture can offer a different kind of mediation, not through words but through meanings and gestures of the ambient. Ambient cues refer to the environmental stimuli that can provide the user with semiotic knowledge as a communicative tactic. This aspect of the design interface is an interpretation of the physical dimension of place. Ambient cues will be used to present the user with spatial affordances in movement and use. The architecture should present inherent signifiers to the user, thus supporting their agency and engendering choice.

Malcolm McCullough widely discusses ambient information which exists in the scale, form and configuration of a setting.[2] With this intrinsic information, content remains inseparable from form. McCullough believes that architects of built periphery should use form to emphasize the affordances of everyday life rather than as fashionable statements. He states that architecture tacitly cues what to say where, how to act in groups, and toward what goals these arrangements have been institutionalized.[3] This coincides with Castells view on the importance of architecture re-establishing its role as a communicator in which culture must come from the organization of public spaces, rather than the governing institutions.3

Coyne's work extends this idea of communication to focus on the architectural subtleties that influence our behaviour in space. He

posits the power of small increments, nudges, and cues, particularly through the use of thresholds, boundaries, and lines of sight that cut through multiple spaces.[5] The power of architectural configurations are echoed in Easterling's argument for the agency in form. She privileges form as action, not form as object, designing for inevitable subjectivity and potential use versus objectivity and discrete activity in design.[6]

By employing ambient information within architectural work, we can engage with the intentions of the user in a more personal way, thus mediating their agency across the architectural interface. People take cues from their physical surroundings, which shapes the social context of space. If these cues intend to liberate opportunities, rather than enforce and structure behaviour, the user's agency is designed for. At the scale of the node, this theory can be used to extrapolate architectural gestures that are intrinsic to form, functionality, or aesthetics, as integral mediating elements in the experience of place.

A design research exercise was undertaken that formally explores the ways in which architecture engenders choice through the unfolding of affordances. This method can be used to speculate how the built form expresses ambient cues that act as an agent in the architectural experience. These look at gestures, boundaries and connections within three distinctive formal languages (Figures 4.3-4.5).
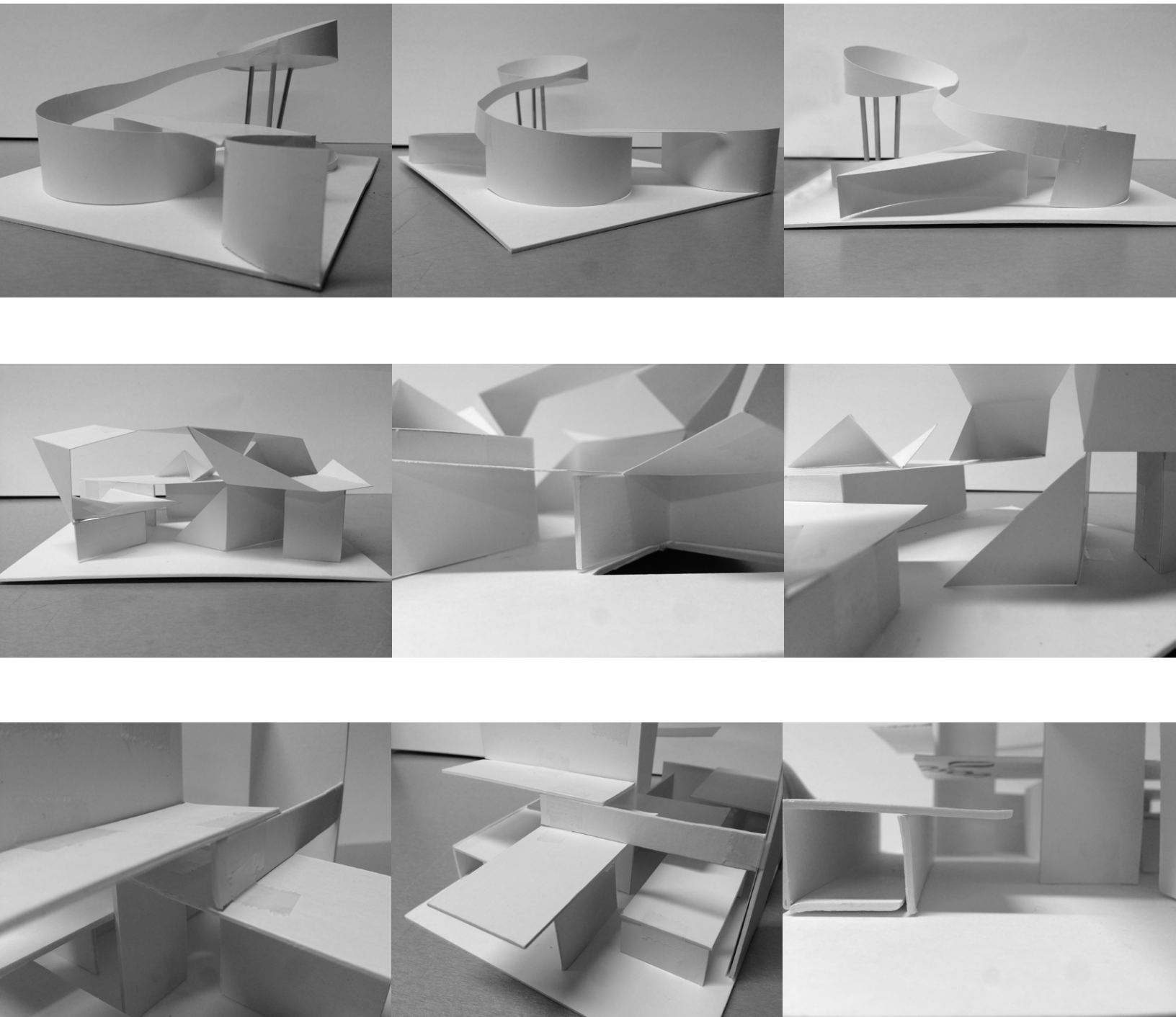
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FIGURE 4.3   Curved sketch models exploring formal ambient cues

FIGURE 4.4   Angled sketch models exploring formal ambient cues

FIGURE 4.5   Rectilinear sketch models exploring formal ambient cues
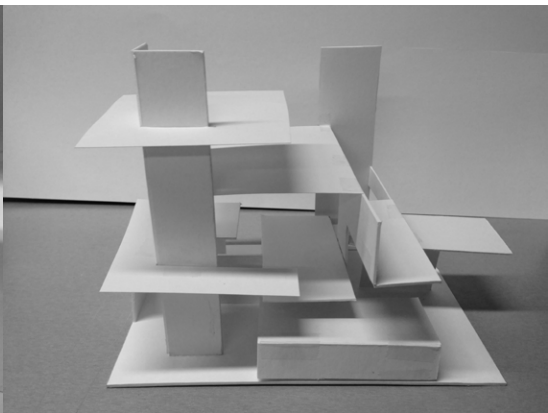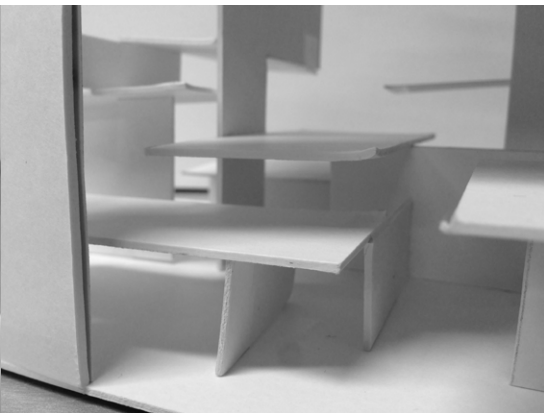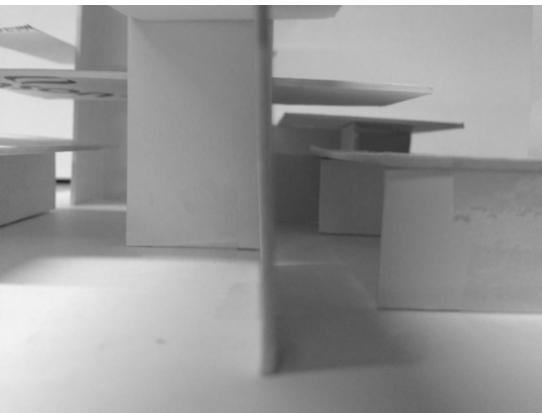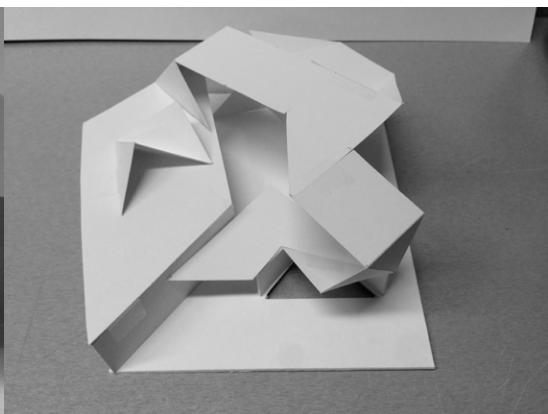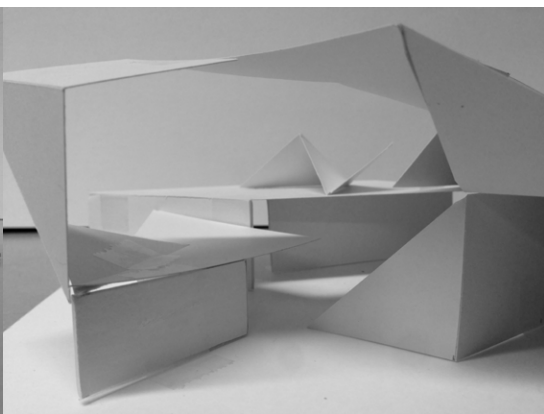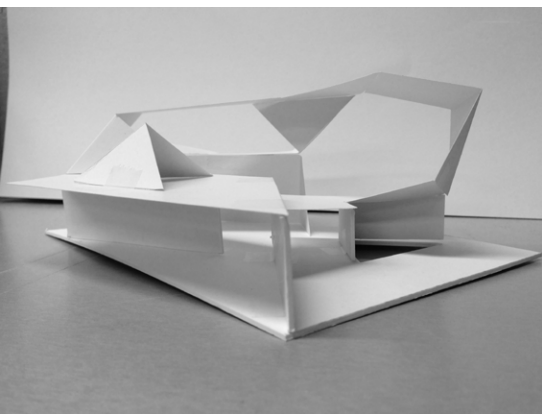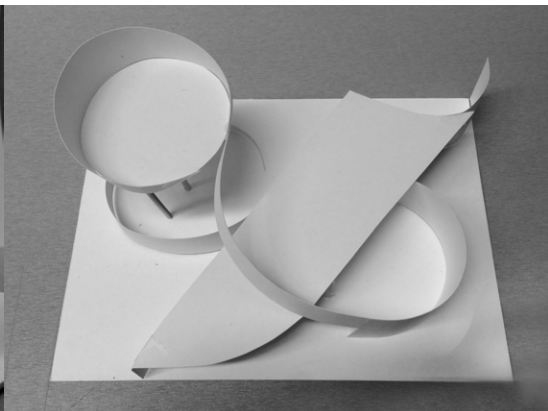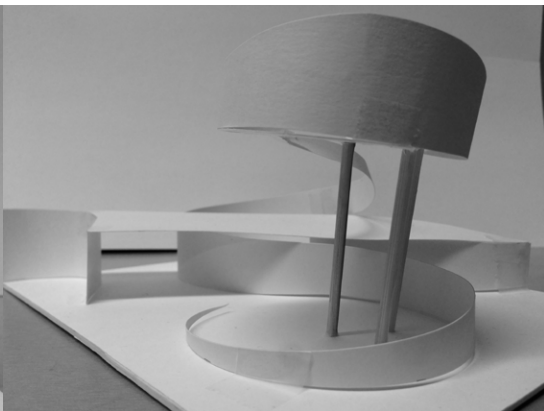
Curves enable the fluidity of movement through a space, but have the tendency to over lead. It is not possible for a user to see around a curve without changing their position, making visual trajectories limited. Curves can envelope the space to create a sense of gathering and togetherness of its occupants. Full circle curves act as a central focal point that activity radiates around.

Angled planes have an inherent directionality and can be used to direct movement and indicate hierarchy in transition. They act as an indicator of axis and promote view specificity, directing the eye along the path of the angle. Angles can also communicate vertical circulation and spatial differentiation when used overhead. Depending on the acuteness of the angles created, some space could potentially be rendered unusable as a result of the restricting geometry in both vertical and horizontal planes.

Rectilinear configurations prove to be quite useful for the formation of boundaries or distinctive relationships between adjoining spaces. Openings reveal lines of sight that project outward from the plane. However, the parallel or perpendicular nature suggests a lack of hierarchy in transition, leading to rather abrupt thresholds and discontinuous bodily motion to be present in many cases. Right-angled

plans tend to be spatially efficient, however a densely set grid can restrict relationships between spaces and close off the user from view or access.

As seen in the design experiment, form plays a large role in the spatial rhythm of a building. The nature of formal relationships and spatial qualities play a significant role in the individual's experience of a building. Other elements of ambient cues can include transition, hierarchy, thresholds, selective openings, and materiality changes.

The design elements of form, hierarchy, and materiality are explored in the AMS Nest by Dialog and B+H Architects. The curvilinear nature of the vertical planes direct the flow of users to the entrances of various elements of programming in the plan (Figure 4.6). The hierarchy between the standard spaces and the celebrated space is made evident in the "nest", housing the performance theatre that is suspended above the building's third place. The wooden slated exterior gives the perched space a distinct identity recognizable from the various overlooking floors of the atrium. Furthermore, the continuous yellow band lining the underside of the communicative stairway frames the vertical circulation method (Figure 4.8).

FIGURE 4.6 Plan of the AMS Nest demonstrating the network of curvilinear cues

FIGURE 4.7 Main atrium perspective showcasing the flows of space around the nest

FIGURE 4.8 Perspective under the open stairway featuring a bright yellow band and lighting strip to accent this vertical component

FIGURE 4.9 Studio dn&co's wayfinding for London's Here East campus

In the interface of place, transitions hold power and engenders decisions. Mitchell's theory emphasizes the significance of connections, networks, and flows whose structure can both present and constrain the individual's action, through barriers and links.[7] The physical, like the digital, is discontinuous and the definition of access points and transitions matters greatly to the experience and delineation of space. Elie During supports this, stating that people are most engaged in their environment through differentials in mobility and access, concentration and dispersion, and constraint and freedom.[8] Nonetheless, contemporary wayfinding techniques tend to privilege signage above all else(Figure 4.9). Architecture should make use of ambient information in the circulation and presentation of the interface. Formal gestures and changes in materiality can be powerful transitional elements that intrinsically denote spatial shifts,

thresholds, and directionality. The concept of ambient information encouraging vertical transitions can be seen in the Vagelos Education Centre by DS+R Architects. The Architects wanted to promote the vertical use of circulation through angular gestures and breakout alcoves that make the vertical circulation space programmable.[9] Articulated on both the interior and exterior, the angles and framed spaces create a playful journey amidst a field of study destinations of varying social scale (Figure 4.11)

The variation of ambient cues across a building is integral to the user's agency, both in moving through and situating themselves within the building. They should be designed in such a way as to communicate opportunities without over-leading, presenting snippets of atmosphere and activity that await beyond.

TOP TO BOTTOM

FIGURE 4.10   Vagelos Education Centre — interior cues directing motion vertically

FIGURE 4.11   Vagelos Education Centre — interior breakout spaces articulated on the exterior
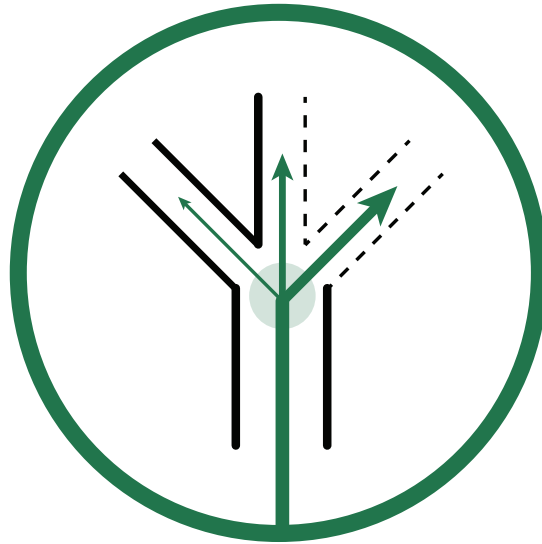
4.2   SHIFTING NARRATIVES – NAVIGATING THE INTERFACE

This section builds on the presentation of the interface to discuss the active role it plays in mediating an individual's narrative within a building. This is expressed through the inversion from designing buildings for specific action to designing for potential agency. Shifting narratives refers to designing opportunities for subjective experiences of a singular place through a diversity of subspaces and navigational routes. This aspect of the design interface refers to the personal dimension of place, engaging with the idea of self-created narratives within a dynamic architectural configuration.

In his theory of recombinant architecture,

Mitchell posits that centralized configurations are no longer the main focus of organization, with direct access becoming a less influential factor for design.[10] With less complex adjacency and proximity requirements, this extends the potential of architectural expression to reconfigure spaces and redefine boundaries. Mitchell puts forth the highly reaffirmed theory that architecture should be designed as networks of nodes accessed from a variety of means.[11] This is a precedent to Horan's recombinant theme of fluid locations, accommodating a multiplicity of communication and activity patterns.[12] Mitchell says we play
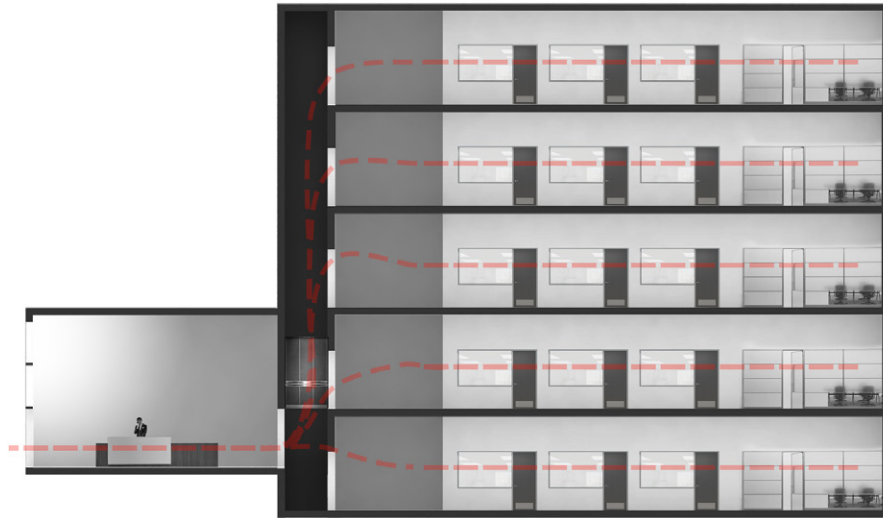
FIGURE 4.12 Diagram illustrating a homogeneous, singular narrative as the antithesis.

different roles in different nodes of the network straddling between voyeurism and engagement; the latter should be better designed for from a participatory standpoint.[13]

In the same way that contemporary digital platforms enable a level of customization and individualization, architecture can engage with this participatory realm through the concept of shifting narratives. Designing for shifting narratives allows for the curation of experience to happen at the user level. Appropriate narration opportunities must be given to combat the feelings of homogeneity that are experienced too often in institutional settings. Figure 4.12 illustrates a typical homogenous narrative found in many office, educational, or government buildings, acting as a container of behaviour and the antithesis of this dimension. Users of the building are confined to the same prescriptive patterns of movement in a highly controlled architectural configuration, experiencing very little agency.

McCullough holds that when participation is eliminated, a building becomes a machine. When participation is encouraged, it becomes an interface, changing the focus from designing objects to designing situations.[14] McCullough emphasizes the importance of designing for intentionality instead of behaviour and his research shows that people are more likely to identify with recurring experiences, especially those resulting from social choices. He explains that when settings are experienced habitually, people begin to associate different environments with different states of intent.[15] This concept is a main proposal of the Activity Theory, used in technological interaction design.[16] Intent is an important factor that shapes the perception of space for a user, specifically with regards to recognition of agency in their environment.

Through shifting narratives, the user is not participating in a strictly predetermined experience, rather they are forming the experience actively through their own use of the interface. This presents a unique experience to each user that imprints on their sense of place as outlined in Yi Fi Tuan's personal dimension of place. Therefore, this thesis privileges designing for the flaneuresque movement rather than direct routes. Each narrative unfolds based on the

intentions of each user. These can include intentions toward different types of social interactions, ambient conditions, voyeuristic opportunities, and routine activities. At the same time, the users are sharing in the knowledge of the same affordances, which results in the formation of communal memory.[17]

Coyne's concept of calibration plays into the user's desire to have their surroundings reflect their own needs and circumstances.[18] He acknowledges the movement through space as opportunistic, drawing from reference points and cues to the spaces beyond.[19] With these notions in mind, design research took place involving explorations of agency through shifting narratives (Figure 4.13-4.14). Through the evolving project explorations for this thesis, vignettes showcasing opportunistic junctures were made. This term refers to the design of punctuated moments in which a path forks into different spatial trajectories. From these moments, ambient cues present information to the user through visual sight lines into multiple spaces.
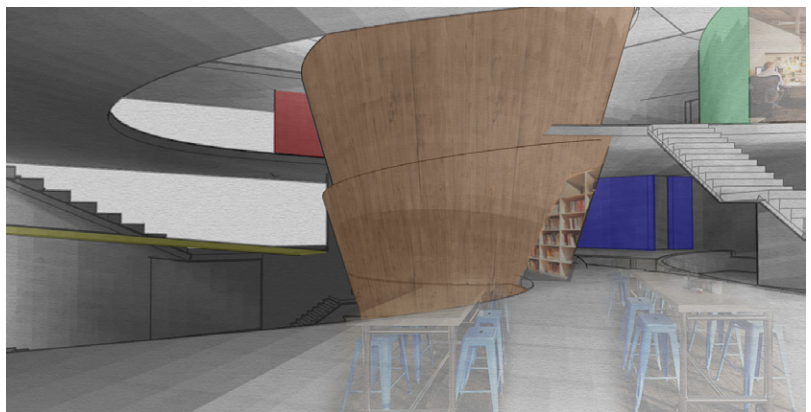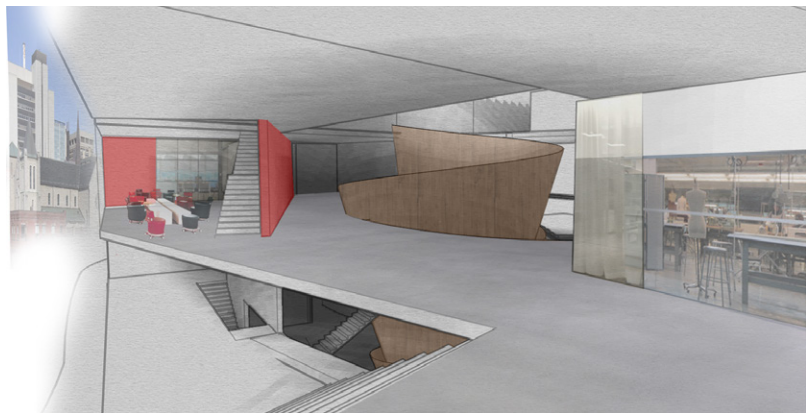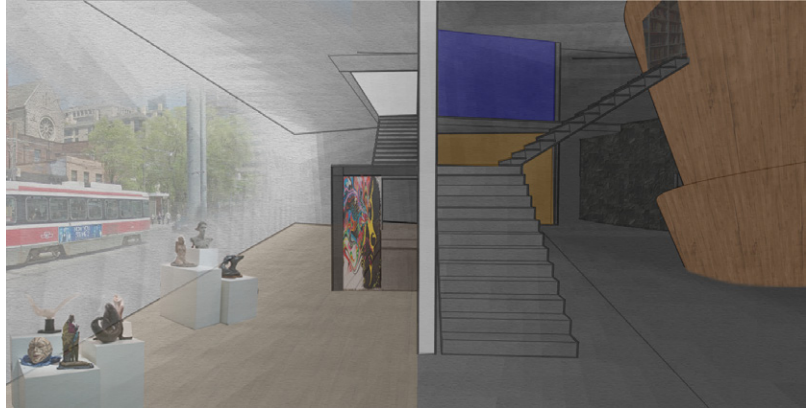
FIGURE 4.13 Vignettes showcasing opportunistic junctures created during an early project iteration.
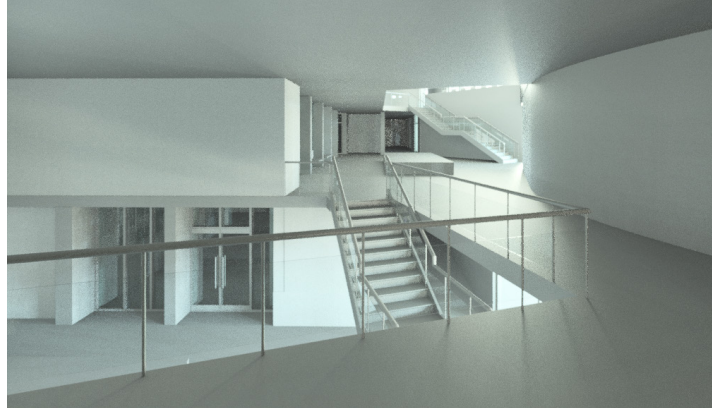
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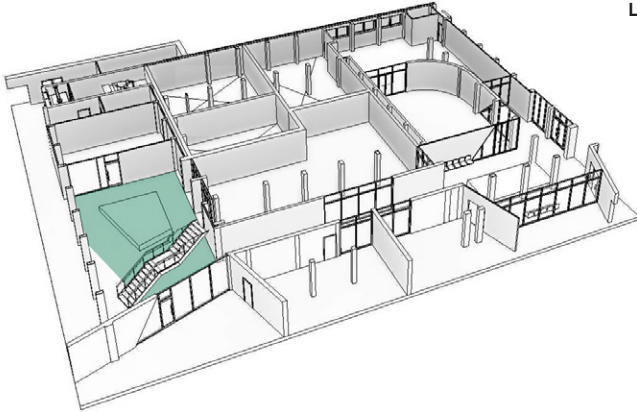
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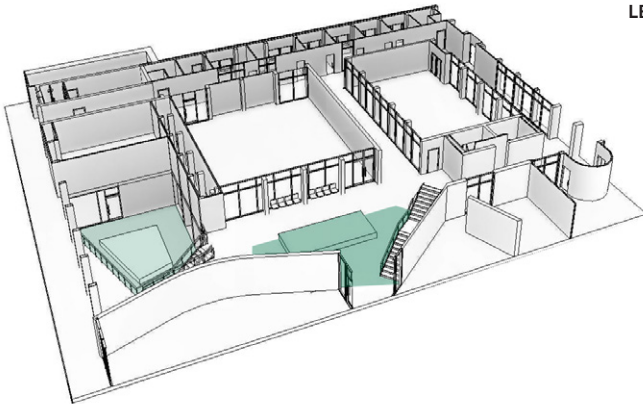
LEVEL 3
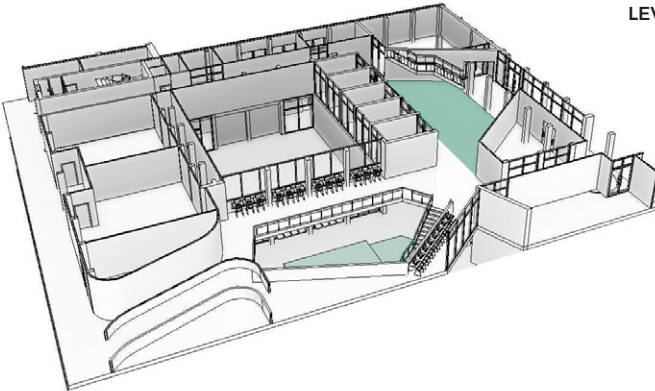
LEVEL 4
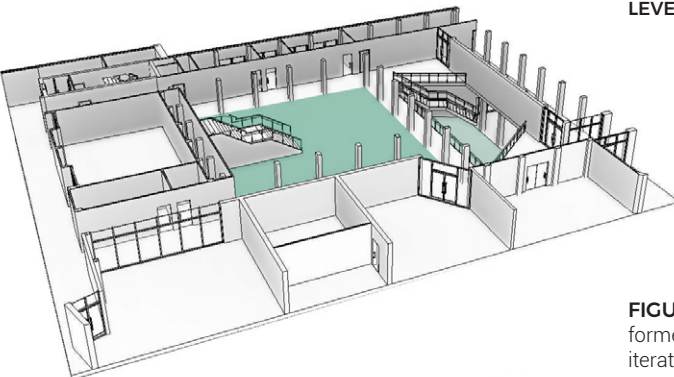
FIGURE 4.14 Renders showcasing the opportunistic junctures formed through the creation of shifting atria during an early project iteration. The shifting atria created are shaded in green in the corresponding axonometric drawings.

In the interface of place, connection to the network is just as important as selective disconnection. "The interface is defined in its coupling of the processes of holding apart and drawing together, of confining and opening up, of disciplining and enabling, of excluding and including."[20] Designing with these notions involves providing varying degrees of spatial connection through the implementation of boundaries and reveals. Architects should provide spaces that could facilitate selective privacy and individually appropriated space standing in contrast to spaces that promote face-to-face interaction.

An architectural example of this notion can be seen in Atelier 2B's concept of the Collaborative Core (Figures 4.15-4.16). While maintaining the existing segregated spatial structure along the perimeter, the firm proposed a renovation of the interior to include an interconnected collaborative shaft. The collaborative core features playful forms, loose programming, and integrated vertical circulation as a direct juxtaposition to the formal office space surrounding it. Through this core revitalization, the occupants are given the opportunity to break up the work day with a change in environment, switching from seclusion to connection. "There is something about switching focus, perhaps especially visual focus, that instinctively satisfies."[21]

Shifting narratives casts architecture as an agent of individual experience, not conforming its subjects to particular conditions but rather presenting them as possibilities for identification. The manifestations of intentions results in a journey and settlement that is unique to the user, imprinting differently on each user's perception of place.
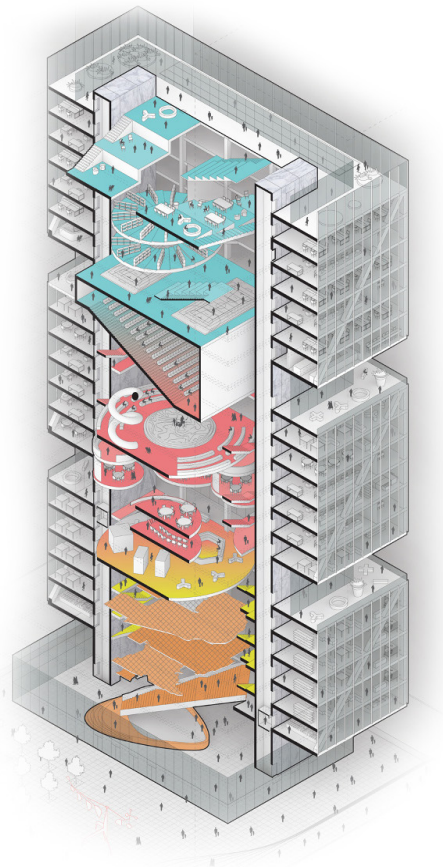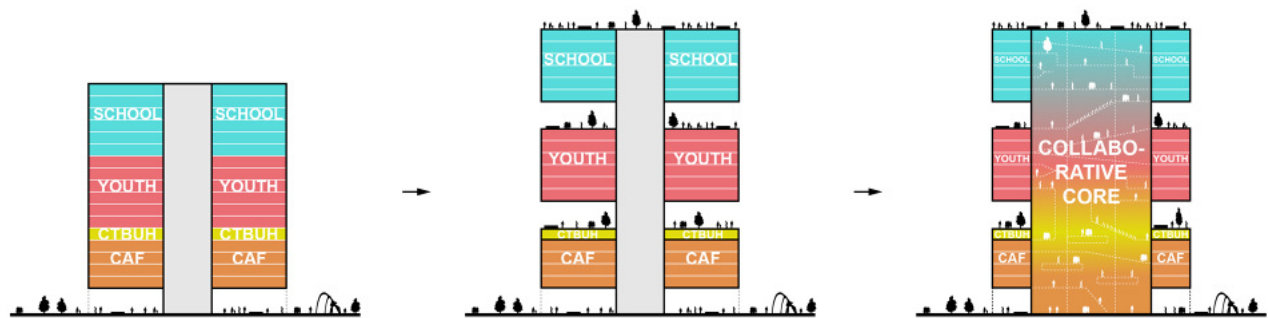
TOP TO BOTTOM

FIGURE 4.15   Collaborative Core Programming Diagram by Atelier 2B

FIGURE 4.16   Collaborative Core Axonometric Diagram by Atelier 2B
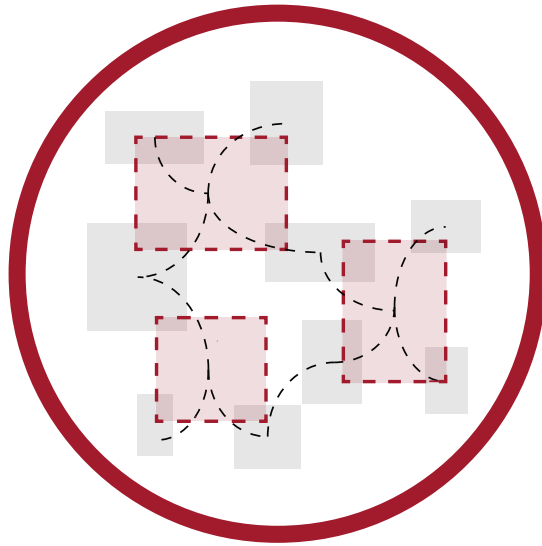
4.2   NETWORK CONNECTIVITY –
SOCIALIZING IN THE INTERFACE

Network connectivity refers to the social networks of physical space. The traditional polarities of public and private space are blurred and architecture should be concerned with intermixtures, interconnections and networks of spaces.[22] Designing for network connectivity involves recognizing a simultaneity of different flows of users acting within the same realm. This thesis specifically explores enclosed networks, or "permeable and open places of supple encounter that are rigidly enclosed on their boundaries."[23] The goal for the physical social network is to create possibilities for face-to-face interactions and interest sub-communities to

form within the building.

McCullough believes that interpersonal distance is the great mediator of social environment, providing a tacit set of social cues and establishing categories of experience, from the intimate to the collegial to the public.[24] The structure of the space tacitly indicates the types of interaction that should take place. In doing so, the interface is designed for connections to occur in a synchronized time and place. Design strategies that contribute to forming the social network include connecting adjacent spaces through selective reveals, overlapping circulation paths, providing alcoves/semi-private

FIGURE 4.17 School of Informatics Atrium Renovation, University of Edinburgh

spaces adjacent to circulation to facilitate discussion, and networking of smaller third spaces within overall building layout.

An important aspect of network connectivity is the connecting relationship between the nodes, also known as the edge condition. The inherent structure of the building with its circulation, amenities, and third spaces should promote spontaneous interactions between occupants of the building. This involves a degree of visual and circulatory connection between certain nodes, with the identities of each represented in the ambient cues. Though visuals are an important factor, this should not reduce its influence

to a mere menu style presentation of spaces. This organization can be seen here in Figure 4.17, in the School of Informatics building at the University of Edinburgh. The differentiation between branches is expressed through the central atrium where the different spaces are articulated to the visitor through windows of imagery.[25] However, these reveals are disconnected from the user's movement to each space, without active edge conditions. Therefore, the uniformity and perspectival removal of this connecting fabric present the interface with a lack of hierarchy and specificity of the nuanced spatial relationships throughout the building.

FIGURE 4.18 Sketch model exploring positive forms and the connecting fabric.

Mitchell's concept of "electronic agoras" aims to remove the isolating aspect of digital technologies and encourage social exchange within the physical realm. He presents asynchrony as a downfall of the digital age, believing that architects must now work to connect these varying rhythms of activity through networks of physical space.[26] Elie During echoes this, arguing that coexistence has now become an issue of both spatial and temporal interconnectedness. During's theory also suggests that urban life is constituted by the simultaneity of congregation and dispersion of individuals, arguing for "scattered working areas functioning as knots connected to a number of different networks".[27] She advocates for the power of visual connection in the network, with the satisfaction of switching between subjects of attention, from focused to distributed attention in the spatial field.

Beginning to explore the notions of the connecting fabric, the design research takes the form of model studies and precedent analysis. At first, an exercise was conducted with programmed space acting through positive forms, with the negative spaces in between acting as circulation space (Figure 4.18). Though it presents distinctive volumes that would register their own identities, the connection space remains fluid and passive, rather than an active part of the interface. A similar situation is evident in the Medellin Modern Art Museum by 51-1 Arquitectos (figures 4.19-4.20). Though the functions have been formally articulated through the massing on site, the programming elements remain separate from one another, expressing a negligible relationship between spaces. The influence of this precedent lies in the spatial representation of identities, while the discord results from the inability to establish interior connections outside of circulation space.

This thesis is critical of architectural ecologies that enforce an antiquated network

singularity as opposed to an interweaving of differing networks that inherently run on their own rhythms. To say that everything is — and should be — connected, is a disservice to architecture as a mediating agent. Today, it is more accurate to describe a building as having multiple networks, connected through common spaces and circulation routes that can facilitate a happenstance encounter. This concept of multiple networks within a building accounts for the freedom and flexibility of use proliferated by digital networks. It extends beyond the realm of mixed-use developments, instead geared toward architectural agency and navigating the varying intentions of the users.

Furthering the notions of the connective fabric and network simultaneity, a series of sketch models were made. These present distinct volumes as outlined voids with more possibility for specific connection through the outlined shifting atria (Figure 4.21).
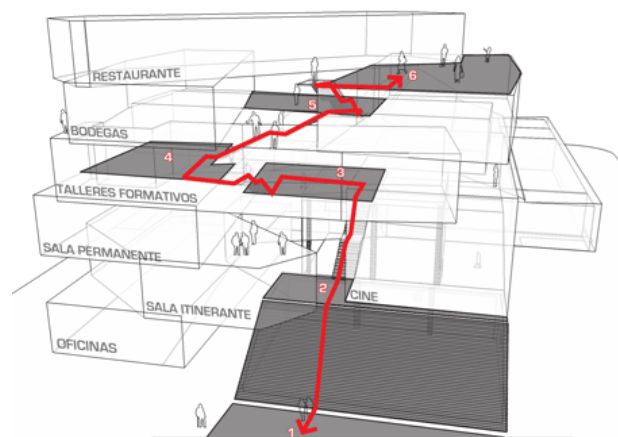
FIGURE 4.19   Circulation Diagram of Medellin Modern Art Museum

FIGURE 4.20   Render of the Medellin Modern Art Museum
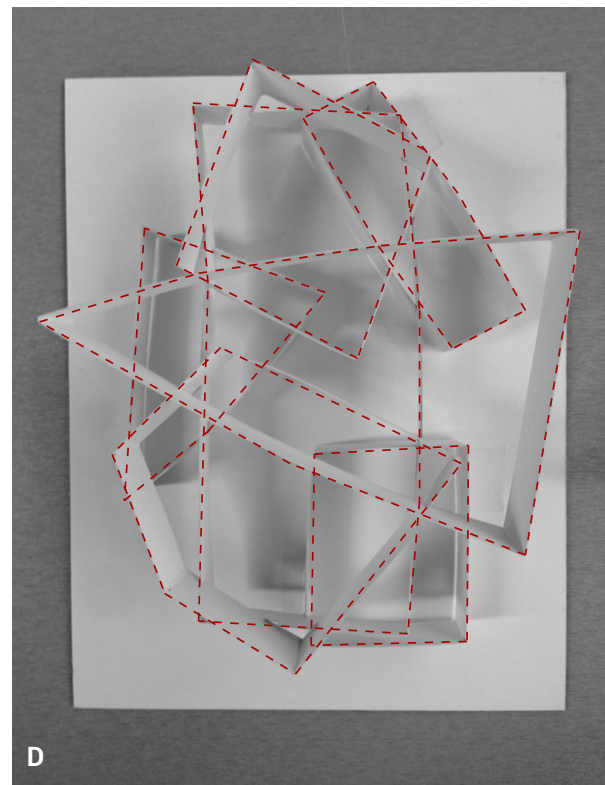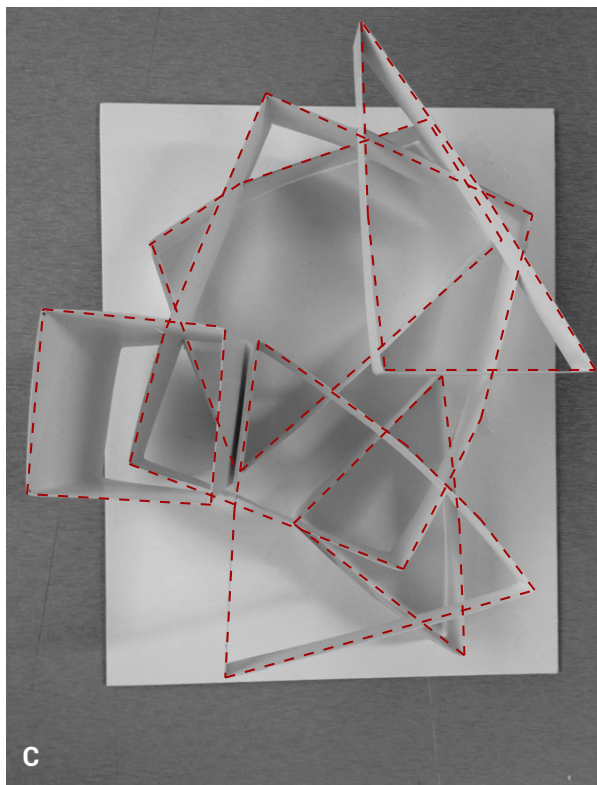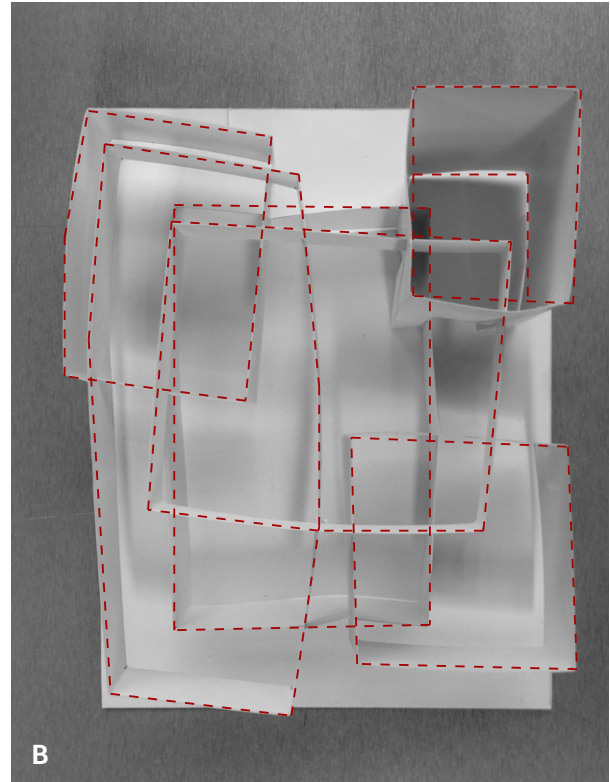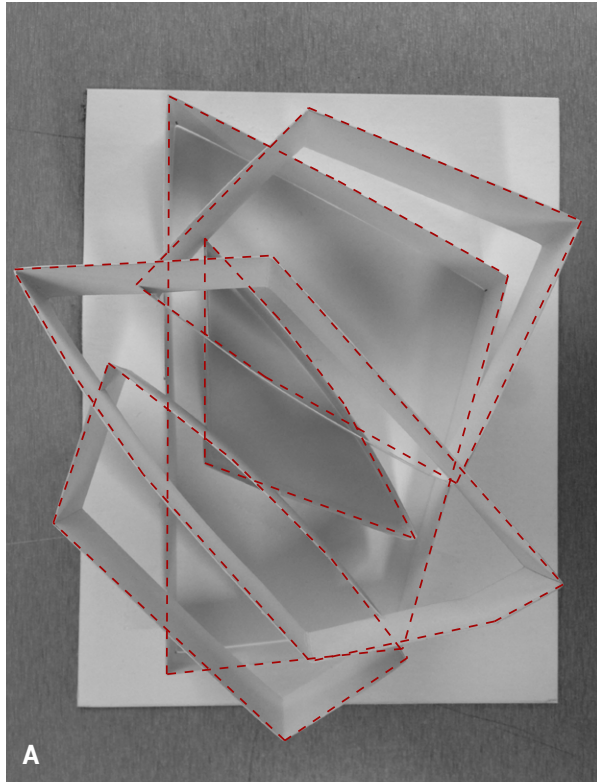
FIGURE 4.21   Sketch model design exercise continued exploring multiple networks and vertical connectivity.

Comparing models A, B, C and D, the network becomes more complex, creating a number of different subnetworks with their own specific connections. The areas of overlap are of particular interest as they create connective opportunities within the interface. Not all parts of the interface are in connection, with discrete relationships created between certain spaces and defined boundaries created between others. The insight obtained from this design exercise is that network connectivity straddles between full autonomy and ubiquitous connection.

A precedent that accomplishes this well is the Culture Forest by Unsangdong Architects (Figures 4.22-4.23). Different spaces within the building are articulated within a weaving structural frame that connects them. The frame opens up in distinct areas to connect certain spaces that belong to a subnetwork, or conversely act as a barrier to others that do not. In this way, the architecture is mediating the networked interactions between the different interest subsets throughout the building. Constructing the subset networks involves a layering of different intentions and crafting of possible experiences. Architecture mediates this experience through ambient information and gestures that lead to the discovery of different nodes.
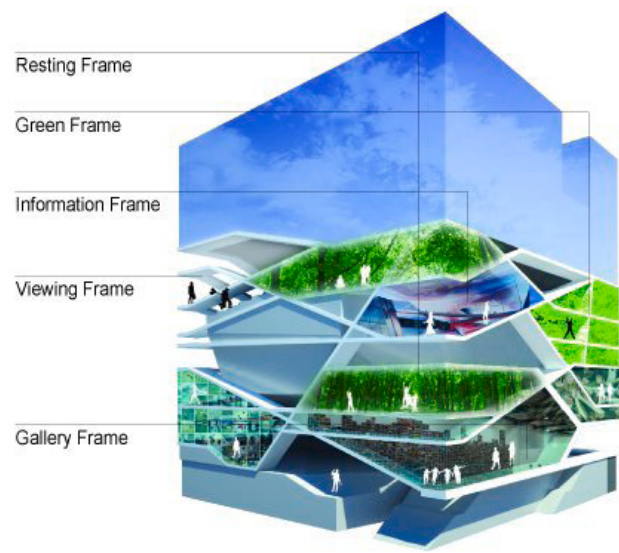
FIGURE 4.22 Culture Forest by Unsangdon Architects, Axonometric Diagram.
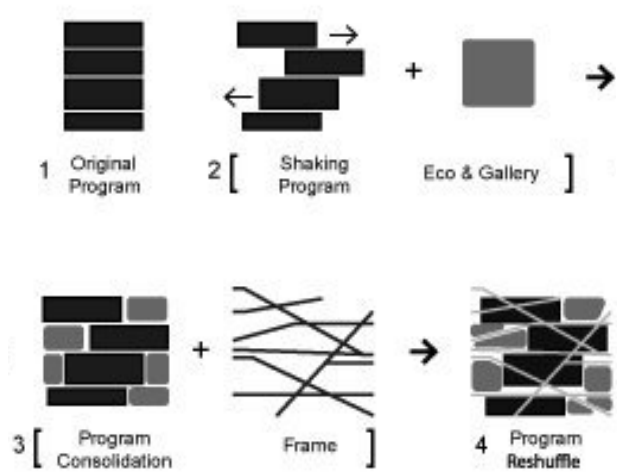
FIGURE 4.23 Process Diagram of the Culture Forest by Unsangdon Architects

4.4   DISPOSITIONAL IDENTITY – DEFINING THE INTERFACE

Dispositional Identity adheres to both definitions of the term *disposition*. At once it refers to context of the space — the way in which the node is arranged, especially in relation to other spaces, as well as the content — the inherent character of the space.[28] Dispositional affordances dictate use that is socially understood and reinforce the identity of the place. Distinctive nodal settings support heterogeneity in which the user associates particular settings with particular states of intent. If the intention is well provided for in the disposition of the place, the user experiences the means to act accordingly.

Mitchell proposes a recombination of space less defined by program and more by the inherent qualities inherent of each space. He is weary of a characterless architecture similar to the modular and reconfigurable spaces of the 1960's and 1970's. Rather, he proposes the need for places that service the nomadic lifestyle, making for diverse and interesting uses.[29] McCullough furthers this discussion with his theory of situated types, in which there are a set number of recognizable possibilities to situate oneself. This range of places helps to structure one's activities and differentiate between grounding contexts.[30] Easterling extends the idea of *possibility spaces*, stating that the networks of spaces seem to possess agency and dispositions.

The disposition of the space invites particular activities and the unfolding behaviours are culturally understood given the architectural design of the space.[31]

   When looking at context, the design elements considered include spatial/programmatic adjacencies, specific views framed from the spaces, transitions, and the relationship to the exterior environment. With regards to content, the subjects of evaluation include diversity of spatial character achieved by the design, style, and materiality. It focuses on the qualities of the space that distinguish it from others in the vicinity, specifically identifying it as a celebrated or more unique zone. "Environments that subtly challenge our constructs provide more satisfaction than those in which everything conforms to expectations."[32]

   In search of heterogeneous expression, a series of sketches were made that explore the ways in which spaces can project autonomy while making distinct connections to other spaces within the composition (Figure 4.24). It was discovered that rather than maintaining consistent connectivity between frames, these schemes create interest when connections and openings are selectively placed. This creates specific contiguous relationships as opposed to more open, centralized configurations.

FIGURE 4.24 Design exercise: Heterogeneous frames and connections.
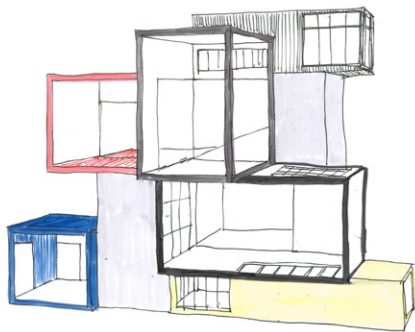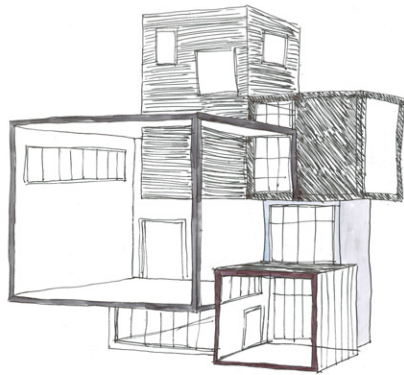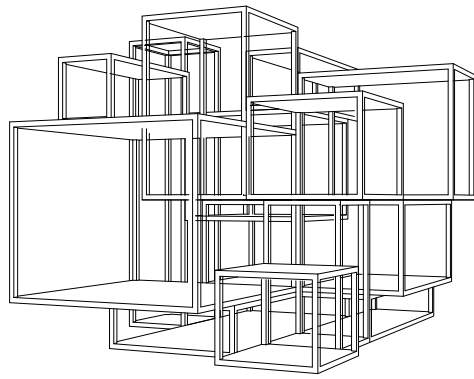
Interruptions in the fluidity of the space present the interface to the user with a more conscious distinction between potential places to inhabit. As the spaces are traversed, the user is confronted with views or signifiers of different spatial environments, and the interface becomes an agent of choice in their experience.

Within the networks, a celebrated node should juxtapose the surrounding forms in language or character, indicating its significance to the user. Ease of circulation to the node, as well as views from opportunistic junctures, allow the presence of the node to punctuate the user's experience. There are three main approaches to the exterior of the node within its network. The first involves complete transparency in which the activity of the node is showcased to the users (Figure 4.25). The second involves partial transparency where selective reveals highlight key views into the space, creating interest for the user while reserving a measure of privacy (Figure 4.26). The third is to treat the node as an enclosed nest, with its identity presented to the network by its exterior appearance of form and materiality. Here the node projects a symbol of the place within (Figure 4.27).

TOP TO BOTTOM

FIGURE 4.25 The Challenger Workplace by BVN Architecture

FIGURE 4.26 Ryerson Student Learning Centre by Snohetta

FIGURE 4.27 UCD Student Centre by FKP Architects

Coyne recognizes the importance of "wayfaring between the familiar and the unfamiliar, the series and the one off".[33] He also discusses the ways in which people put claims on spaces as a means of tagging and appropriation of place. This coincides with Castells' position that "symbolic nodality" will identify places, and that their meaning will be appropriated by different individuals or groups respectively.[34] Shared symbolic meaning in places reinforces the cultural identity. For this reason, dispositional identity relates to the cultural dimension of place that Yi Fu Tuan has outlined.

Settings themselves emerge into the foreground as a means of self-identification. "Social recreation uses public sites for the presentation of self, for which physical architecture sets the stage."[35] As such, it is understandable that the rigidity of institutional settings resonates less meaning with its occupants. These settings are inhabited not as a desirable chosen backdrop, but rather conforming to the standards and expectations put in place. Contemporary architecture appears to be responding to this dissolving hierarchy in many ways. One corporate institution that has adopted a liberated spatial structure is Airbnb, whose international offices have all been designed to echo the company's 'belong anywhere' ideology.[36] Its various branches hold a progressive attitude toward office life, with the diverse spatial atmospheres allowing the workers to situate themselves in a place of their choosing (Figures 4.28-4.33). When people share the same awareness of affordances, an identity of the environment is constructed.[37]

TOP TO BOTTOM > Airbnb international office headquarters

FIGURE 4.28 San Franciso office by Gensler

FIGURE 4.29 London office by Threefold

FIGURE 4.30 Portland office by Bora Architects

FIGURE 4.31 Sao Paolo office by MM18

FIGURE 4.32 Singapore office by Farm Architects

FIGURE 4.33 Dublin office by Heneghan Peng Architects.

SAN FRANCISO

LONDON

PORTLAND

SAO PAOLO

SINGAPORE

DUBLIN

TIROL

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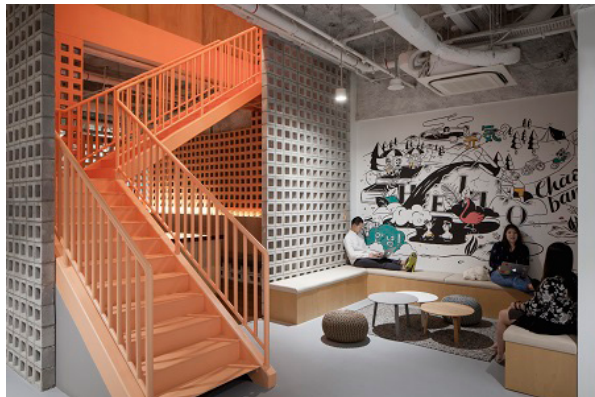
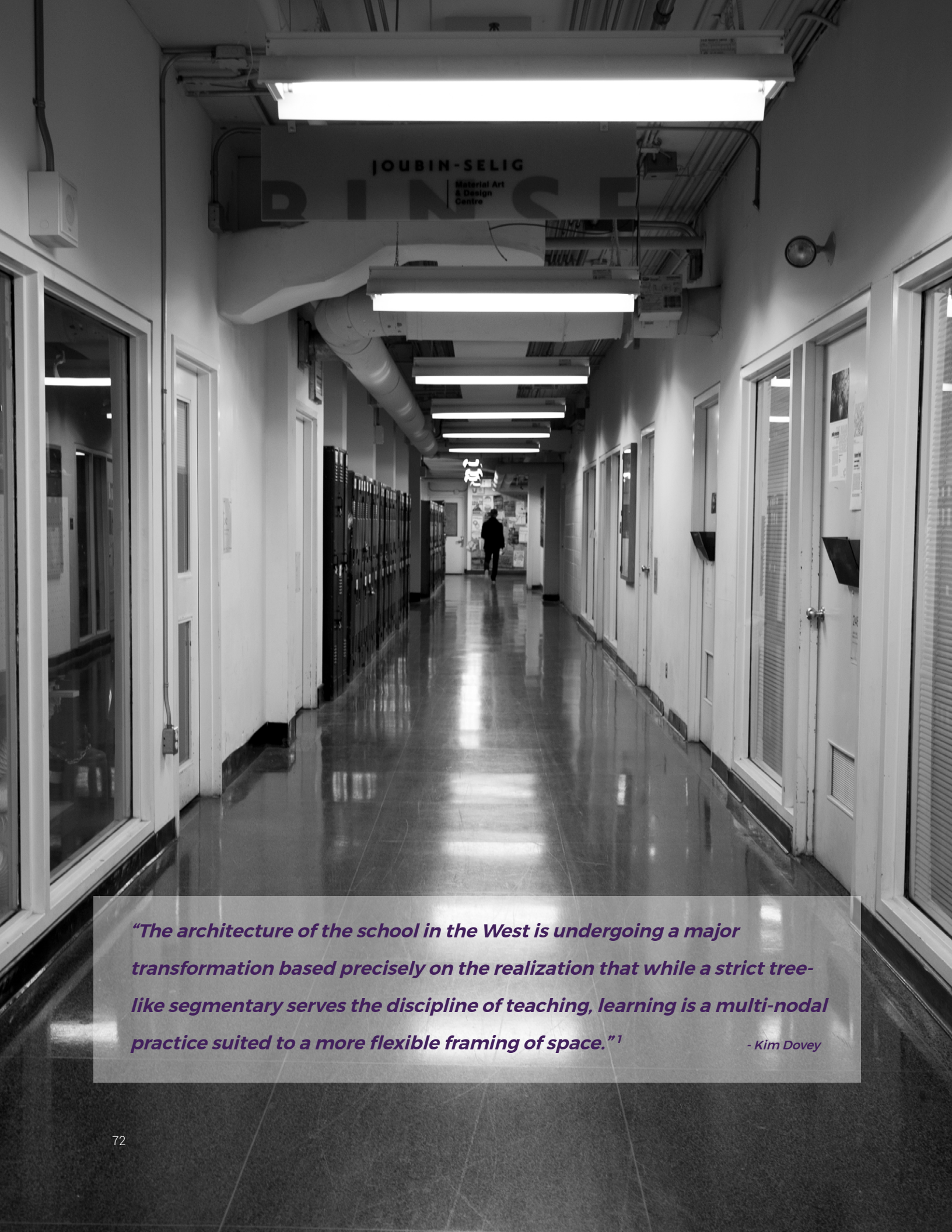37. McCullough, Malcolm. *Ambient Commons: Attention in the Age of Embodied Information*, 28. Cambridge, MA: MIT Press, 2013.

JOUBIN-SELIG

RINSE

Material Art
& Design
Centre

"The architecture of the school in the West is undergoing a major transformation based precisely on the realization that while a strict tree-like segmentary serves the discipline of teaching, learning is a multi-nodal practice suited to a more flexible framing of space."[1]

- Kim Dovey

5.0

PROJECT: RE-MEDIATING OCAD UNIVERSITY

The design research of these interface dimensions cumulates in the execution of an architectural project: an educational resource centre as an addition to the main building of OCAD University. Located at 100 McCaul street, the majority of the university's programming takes place here, and it is widely known as the cornerstone of this institution. With its future-forward values yet dated architectural structure, OCAD U is an ideal candidate for a revisitation of agency in place-making. The project involves an analytical critique of the existing volumes: the Main Building, built in the 1960's, and its overhead counterpart, the Sharp Centre for Design, completed in 2004.[2]

< FIGURE 5.1 Photo of a corridor in the Main Building of OCAD University, typical of the institutional configuration that is used as the antithesis.
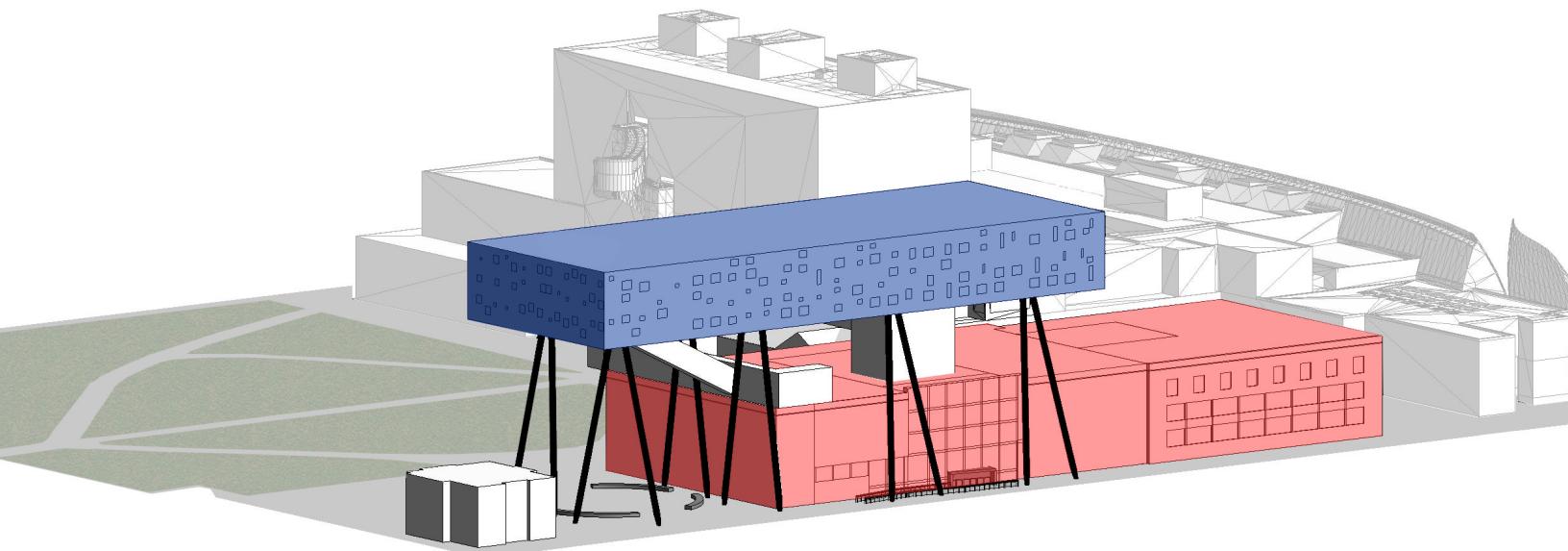
FIGURE 5.2 Axonometric diagram of existing program massing

Currently, the Main Building houses the Centre for Art while the above volume is home to the Centre of Design (Figure 5.2). The design addition will consist of a third volume that stands in juxtaposition to the opposing volumes, designed by applying the four design interface layers to form the architectural experience.

This typology specifically caters to the target cultural group, the Digital Natives. This demographic grew up after the widespread adoption of the personal computer and have been operating digital technologies their entire lives. Their integration into digital culture makes this demographic an appropriate target of design research. The selection of an educational institution was informed by studies suggesting that places of learning would benefit from a restructuring of space to reflect a flexible,

more diverse atmospheric range of workspaces.[3] This program and institution are thus an appropriate subject when designing for increased agency in place-making.

The existing building was evaluated on its current architectural interface to bring forth its issues, shortcomings, and missed opportunities before the strategic proposal for the addition was formed. After investigating the dimensions of ambient gestures, shifting narratives, network connectivity, and dispositional identity, the design interface of the building can be re-mediated as a producer of agency. It is critical that the architecture both represents and structures the institution's progressive system of education. The following critique will explore how this is currently not the case.

CAMPUS

MAIN BUILDING

FUTURE DEVELOPMENTS

199 Richmond St. Professional Gallery

Princess of Wales Centre for Visual Arts at OCAD

Rosalie Sharp Pavillion Renovation

Thomson Gallery and Art Research Facility

FIGURE 5.3 Site context map with campus, main building, and future developments for the university labelled.

5.1 NEIGHBOURHOOD AND SITE

The OCAD University building is located in the heart of downtown Toronto, a short distance west of Toronto City Hall. The main elevation of the building addresses McCaul street with the rear adjacent to Grange Park, the main green space for the local community. This park was recently renovated as featured in the site plan in Figure 5.4. Though the building is the primary icon of the university, there are many new developments being made by the institution with regards to the campus expanding outwards from this integral node (Figure 5.3). The surrounding neighbourhood is an artist hub, with the adjacent Art Gallery of Ontario, close proximity to Kensington market and a series of galleries and artistic franchises along Queen Street West.
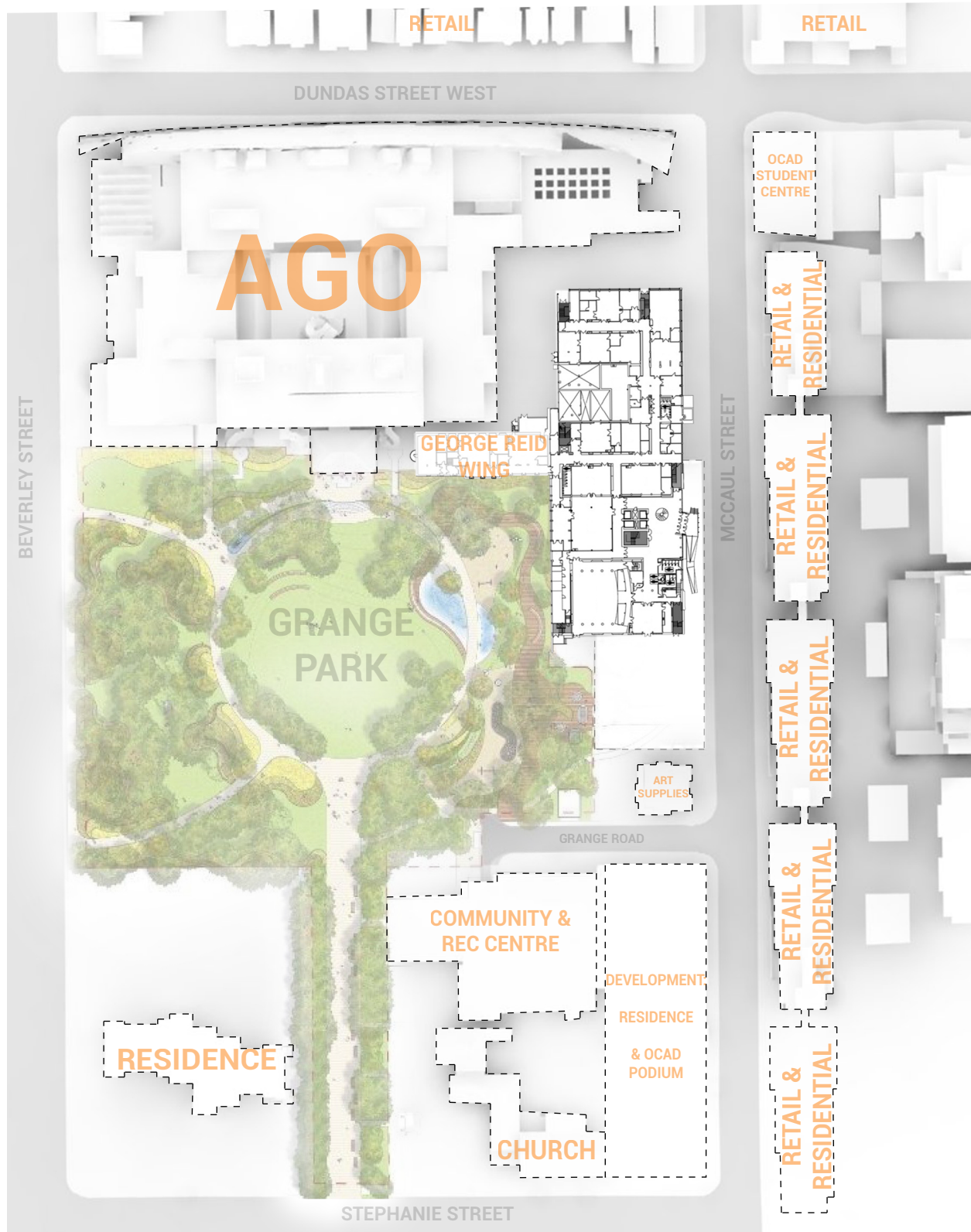
FIGURE 5.4 Map of surrounding site programming

FIGURE 5.5 Exterior photo of the existing two buildings that comprise 100 McCaul Street.

The main building was built around the same era as the adjacent strip of residential buildings, sharing a similar character and material palette. Meanwhile, the Sharp Centre above, known colloquially as the "table top", introduces a distinct juxtaposition to the surrounding architectural works. Compositionally, there is a considerable discrepancy between the top and bottom buildings, with the main building receding out of recognition and importance in comparison to the icon perched above (Figure 5.5). The majority of traffic comes from the north of the building, due to the proximity of Dundas Street and its public transportation line. Frank Gehry's addition to the Art gallery of Ontario is also accessible from this northern corner, casting the main building as lackluster in its adjacent contrast. The outline of the

Sharp Centre can be seen in the background, the only ambient indicator that this site is monumental to the Grange Park community.

As part of OCAD University's Creative City Campus Plan, there was a call for the renovation of the main building and an addition of programming.[4] The design project is informed by the needs of the institution expressed in this call, while presenting the interface of place proposed in Chapter 4. In light of the cultural shift towards individual agency, it is necessary that the architecture of this institution be revisited to reflect this value.

FIGURE 5.6 Photo of the northern approach from the street.

FIGURE 5.7 Photo of the existing poor access point to the south.
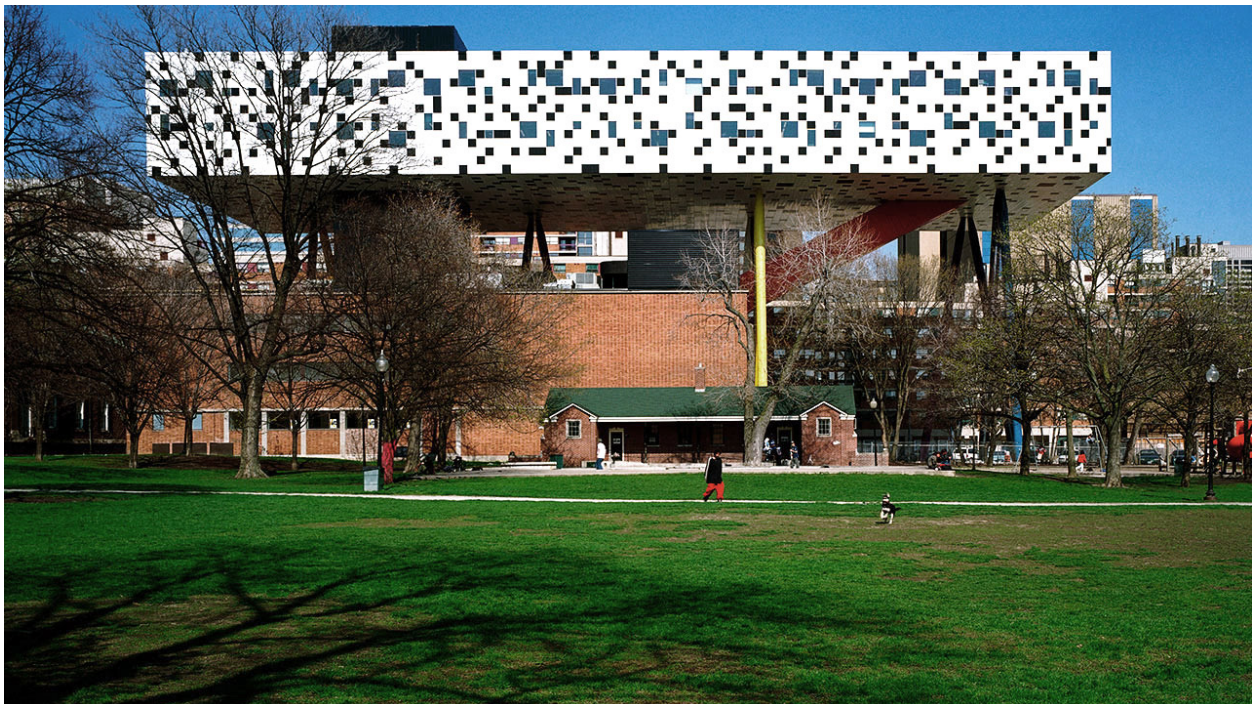
FIGURE 5.8 Exterior photo taken from Grange Park

5.2   THE MAIN BUILDING – PLACE AS CONTAINER

Originally built in 1967, the design interface of the main building is typical of a strictly organized educational building.[5] This spatial layout, like most institutional typologies of its time, was predicated upon rigid programming, conservative spatial use, and singular functional rhythm. The architecture was built divisively to impose a specific organization of its occupants, as a reflection of the education system of the time. In the 1960's, educational buildings resembled an assembly line operation process, no different than the working situation its occupants would be subject to after completing their education.

From the exterior, the main building fails to communicate its use to the passers by through adherence to architectural typology or distinctive reveals. From the northern approaching view, the user is met with brick façade tiled with rows of windows indistinct from the buildings of the surrounding neighbourhood. On the wall, an understated white sign indicates the building's use (Figure 5.6).

From the south, the user is met with a modest, sunken parkette as well as an entrance to a vertical egress stair and the entrance to the main theatre space of the building. Though the parkette is quite successful as a third space, it's connection to the building could be better defined. The south entrance contains the same signage as the north façade and its distinction from the other elements of the façade is negligible (Figure 5.7). The lack of hierarchy and repetition of facade elements puts up a barrier to the community, with no evidence of interior-exterior relationships. The direct adjacency to Grange Park is met with a expansive brick wall, with only a few small perforations for visual connection. The building cannot be accessed by this approach and there appears to be no architecturally defined relationships between this part of the site and the building (Figure 5.8).

This building's current architectural framework follows a very rigid, prescriptive, and uniform layout. The main building stands as a clear example of a place that acts as a container of behaviour, imposing strict order upon its occupants. As an institution that defines itself by its celebration of diverse perspectives, individual expression, and community awareness, it is surprising to experience an environment that seems to suppress these notions through its dated architecture, reminiscent of a more antiquated education system.

FIGURE 5.9 The main entrance facade renovation showcasing the aesthetic upgrade that hides the mundane interior.

5.3 THE SHARP CENTRE – PLACE AS IMAGE

In 2004, OCAD University underwent a 6,200 square metre addition that was conceptualized as a floating box on legs so as to not interfere with the adjacent residential views to Grange Park.[6] The concept of the building on stilts, or "tabletop", is a clear post-modern expression, directly contrasting the heavy and contextually grounded base building in exterior aesthetics. Though regarded as one of the more revolutionary buildings of its time in terms of structural design, it is a clear example of place as image, or more accurately, place as icon. The Sharp Centre focuses on an aesthetic reconceptualization of the university, with critics and civilians alike referring to the architecture as innovative and memorable, leaving a creative expression of the institution it represents. The building also won the RIBA Worldwide Award in 2004, with the jury describing it as "courageous, bold and just a little insane."[7] The project also involved the renovation of the entrance threshold, bringing colour and variation to the main facade at the ground plane (Figure 5.9)

While presenting as an creative symbol of the university from the exterior, the interior reflects quite an opposite expression. The Sharp Centre reflects the same interior configuration as the main building, with an economically conservative interior
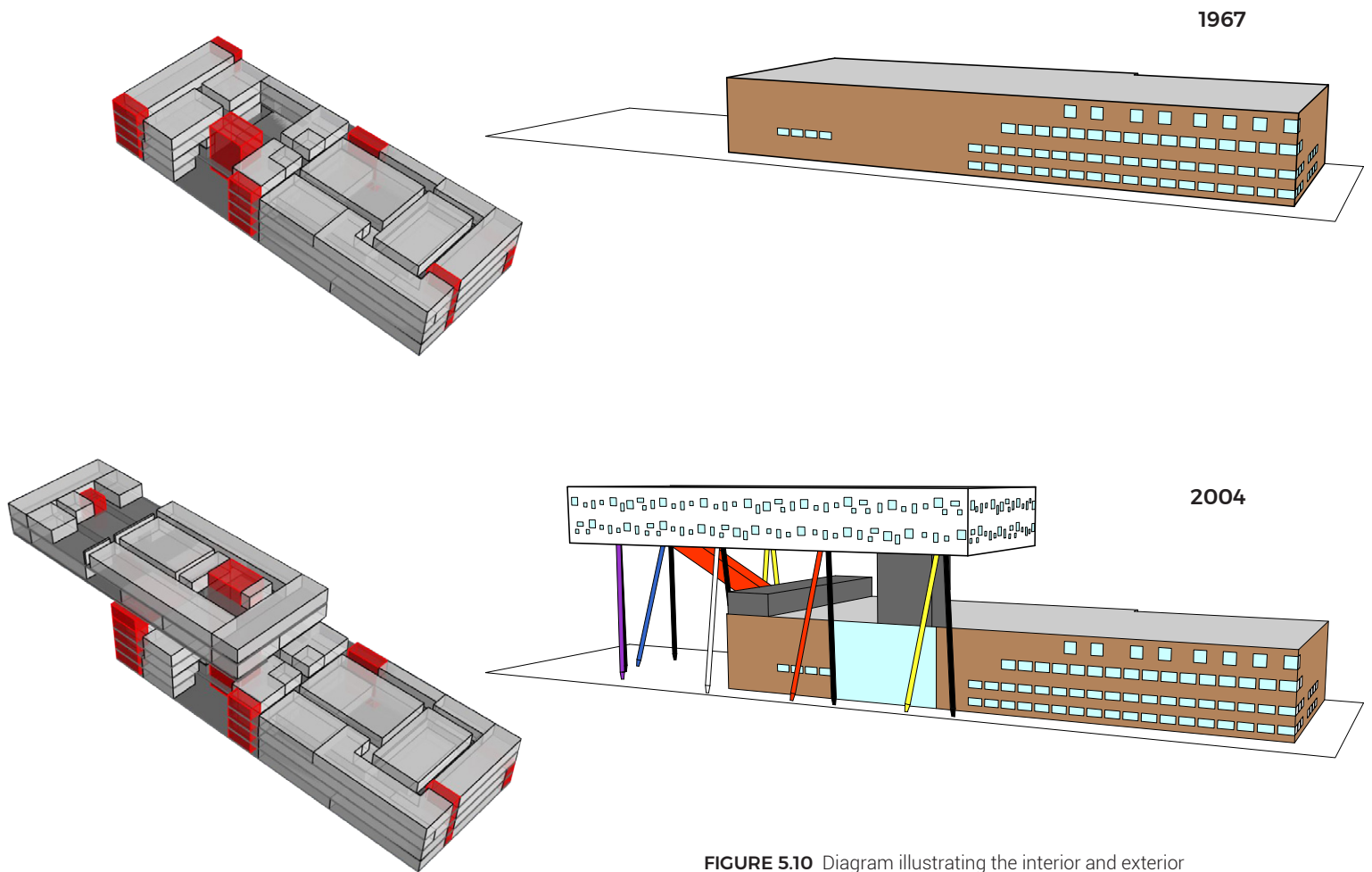
FIGURE 5.10 Diagram illustrating the interior and exterior relationships between the main building and the Sharp Centre.

and repetitive spatial compartmentalization (Figure 5.10). Though the staggered fenestration pattern did an excellent job of framing views to the city, they made no gestures to connect with the volume below. The exterior of the volume demonstrates the concept of place as an image, putting up a creative and unique exterior, while masking the homogeneity and prescriptive architectural experience within.

The efforts put towards this addition were focused on re-branding the institution and managing the dense spatial program that needed to be accommodated. As a result, the efforts to innovate the educational spatial experience were not a priority at this time. Henceforth, the interiors of both the original building and the Sharp Centre will be analyzed in conjunction as they present a consistent architectural configuration and expression.

5.4   INTERIOR HOMOGENEITY

The building makes use of a loose repetition of doors, solid walls, and the occasional glass reveal that present in a disorganized manner. This presents as confusing to the user from both navigational and functional aspects. The jagged grid of hallways maintains its width throughout, suggesting constant flow without spaces for idle. Though most halls are lined with lockers, there is no gesture that delineates the idle space by the lockers from the movement of traffic (Figure 5.11).

There is also little to no hierarchy of entrances from the hallways; the entrance to a storage closet presents the same way as the entrance to a more significant nodes such as a studio (Figure 5.12). The current cues involve signage on the doors and — in the more monumental cases — crafty signage overhead for décor (Figure 5.13). The walls remain almost entirely opaque and uniform: sterile white drywall and painted concrete block, except for small glazed windows in some doors. There is excessive access to countless storage and support spaces from the hallways, lining the hallways with even more indistinct doors.

While the building's programmatic layout consists of distinct zones for the various department programs, the architectural transition between these zones leaves is underdeveloped. There are no materiality changes, formal gestures, or any other ambient cues that would indicate to the user that they are about to enter or exit a particular zone. The programmatic use of the building must be interpreted from maps or door labels as there is no distinction between zones that has been articulated architecturally. In Figure 5.14, the door to the George Reid Wing and the door to the printmaking zone do not present as a shift in programmatic zones, nor do they serve these respective departments justice in their representation of what the user is about to visit.

Overall, the presentation of the interface is lacking ambient cues, resulting in a uniform appearance of the spaces beyond the hallways. This reduces the agency of the user, limiting them to strictly programmed space, scheduled interactions, and inconsequential signage.
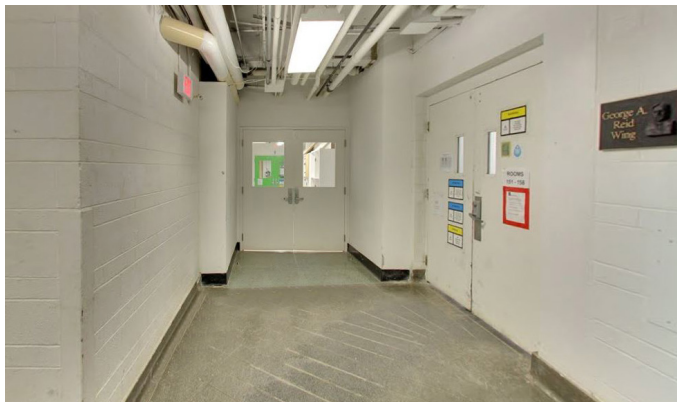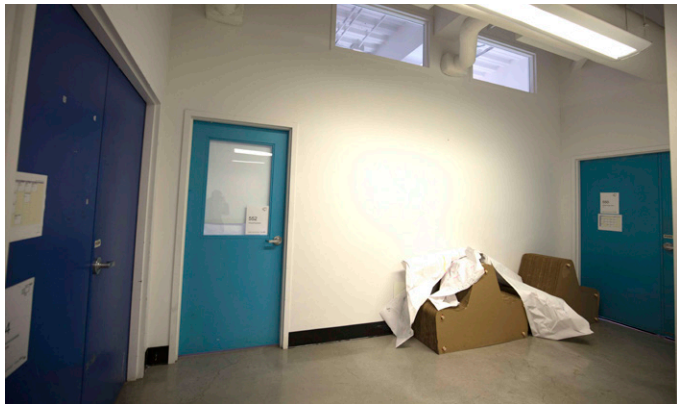
TOP TO BOTTOM

FIGURE 5.11   Interior photo of typical Sharp Centre hallway

FIGURE 5.12   Interior photo of a dead end corridor in the Sharp Centre

FIGURE 5.13   Photo of the entrance to the wood shop in the main building

FIGURE 5.14   Photo of the zone transition between two departments in the main building
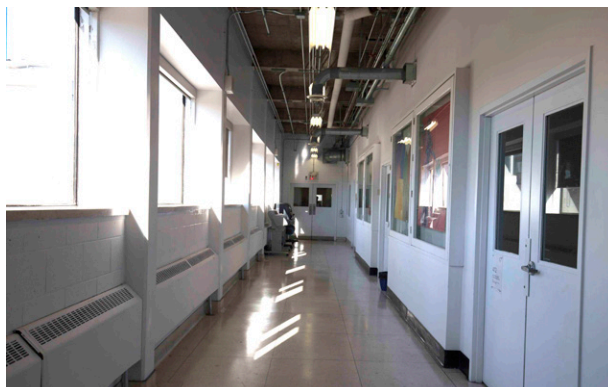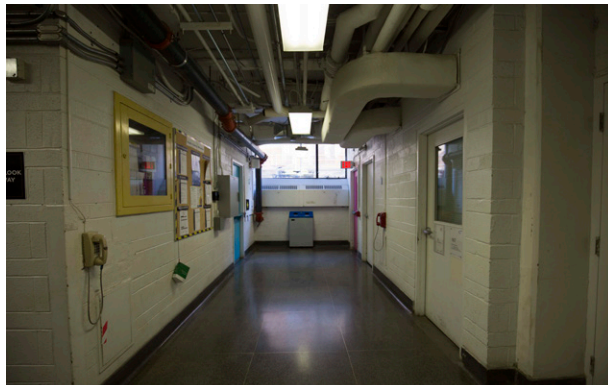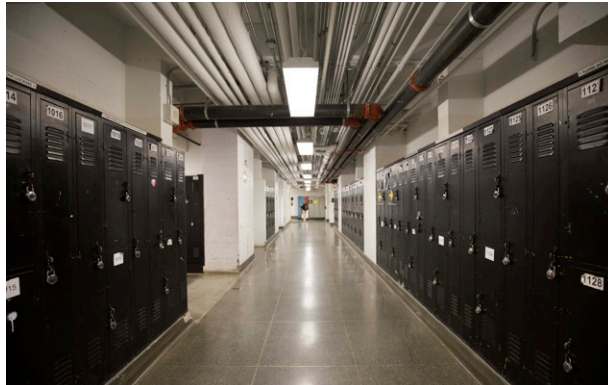
TOP TO BOTTOM

FIGURE 5.15 Photo of a typical hallway in the main building

FIGURE 5.16 Photo of the poor termination of a corridor.

FIGURE 5.17 Photo of a missed spatial opportunity to connect to the park views.

5. 5   SINGULAR NARRATIVE

The buildings present as a sea of interconnected corridors lined with lockers, cluttered info boards, and doors to rooms that can only be identified by number (Figure 5.15). They follow a utilitarian approach to circulation, with the aims of direct movement hindering the possibilities that lie in exploration and the flaneur.

As can be seen in the plans (Figure 5.18), the linear flow of the corridors is interrupted by jags serving no programmatic purpose ie. crush or breakout spaces. The perpendicular nature of the entrance ways in reference to the circulatory system is visually restricting to the user. The corridors are enclosed and promote a linear movement from A to B without any interstitial opportunities for spontaneous interactions. Some corridors terminate in either an enclosed fire stair or mechanical shaft, rather than a destination (Figure 5.16). While the majority of hallways exist towards the interior of the building, a hallway lines the perimeter of the west wall facing the park (Figure 5.17). As this is a less-travelled area, the views to the park could be reserved for a more celebrated space.

LEVEL 1

LEVEL 2

GREAT HALL

CENTRAL HALL
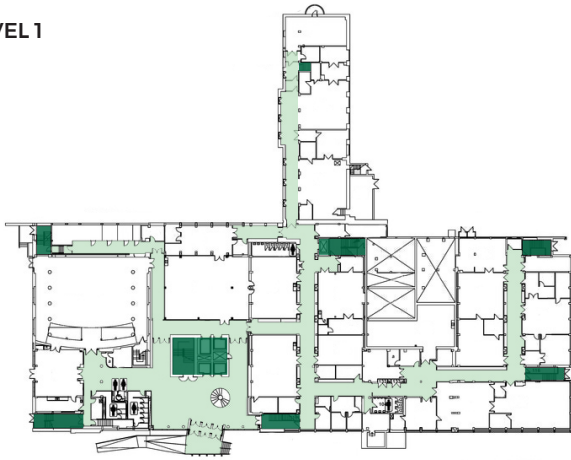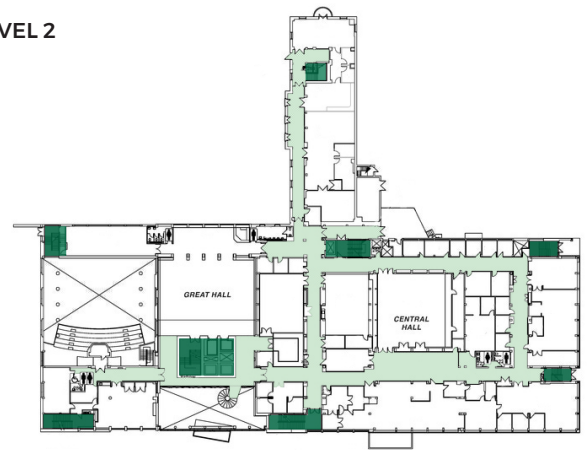
LEVEL 3

LEVEL 4
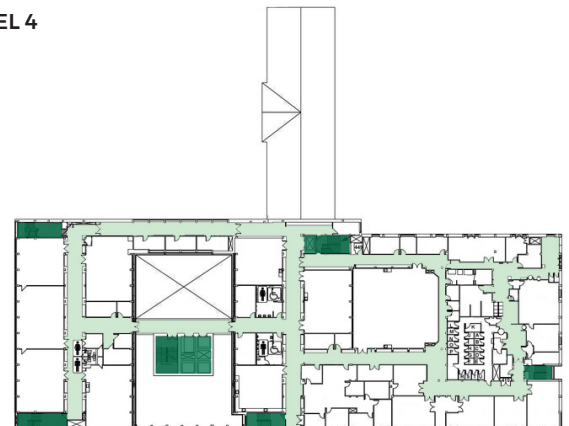
FIGURE 5.18 Diagram of vertical and horizontal circulation throughout the plans

Vertical Circulation

Horizontal Circulation

N>

85
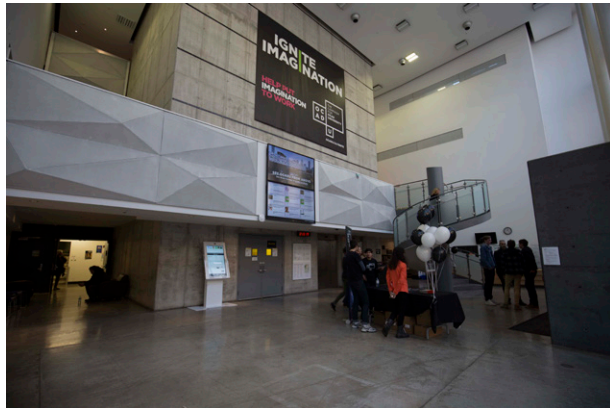
FIGURE 5.19 Photo of the entrance from main atrium

FIGURE 5.20 Photo of the central stair in the fire core connecting the two buildings

The lack of defined alternative entrances funnels people through the single front entrance off of McCaul street and into the main atrium (Figure 5.19). Except for the single spiral staircase connecting the first and second floors of the entrance atrium, there are no open vertical forms of circulation. All of the egress stairs are completely hidden from view, and the lack of useful communicative stairs forces the vertical circulation through these isolated shafts. The only spatial connection of the art and design volumes exists in the central enclosed shaft (Figure 5.20-5.21) extending through the atrium. The lack of open vertical connections segregates the users by floor plate, creating a lack of connection between zones of different floors.

The lack of vertical circulation options and mundane system of enclosed corridors makes for a narrative design that is singular and unimaginative. It encourages the users to enter and use the elevators the same way, diverging only to their respective floors. Under this architectural organization, it is understandable how the students could feel like numbers as part of a system rather than autonomous individuals. The activity that takes place in this building begs for a less prescriptive framework that encourages curiosity in individual to explore their school environment; one having an active network of third places to punctuate their narrative of place.
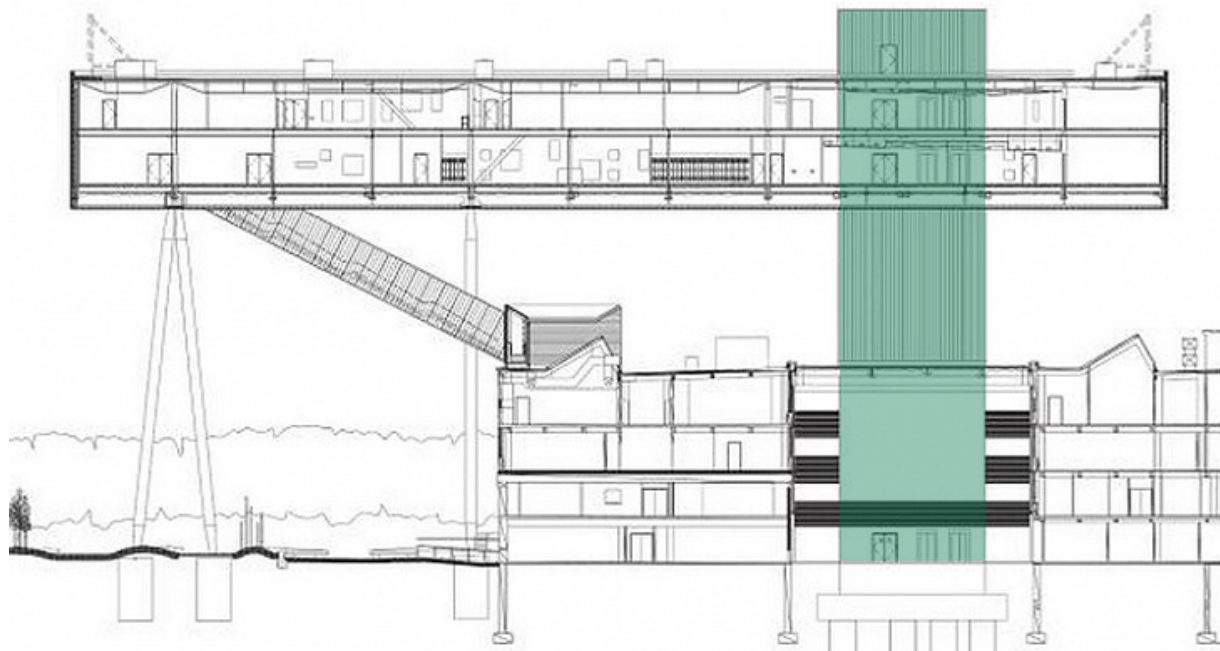
FIGURE 5.21 Sectional diagram outlining the connecting core between masses

FIGURE 5.22 Photo of the closed off, central atrium

FIGURE 5.23 Photo of the café space facing the park

5.6   HINDERING CONNECTIVITY

Because the bulk of design and production takes place outside of the classroom in individual settings, the importance of bringing students together in working environments has never been more important. With digital platforms enabling isolated learning experiences, the potential for idea sharing that OCAD University values is not being realized. The campus lacks successful places that are conducive to social interaction, collaborative learning, and idea sharing.

The building has one central third space, located in the main atrium (Figure 5.22). This space is expansive and serves as a presentation and event space effectively. Though it is very active on the base level, the surrounding solid walls and lack of sectional connection makes for a missed opportunity in network connectivity. Furthermore, though the atrium is located toward the western edge of the building, its only connection to Grange Park is through the fenestration of the adjoining student-run café. Expected to serve the entire arts building, this café space is spatially inadequate for a celebrated part of the building, tucked away under the large back wall of the atrium (Figure 5.23).
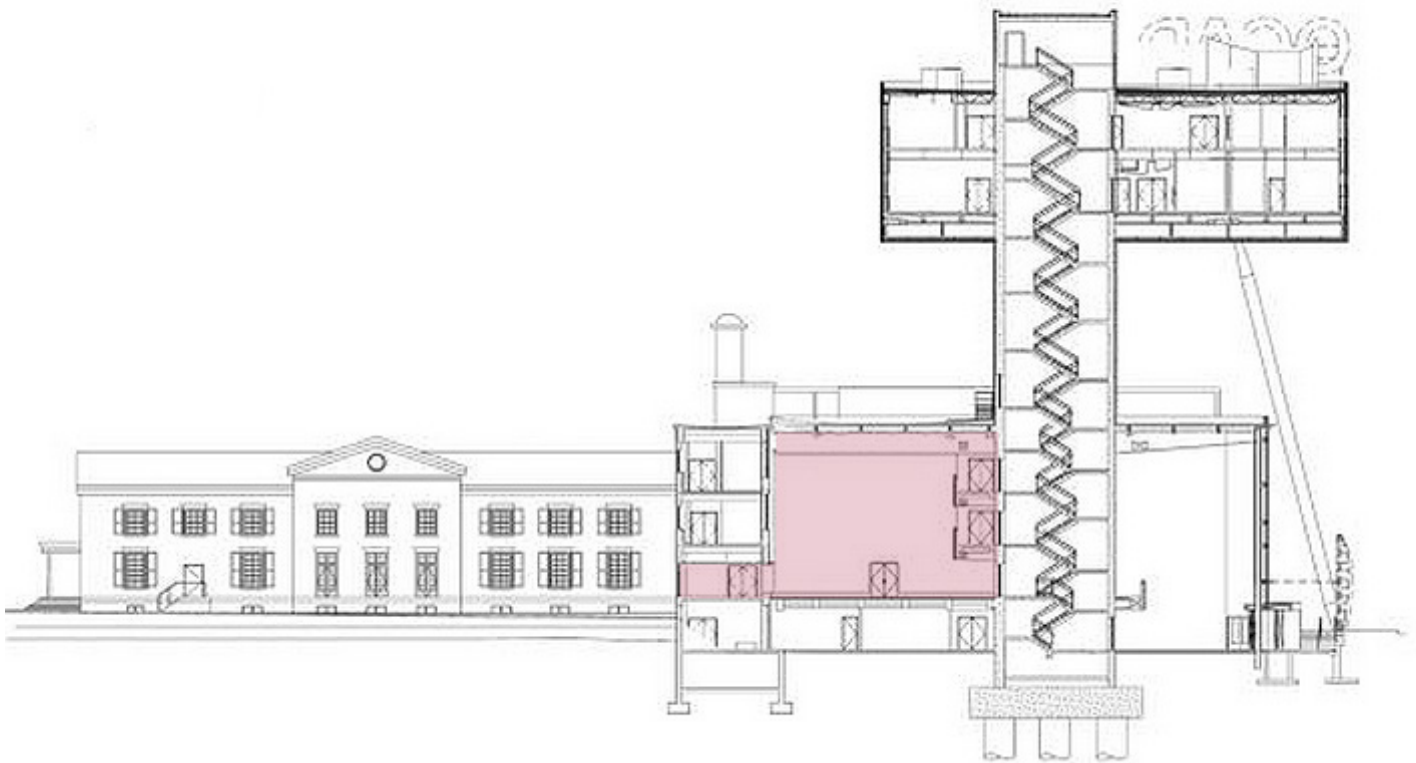
FIGURE 5.24 Sectional diagram outlining the existing main atrium

Moving into the corridors, the lack of appropriate breakout spaces in the building has led to ad-hoc interventions to serve this need (Figures 5.25-26). Though these seating spaces are located in less-travelled corridors, these interventions involve simple furniture placements without any architectural articulation that would suggest it is a place for meaningful interaction.

Though the building has been organized successfully in terms of the university department zones, the architecture does not promote interaction within each of their interest communities. The department zones are not founded on communal spaces, rather by the shops and studios located within the vicinity. Galleries showcasing work from these programs are located along the corridor walls in window boxes (Figure 5.27). Given that they are located in the flow of traffic without adequate idle space, these galleries are inadequate to foster interest community interactions. The critique and presentation rooms located on each floor are entirely closed off from the school community, further hindering the physical social network and real-place content sharing.

TOP TO BOTTOM >

FIGURE 5.25   Photo of breakout space in the George Reid Wing

FIGURE 5.26   Photo of breakout space in the north wing

FIGURE 5.27   Photo of the window box galleries lining the halls
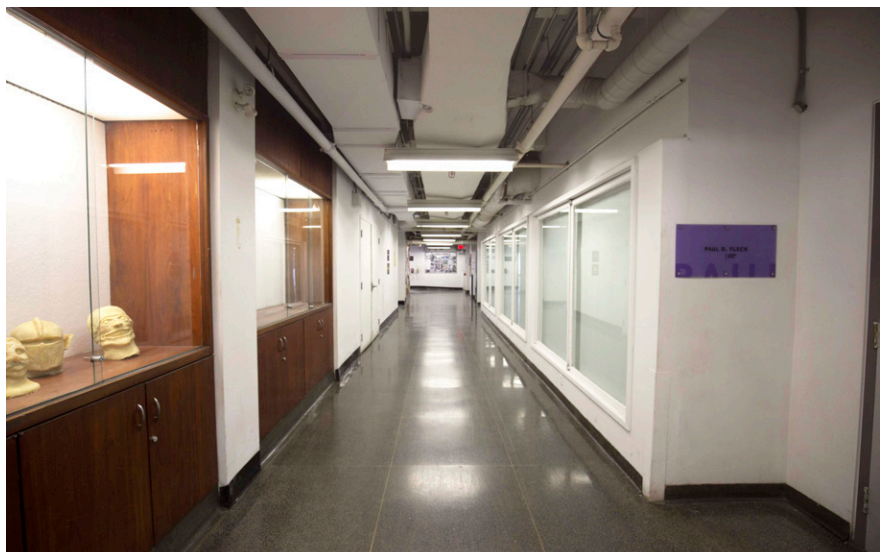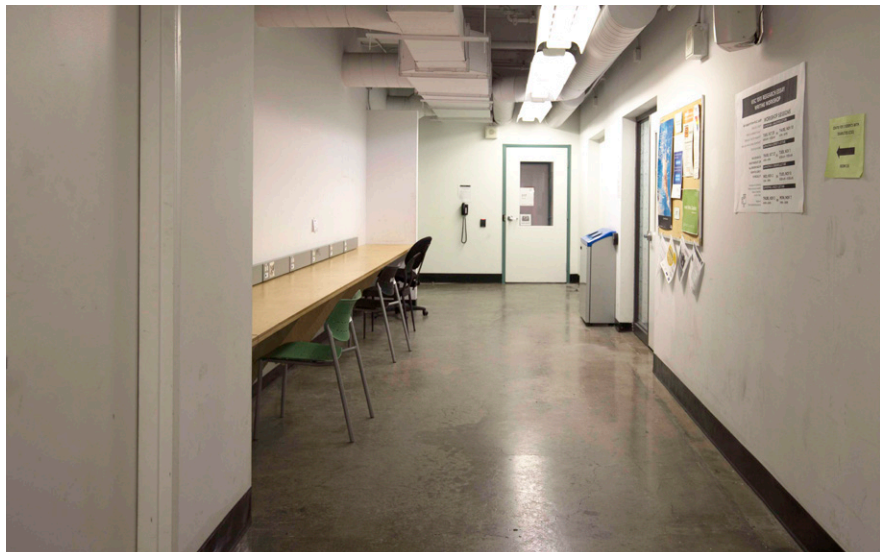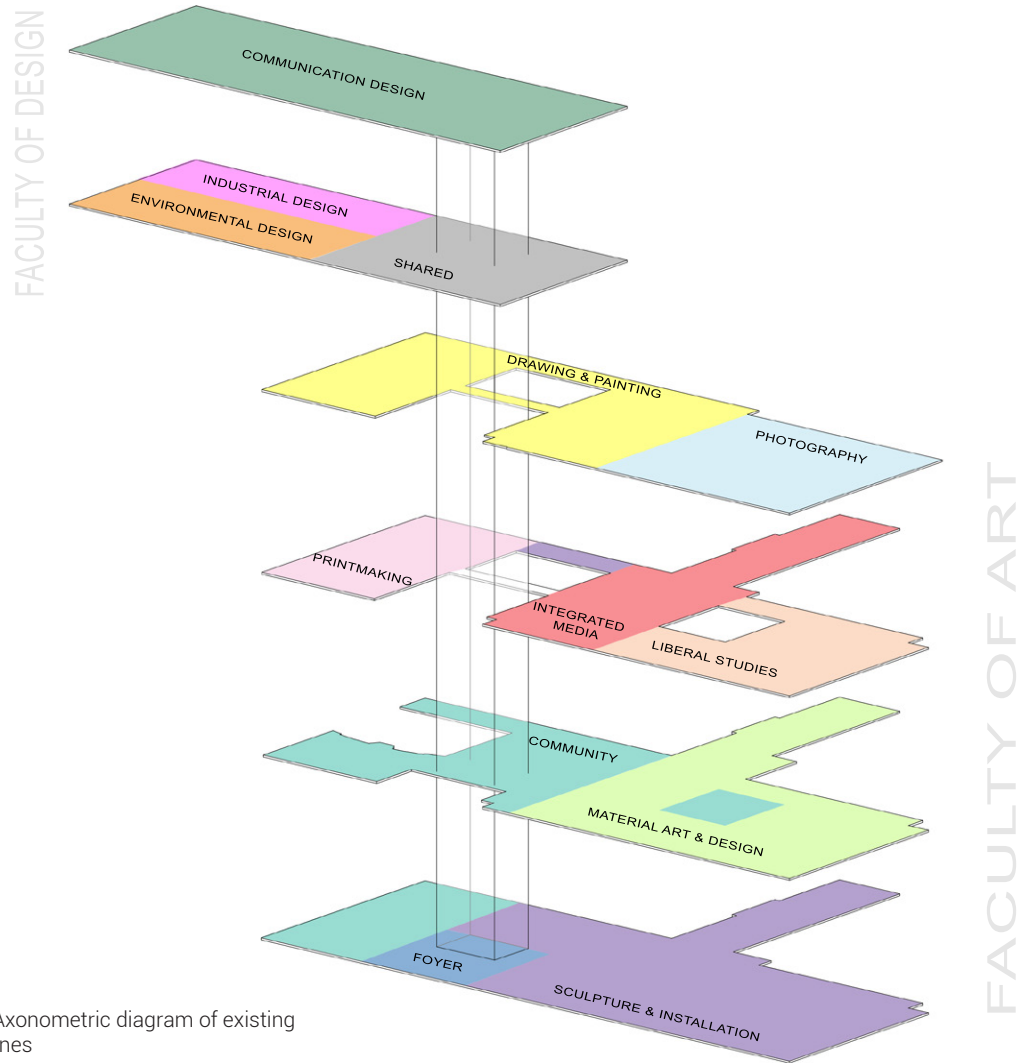
FIGURE 5.28   Axonometric diagram of existing departmental zones

5.7   UNIDENTIFIABLE SPACE

The building is divided up programmatically by the type of university programs the institution offers as can be seen in Figure 5.29. Though the departmental zones are distinct in terms of location and the types of workshops and facilities available, there is no distinction between their architectural language. The corresponding floor plans are indicative of this, with negligible interventions in zone transitions between one department zone to the next. In many cases, the organization results in the abrupt termination of one zone and onto the next within bordering rooms along a hallway for example the Liberal Arts and Integrated Media zones.

The zones are separated distinctly by floor plan with no sectional relationships between zones above and below. The dominant and sterile material palette and lack of threshold transitions results in a lack of zone identity, unlikely to resonate with the individual or linger in communal thought and memory.

LEVEL 1

LEVEL 2

GREAT HALL

CENTRAL HALL
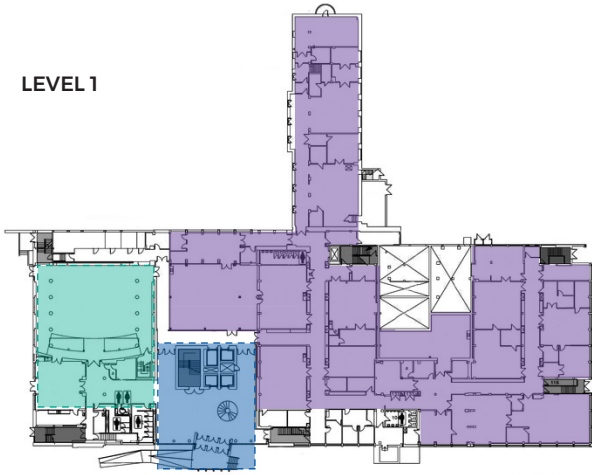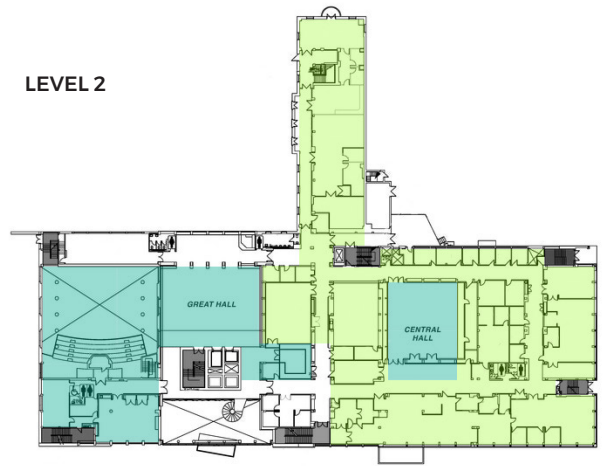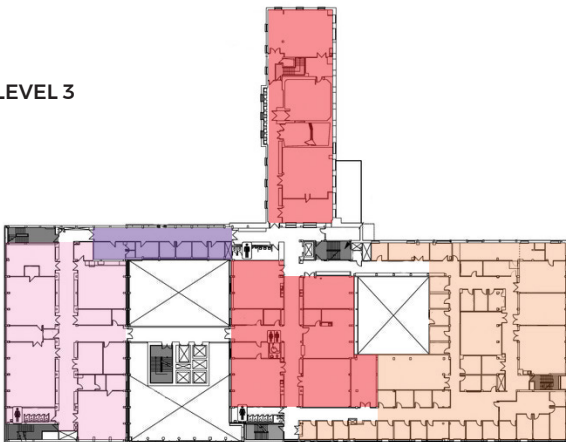
LEVEL 3

LEVEL 4
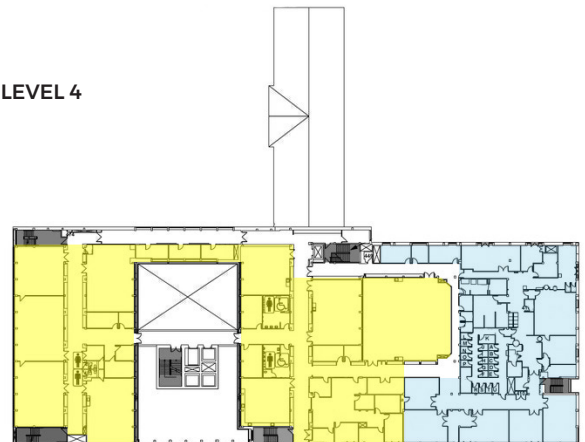
FIGURE 5.29 Corresponding plan diagrams to the axonometric of zones

N>

FIGURE 5.30 Photos of spaces with the same architectural design but furnished as different programming.

Within each department zone, there appear to be no organized patterns, rather each floor plate is a scattered mix of offices, shops, classrooms, and studios (Figure 5.31). Aside from the furniture within, there is little that distinguishes one space from the next. There are very few architectural gestures that separate studio from classroom, office, or even celebrated space. Even cross-studio relations remain homogeneous, with each studio appearing to be the same as the next, save for interior equipment (Figure 5.30).

This network of hallways lacks hierarchy, making the user unable to identify the celebrated spaces in the interior context. The confinement of the hallways to the interior disconnects them from the exterior contextual views, making it even more difficult for the user to orient themselves within the building.

The overall state of homogeneity within the building prevents the user from connecting with their surroundings or establishing a revered sense of place. The current configuration further makes it impossible for the individual to navigate the building with agency. The design intervention responds to this condition, re-mediating the user's experience through the layers of the interface. The next chapter outlines this design proposal achieved in light of this critique on the existing building.

LEVEL 1

LEVEL 2

LEVEL 3

GREAT HALL

CENTRAL HALL

LEVEL 4

N>
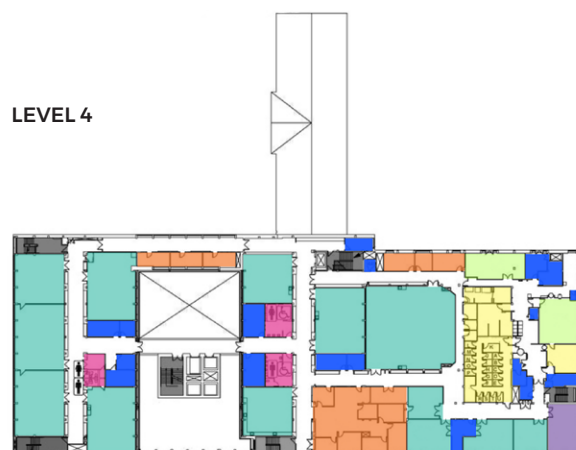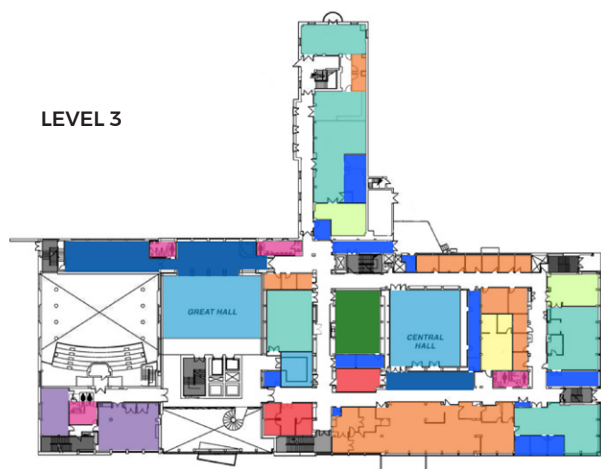
	Administration
	Offices
	Storage/Support
	Resources
	Workshop/Lab
	Classroom
	Studio
	Gallery
	Third Space
	Critique/Presentation
	Washrooms

FIGURE 5.31 Diagram of the programmatic layout of the building by use.

ENDNOTES

1. Dovey, Kim. *Becoming Places: urbanism, architecture, identity, power*, 22. London: Routledge, 2010.

2. "Sharp Centre for Design - Location and Maps - OCAD U." OCAD University. Accessed July 07, 2017. http://www.ocadu.ca/about/sharp-centre-for-design.htm.

3. Ibid.

4. Dovey, Kim. *Becoming Places: urbanism, architecture, identity, power*, 22. London: Routledge, 2010.

5. "Project Details and Objectives." Creative City Campus. Accessed July 07, 2017. http://www.ocadu.ca/creativecitycampus.

6. Carr, Richard. "Alsop's Tabletop." Studio International, March 23, 2009. Accessed July 7, 2017. http://www.studiointernational.com/index.php/will-alsop-sharp-center.

7. Ibid.

The project acts as a haven of individuality and free agency — a diverse institutional ecosystem mediated by the design interface.

FIGURE 6.1 Sectional model through the Ideas Incubator

6.0   PROPOSAL: DESIGNING THE INTERFACE OF PLACE

The activity that takes place at OCAD University begs for a less prescriptive architectural approach, promoting creativity, personality, and expression. A design project was undertaken that re-envisions the interface of place in the existing building at 100 McCaul Street. The project proposes the addition of a third volume that fills the massing void, connecting the main building with the Sharp Centre above. This intermediate centre, referred to henceforth as the *Ideas Incubator*, explores how spatial conditions influence the activity that takes place as a question of agency. The architecture created stands as a representation of the societal shift privileging the role of individual agency, presenting an architectural response to digital native culture.

Focusing on the lived experience, the Ideas Incubator privileges the journey and opportunistic settlement in real-time and real-place, responding to the culture of nomadic, flexible lifestyles that has surfaced in the digital age. It acts as a haven of individuality and free agency — a diverse ecosystem mediated by the design interface. Through the layering method of place re-construction, the design will showcase ambient cues, shifting narratives, network connectivity, and dispositional identity. These layered elements mediate the user's agency in idiosyncratic ways, influencing the heuristic formation of individual landscapes of place.
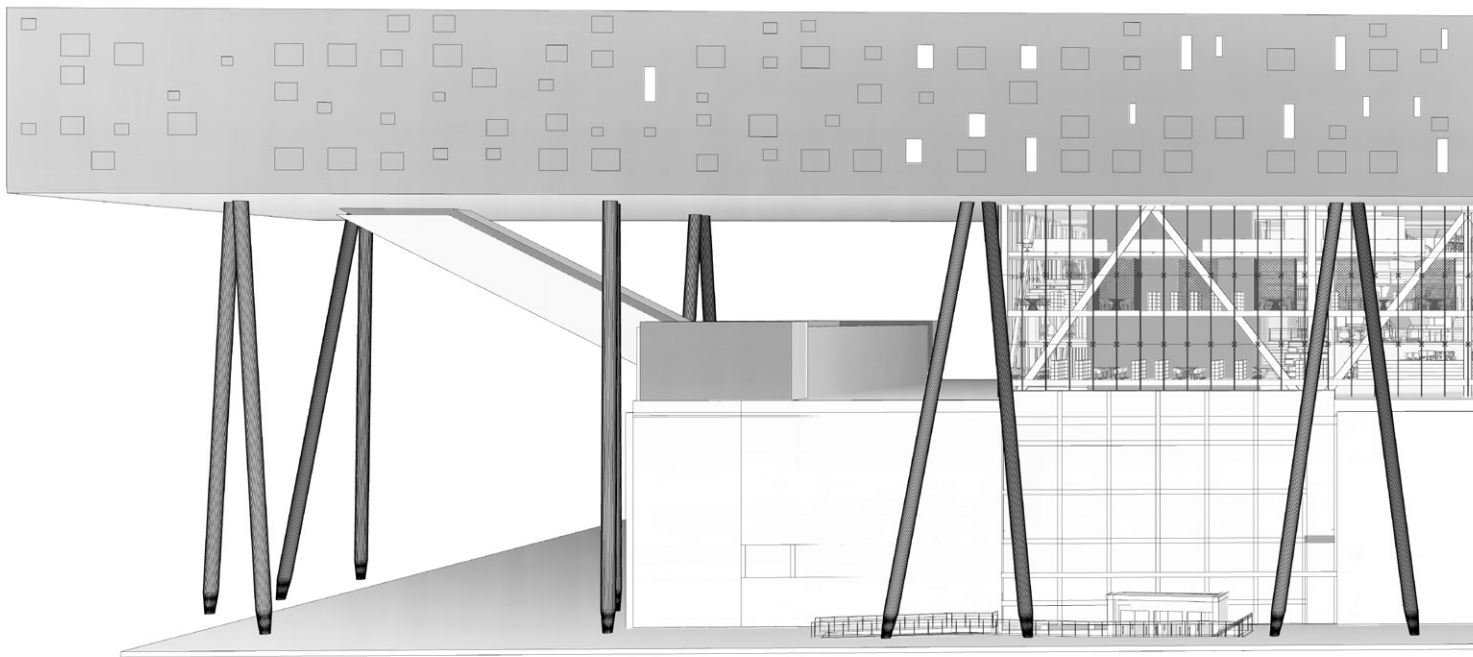
FIGURE 6.2   Perspective elevation of the design proposal from McCaul Street.

6.1   MASSING APPROACH

The addition of a central volume acts to both extend the scale and scope of the programming of the university in a more free-form and collaborative workspace. This volume takes the form of a transparent glass box, occupying the space between the main building and the Sharp Centre. The form of the addition was conceptualized as a void between two solids, with the façade bringing the inside activity out onto the streetscape (Figure 6.2)

Various massing studies were conducted to determine the appropriate scale and positioning of this central addition, with the chosen massing scheme seen in Figure 6.3. The massing's primary driver was to establish a sectional connection between the main building below and the Sharp Centre above while maintaining the autonomous formal distinction between the masses. The resulting approach introduces a fully glazed, rectilinear volume that is offset in the same sectional proportions as the existing volumes. By locating the addition towards northwest corner of the Sharp Centre, the integrity of the existing cantilevered tabletop remains intact. This positioning also cantilevers the Ideas Incubator towards to park, creating a strong visual connection.
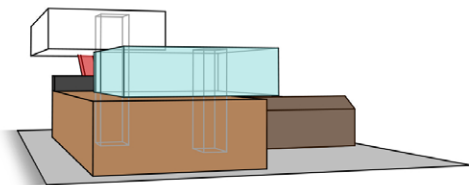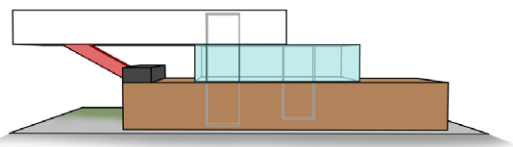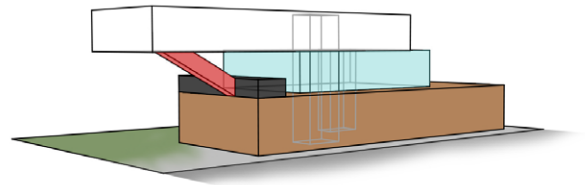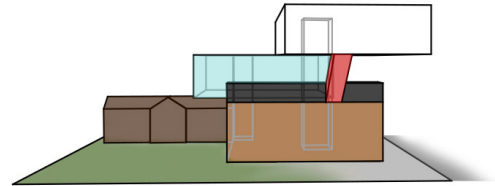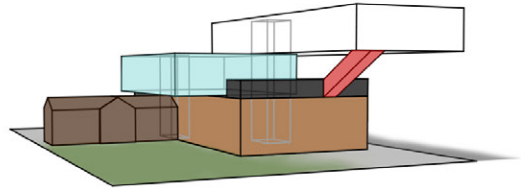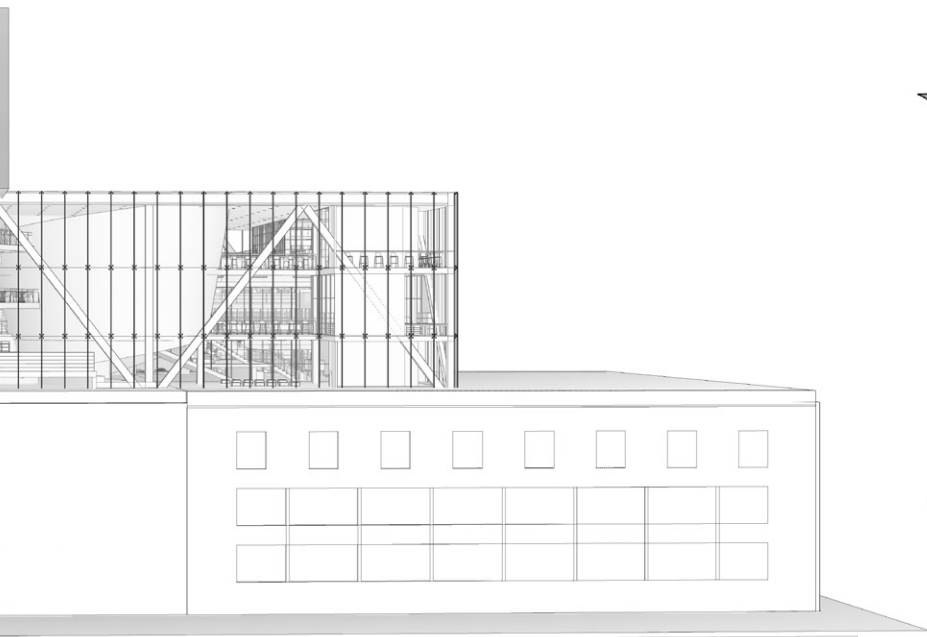
FIGURE 6.3 Massing diagrams of the addition (blue) from multiple angles.
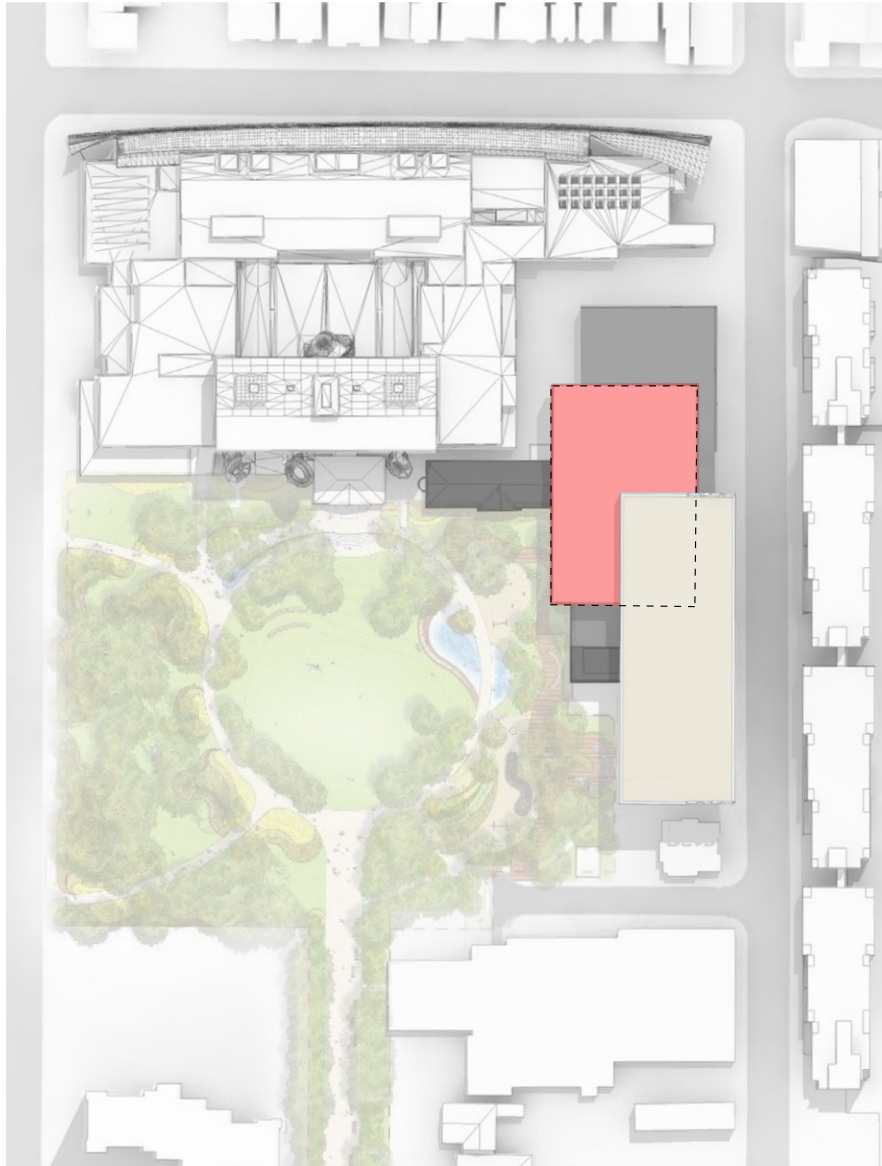
FIGURE 6.4 Site plan with proposed addition   ▬▬ Addition - The Ideas Incubator
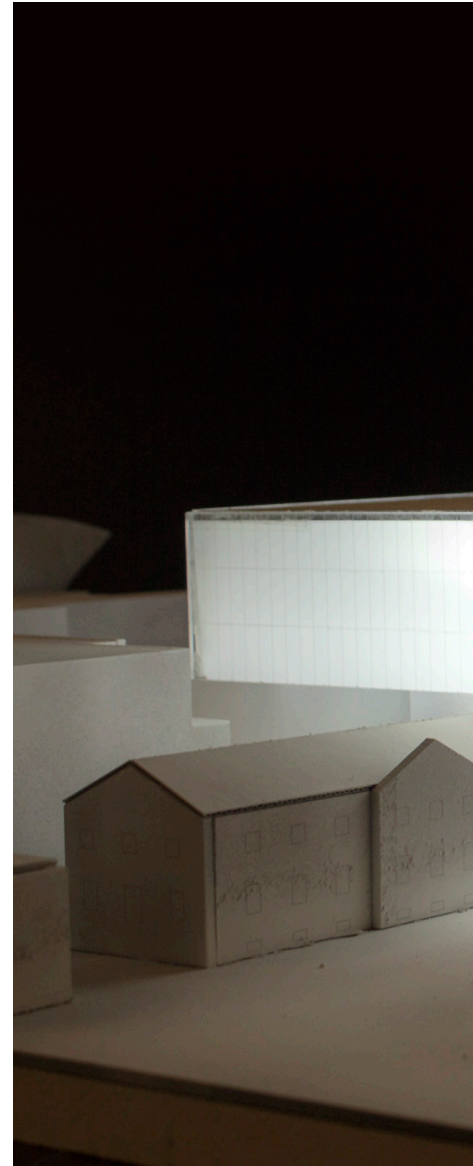
Though the mass is vertically removed from the ground plane, a visual relationship is forged between the park space and the Ideas Incubator (Figure 6.5). By showcasing the interior spaces of the volume in this suspended manner, the activity of the building is exposed while maintaining a sense of anonymity for the users due to the scale of the view inside. By projecting the authentic production in this volume, the architectural interface incites curiosity in the local community from the exterior, enticing them to visit the exhibitions inside.
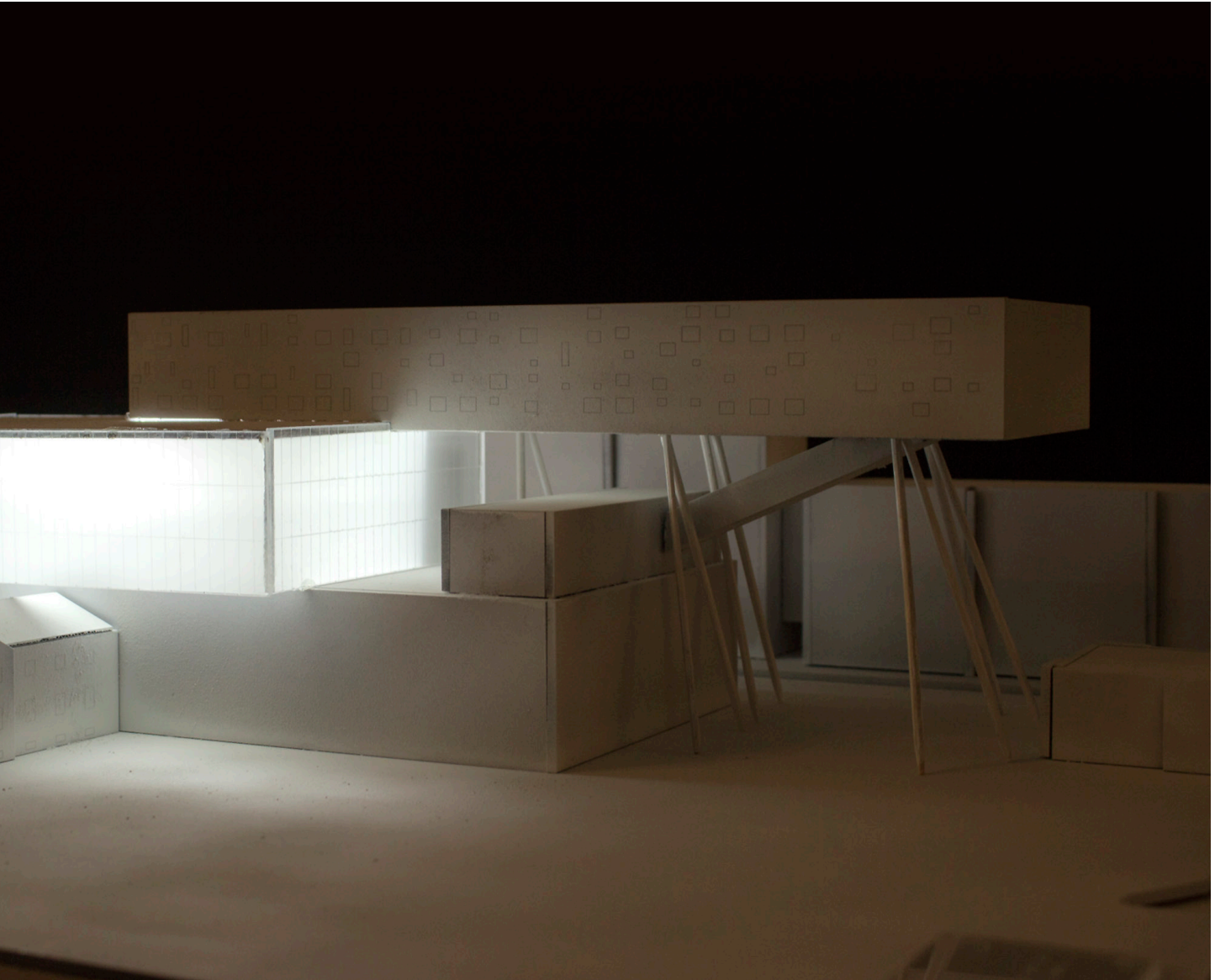
FIGURE 6.5 Site model photo featuring the view of the addition from Grange Park.

FIGURE 6.6 Render of the first level of the Ideas Incubator, showcasing the free perimeter achieved by the perimeter tubed truss system.

The transparency of this rectilinear volume is an intentional move in establishing the design interface from within. This transparency is not intended to present as an exterior iconographic expression, but rather focusses on the interior spatial experience and its affect on the agency of the user. It presents the perimeter as an expansive spatial field, extending the user's vision and sensory qualities beyond the confines of the built volume. Glass fins support the transparent perimeter walls, created to reinforce the idea of a transparent spatial field, preventing the segmentation and additional view obstructions of traditional mullion systems. Views from the node to the exterior context help to ground the user with persistent, location based stimuli that contribute to their understanding of their surroundings. By dissolving the visual barrier between interior and exterior, it engages with the user's sense of freedom, imprinting more substantially on their memory of place.

The perimeter structure of the addition features a steel tubed-truss system of diagonal supports, freeing the façade from the typical vertical grid that dominates most rectilinear construction.

FIGURE 6.7 Concept model depicting the Sharp Centre as an image, the main building as a container, and the Ideas Incubator as a producer of agency

The rationale for implementing this structural system is twofold. First, these larger trussed members create large spans that extend the spatial field and feelings of free agency on the floor plate. The large expanses of glass produce a spatial fluidity that extends beyond the perimeter of the volume, expanding the user's possibility space as an uninterrupted plane in the sky (Figure 6.6). Second, the use of the diagonal has symbolic architectural connotations: while strong vertical members are frequently used to express power or domination, "diagonal forms play upon this tension between vertical and horizontal, embodying a certain perceptual dynamism. A predominance of diagonal forms is characteristic of the dynamic architecture of revolution"[1]. In this sense, the addition does not project as an image, nor does it prescribe predictable patterns of behaviour through the typical segmentation of fenestration (Figure 6.7). Rather, the architecture produces agency through the liberation of the spatial field made possible by its facade.
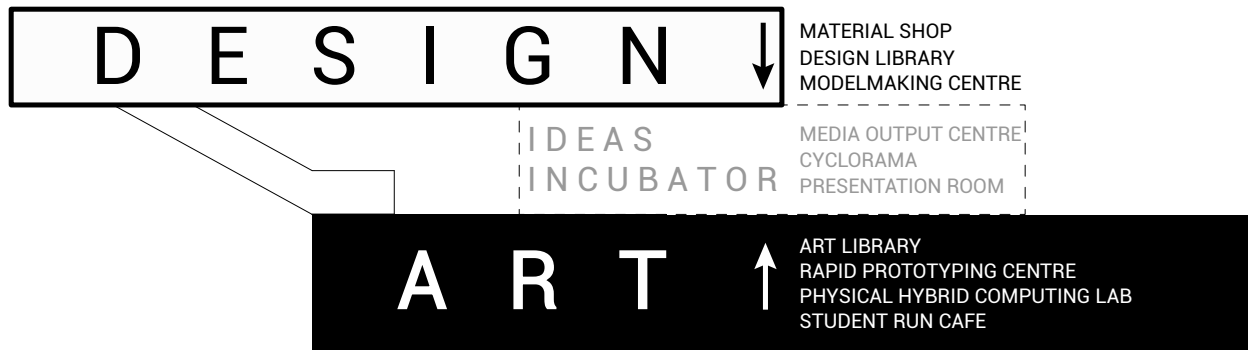
FIGURE 6.8 Programming diagram indicating the reallocations of space from the above and below volumes, as well as the new programming introduced by the addition.

6.2 DECONSTRUCTING INSTITUTIONAL SPACE THROUGH NODAL DESIGN

This addition filters various standalone workshops and resource centres from both existing volumes to encourage collaboration between the Art and Design faculties (Figure 6.8). It contains various resources and innovation centres to be used by both faculties simultaneously for inspiration, iteration, and production. This centre houses selected resource and study areas displaced by the top and bottom volumes, consisting of a series of mezzanine levels with a more fluid configuration than the existing buildings (Figure 6.10). The design presented operates under a more flexible spatial configuration, with a less controlled environment from an operations standpoint. This added volume consists of less densely programmed institutional space with more breakout space for flexible research, study, and production.

On the interior of the addition, the design began using an additive formal approach rather than divisional. The division method, used by the existing volumes, consists of segmenting the building massing into a cellular spatial genotype consisting of indistinguishable rooms branching off a basic circuit of hallways (Figure 6.9). The additive design applies the interface layering method, particularly with regards to dispositional identity. It began with the conception of the primary programmatic nodes, configured into a dynamic network amidst adjoining third places within the massed volume. In the circulation system of the existing volumes, only the void is noticeable because the solid blends together. Meanwhile, the addition expresses an open floor plan with forms acting as distinctive solids in the predominantly open visual field. Through their punctuation in formal, material, and sectional design, the nodes assert their presence to the user, offering themselves for exploration within the opportunistic journey this network presents to them.
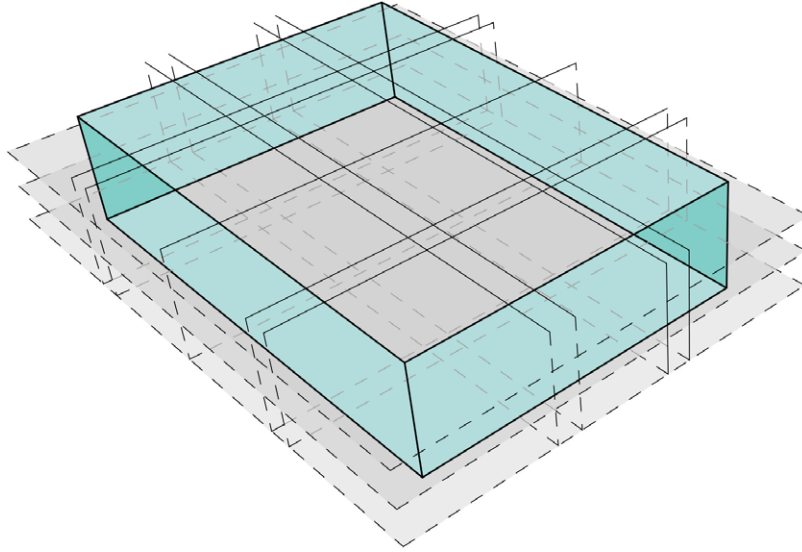
FIGURE 6.9 Divisional design approach, typical of traditional educational typologies
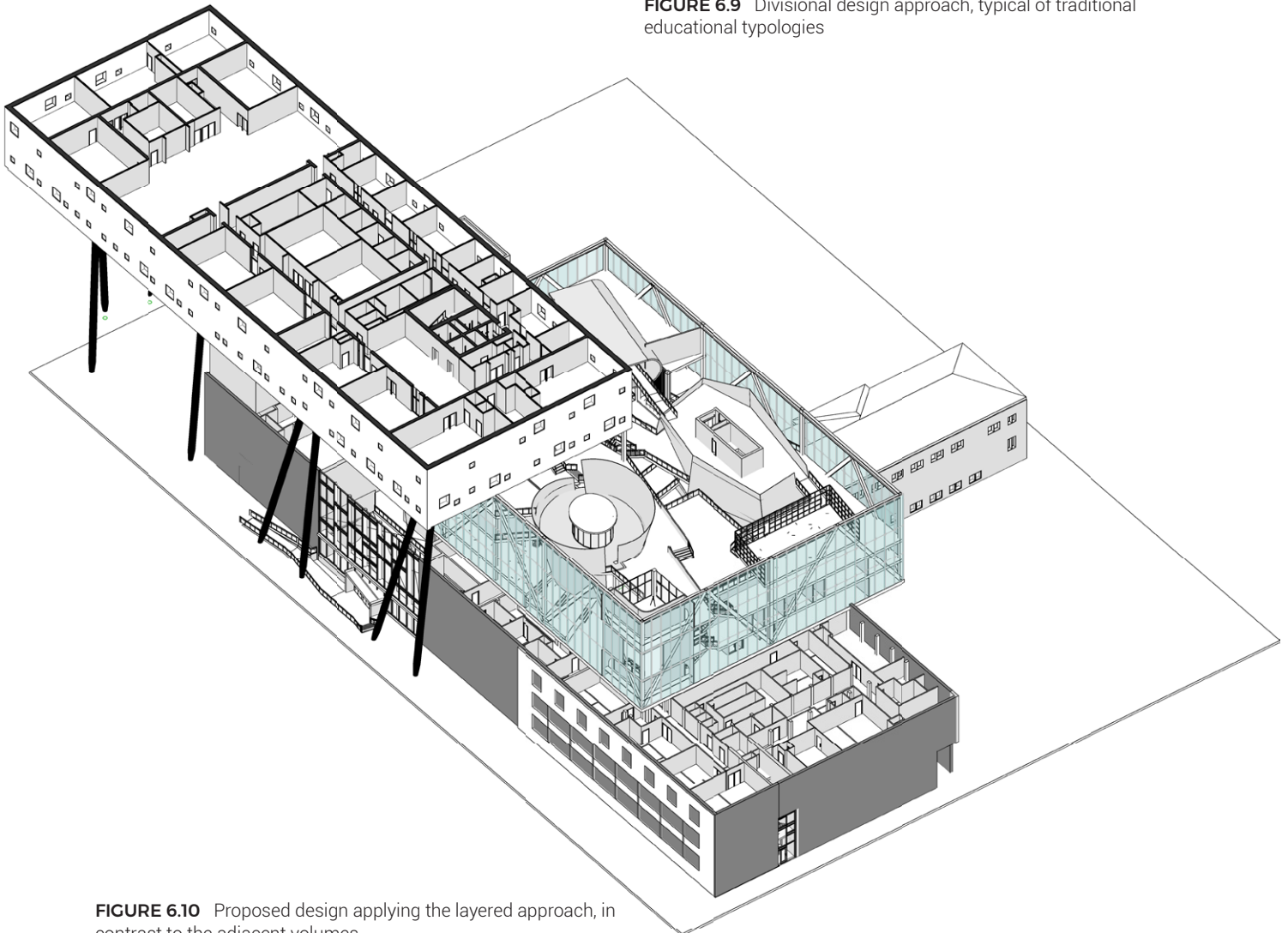
FIGURE 6.10 Proposed design applying the layered approach, in contrast to the adjacent volumes.

LEARNING
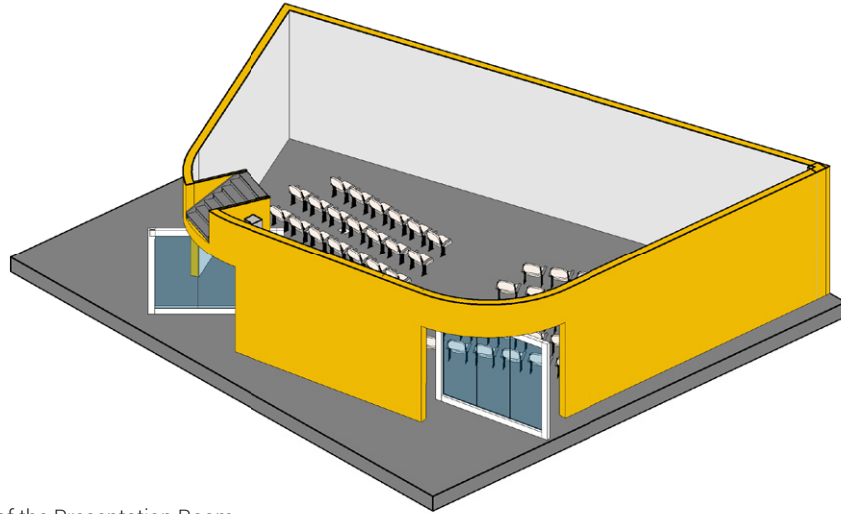
FIGURE 6.11 Axonometric drawing of the Presentation Room.

The primary nodes housed in the Ideas Incubator can be categorized by the forms of agency they enable: learning, experimenting, creating, and facilitating. The following axonometric drawings explore the dispositional identities of the nodes in terms of interior configuration, exterior presence, social scale, atmosphere, and materiality.

The nodes that mediate learning experiences were designed at three distinct social scales for different learning environments. The Presentation Room is a large central node that is internally focussed while presenting as a bright curved form to the rest of the ecosystem (Figure 6.11). Aside from exterior circulation cues, the form of the Presentation Room offers flexibility for different types of pin-ups,

both formal gallery style or informal presentations.

The library sections have been divided based on the art and design faculties and their overarching spatial proclivities (Figures 6.12-6.13). The interface of the Design Library was created to mediate collaborative learning, with low stacks for visual connection and integrated group work stations amidst the stacks. The integrated stack seating provides an informal study environment, fostering intermittent social encounters. The Art Library consists of a meandering system of high stack walls with interspersed private study rooms and perimeter alcoves. This offers a more intimate social scale, acting as a more contemplative space for individual study.

DESIGN LIBRARY
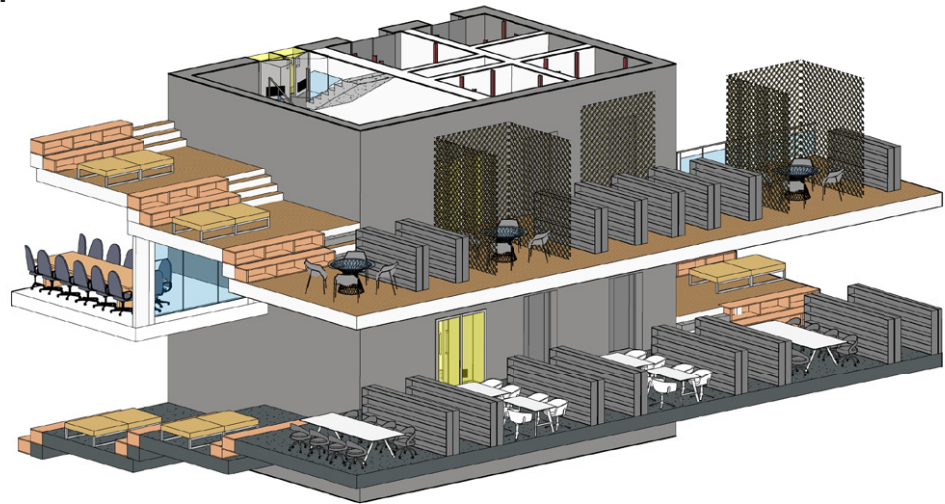
FIGURE 6.12 Axonometric drawing of the Design Library.

ART LIBRARY
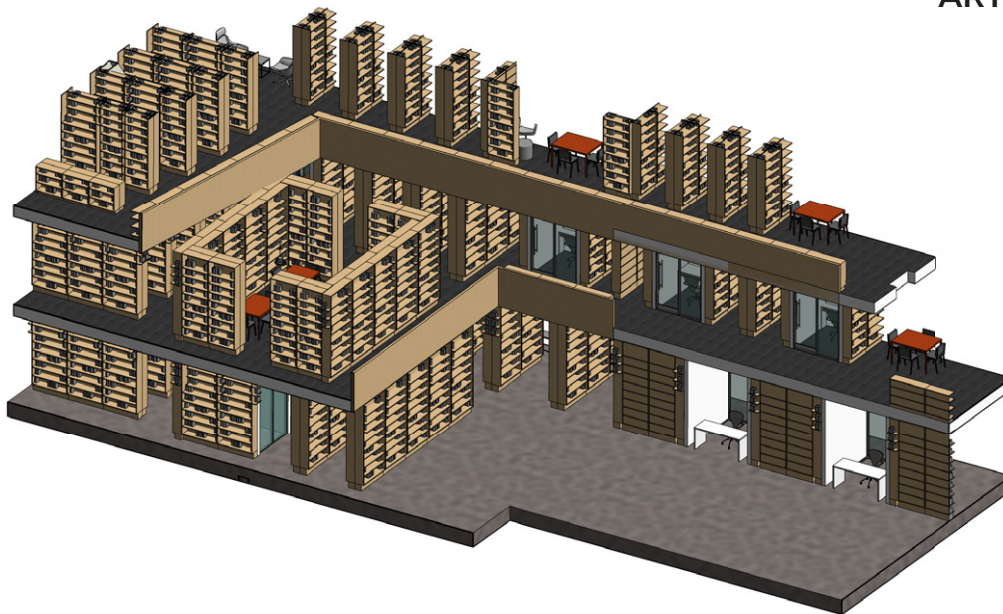
FIGURE 6.13 Axonometric drawing of the Art Library.

EXPERIMENTING & EXHIBITING

RAPID PROTOTYPING CENTRE
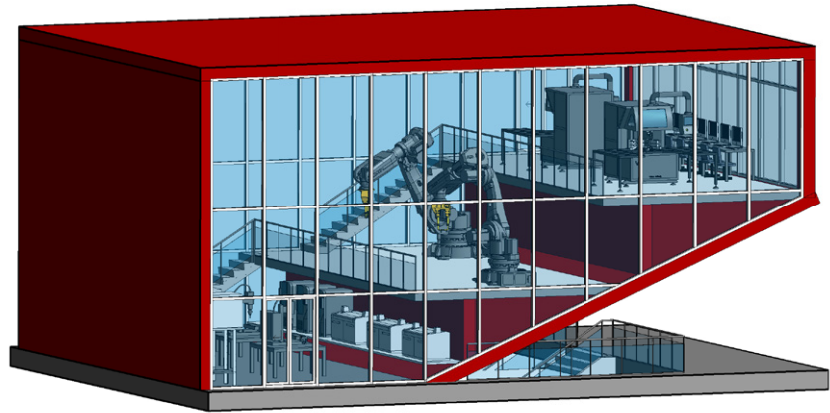
FIGURE 6.14 Axonometric drawing of the Rapid Prototyping Centre.

MODEL MAKING CENTRE
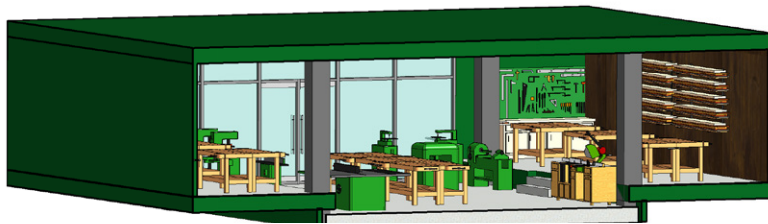
FIGURE 6.15 Axonometric drawing of the Model Making Centre.

The nodes designed for experimenting and exhibiting reflect a medium internal social scale. However, framed transparent reveals that allow a visual connection into the nodes for the passerby. These nodes create connections to the interior activity and displays from surrounding programming and circulation, while maintaining auditory and security barriers. Their forms were conceived to mediate the activity within and to delineate areas of use.

The Rapid Prototyping Centre features the largest exhibition window in the Ideas Incubator,

showcasing innovative work in form-making. As such, its design is composed of a tiered stage configuration for maximum visibility of the activity within (Figure 6.14). The Model Making Center also employs interior visibility, however it employs a slight level offset to delineate machine space from hand building space (Figure 6.15). The bold colours and appeared suspension of these nodes within the network make them recognizable from many junctures.
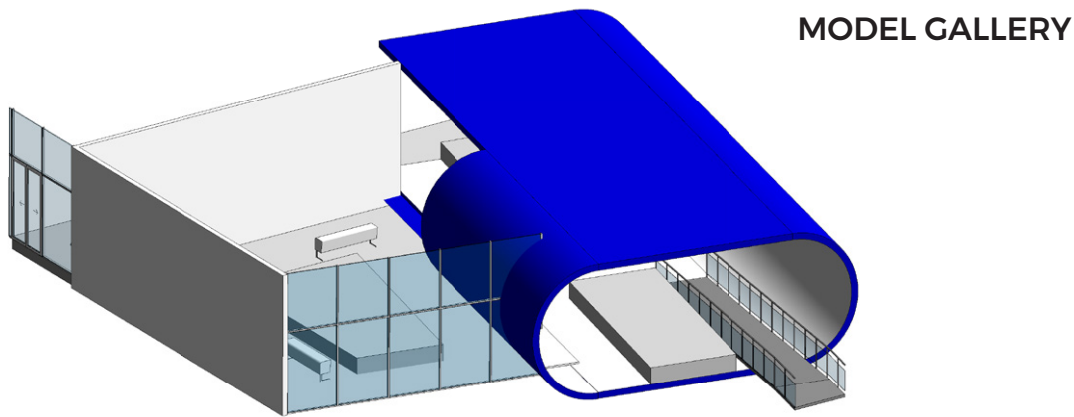
MODEL GALLERY

FIGURE 6.16 Axonometric drawing of the Model Gallery.

PHYSICAL-HYBRID COMPUTING LAB

PHYSICAL-HYBRID GALLERY
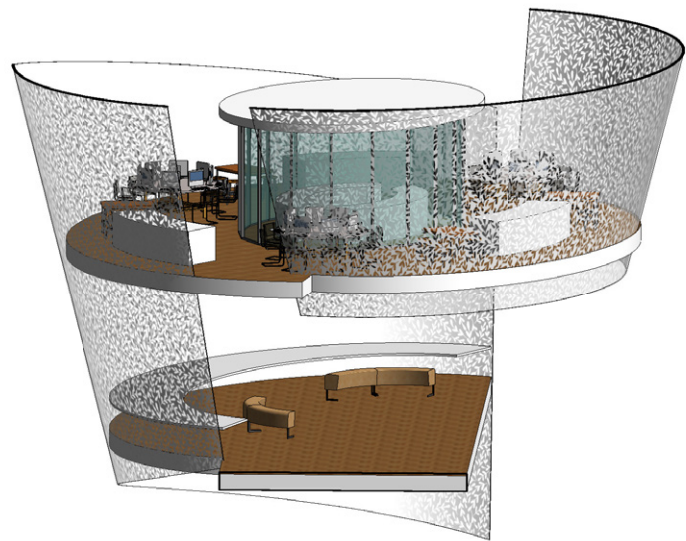
FIGURE 6.17 Axonometric drawing of the Physical-Hybrid Computing Lab with its gallery below.

The Model Gallery makes use of both form and colour in the distinction of space. The blue, extruded oblong form contrasts typical gallery spaces with perpendicular white walls. This asserts its presence as a model gallery, with the displays located on horizontal surfaces. The contrast is seen in Figure 6.16, in the node's adjacent relationship to a gallery hosting two-dimensional work.

The Physical-Hybrid Computing Lab distinguishes gallery space from work space through a full change in level. The upper level features concentric computer stations surrounding the equipment zone. The lower level presents the completed work of the lab for examination by the study body. Though visually separated from one another, the node is unified by the patterned metal wall that wraps around them (Figure 6.17).

From the exterior, the individual is presented with the distinct identities of these nodes through the uniqueness of their form and materiality. This reinforces the concept of symbolic nodality, in which the individual associates these distinctive nodes with different forms of intent.

FACILITATING

PRODUCTION TOWER

L3: CLOSED PHOTO CYCLORAMA

L2: MATERIALS SHOP

L1: OPEN PHOTO CYCLORAMA
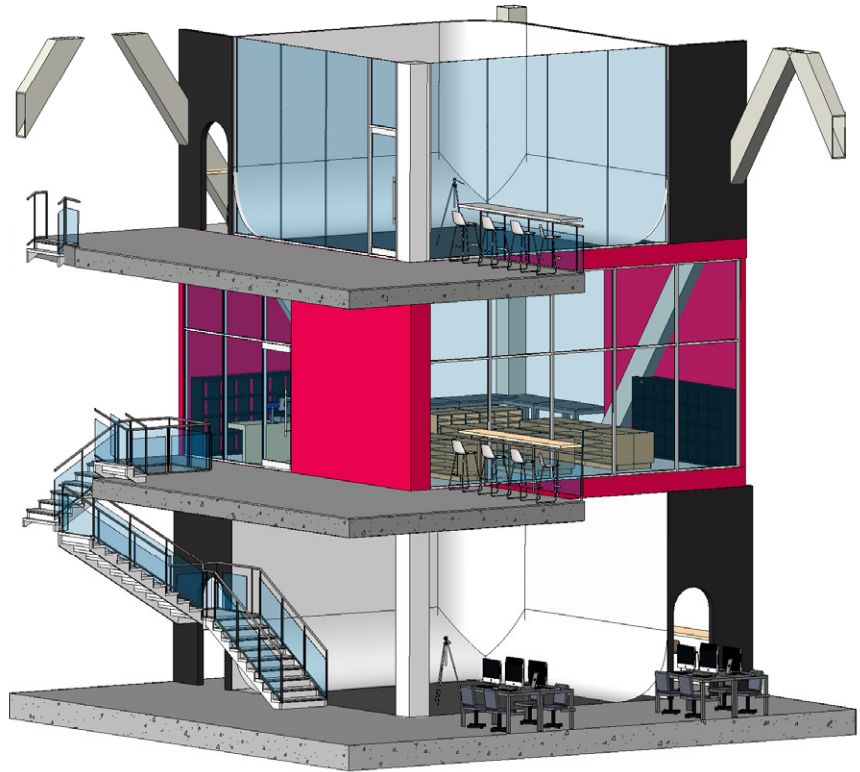
FIGURE 6.18 Axonometric drawing of the Production Tower.

To facilitate the production of student work, two main resource nodes have been designed that revolve around the easy access of materials and services: the *Production Tower* and the *Access Centre*. The Production Tower features stacked photo cycloramas and the materials shop (Figure 6.18). It expresses a kiosk-like disposition with an intimate social scale. The focus is to project the inner functions outward that can be seen across the network from various junctures.

The Access Centre operates at a larger social scale with greater means of circulatory access from the rest of the Ideas Incubator (Figure 6.19). It consists of an angular perforated metal skin that provides a moderate level of privacy for the resource operations, including library circulation, media output, resource sign-out, and research assistance. The skin opens up in areas to allow for circulation platforms to extend into the node, with selective views in along the circulation junctures. This node also houses one of the egress cores running through its centre. The vertical prominence of these two nodes render them constantly visible in the field.
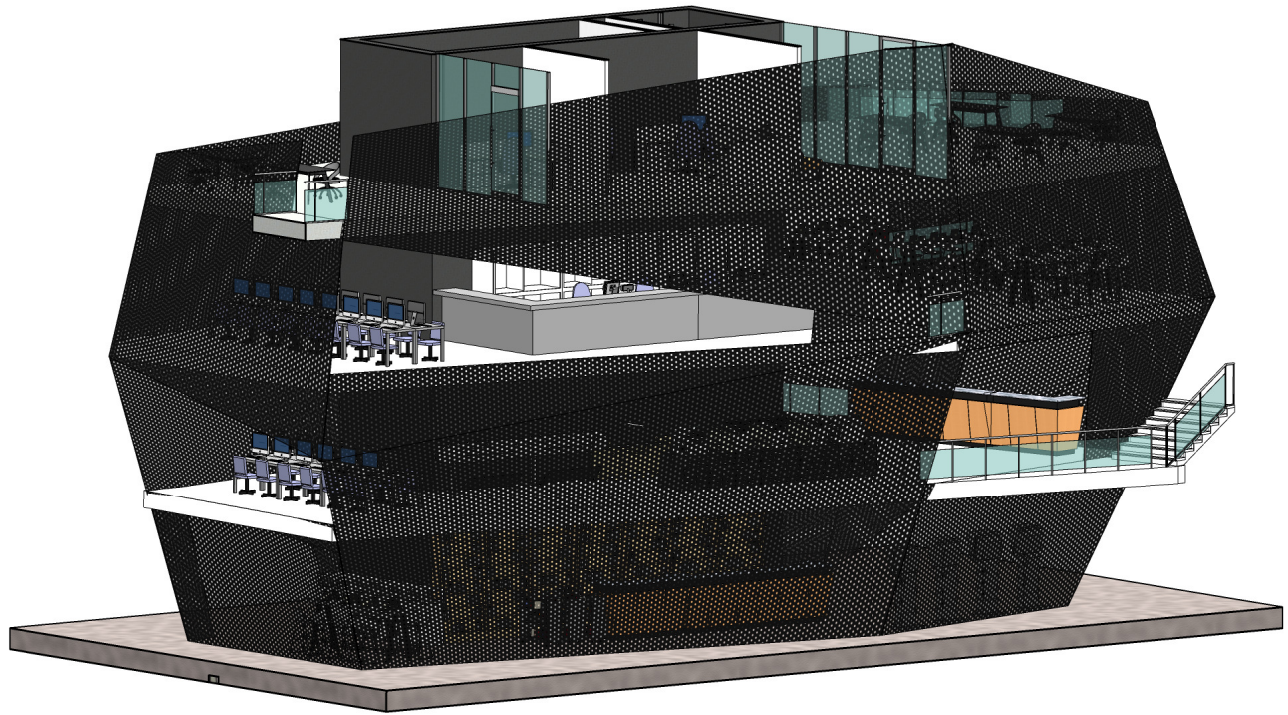
FIGURE 6.19 Axonometric drawing of the Access Centre.

ACCESS CENTRE

L4: RESEARCH ASSISTANCE

L3: RESOURCE SIGN-OUT

L2: MEDIA OUTPUT CENTRE

L1: LIBRARY CIRCULATION CENTRE

CREATING

OPEN STUDIOS
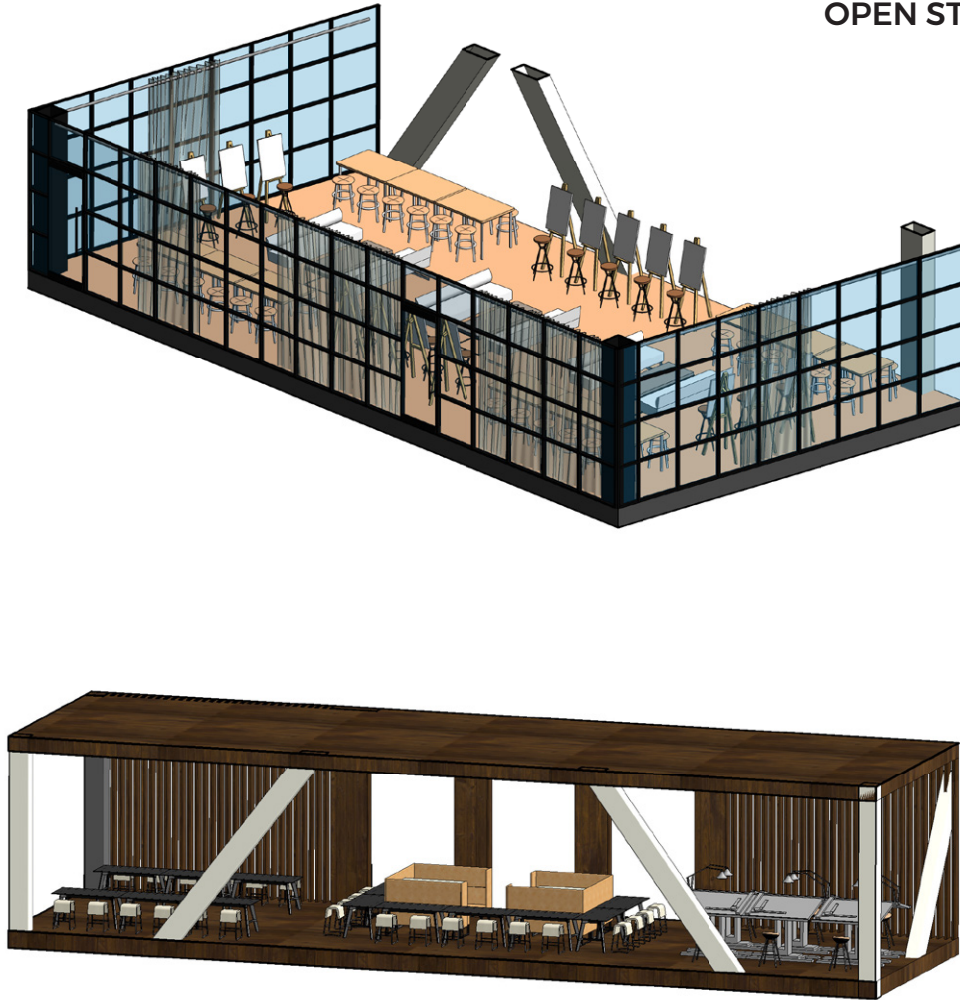
FIGURE 6.20 Axonometric drawings of two of the open studio nodes.

Creative agency is enabled through a final grouping of nodes including open studios. These nodes include open studios, group work spaces, and individual work spaces. These spaces provide variation in visual and auditory barriers, social scales, and atmospheric character. There are many different open studios throughout the Ideas Incubator, with selected designs featured in Figures 6.20-6.22, showcasing the range of spaces available. By providing these spatial options to the user, they are able to situate themselves in a work environment that best reflects their needs and desires of place.

GROUP WORK
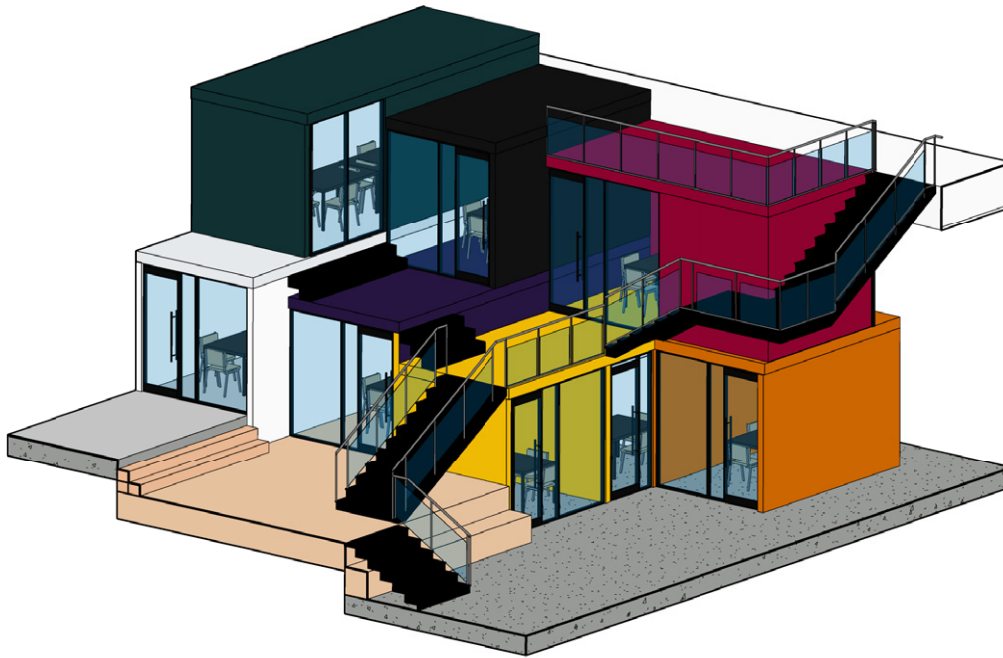
FIGURE 6.21 Axonometric drawing of a cluster of group work pods.

PRIVATE WORK
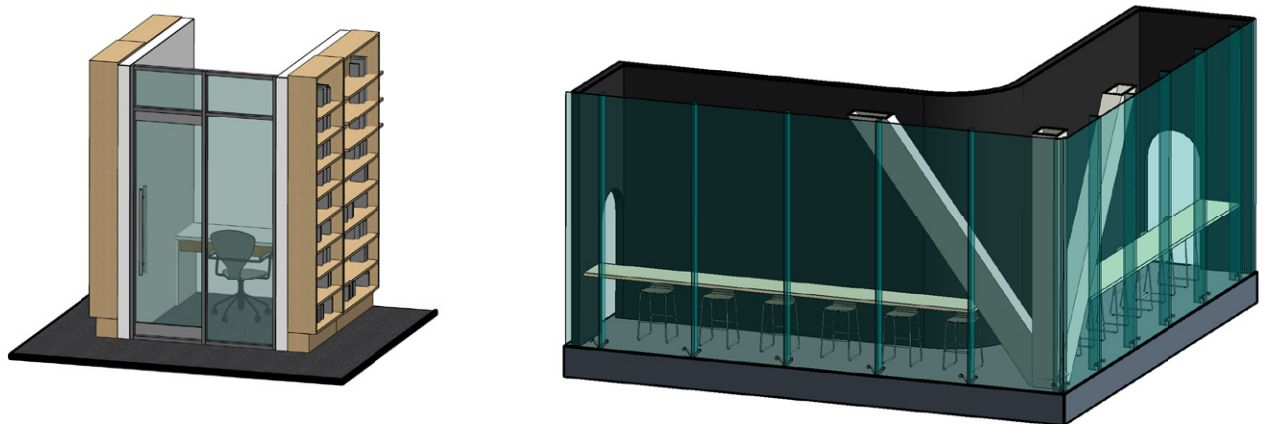
FIGURE 6.22 Axonometric drawings of two types of private work spaces.

When configured in a spatial network within the volume, the result of the additive method is a clear distinction between different nodes, merged with open edge conditions that link them. The offset mezzanine condition and strong sectional variation create a relief in density that results in an open visual field that better distinguishes the nodes in the network. Since the voids provide sectional breaks between occupying forms, the individual will experience a clear distinction between the various nodes scattered throughout the volume. This enables the individual to traverse the network of interconnected mezzanines with a greater sense of agency. Overall, this creates an ecosystem that projects the spatial identities of the nodes while connecting through a dynamic network of circulation and integrated breakout spaces (Figure 6.23).

FIGURE 6.23 Sectional model featuring the nodal identities configured into the greater network of the Ideas Incubator.

6.3   REAL-PLACE CONNECTIVITY

In the architectural interface, establishing a successful social network involves designing for real-place connectivity. This involves creating and framing opportunities for social exchange and physical content sharing within the building. In order to be a producer of agency, the architecture must mediate the potentiality of different types of interaction within the building. The proposal architecturally represents the simultaneity of different social networks merged together in one social field. These nodes coalesce to form a multifaceted network of people, activities, and places for the user to navigate, punctuating the design interface through visual connections (Figure 6.24).

In the analysis of the existing building, there was segregation between the different artistic disciplines, confining them to separate zones with negligible social space between. However, in the Ideas Incubator, the majority of the nodes are allocated to open work space, creating sight lines to the activity happening from various disciplines. This is a form of real-place content sharing, with the architecture creating a platform for idea sharing that influences the artistic work taking place. The spatial field is left open in the centre, uninterrupted by continuous floor plates, maintaining sectional fluidity and visual connection. The nodes branch off the cores in a staggered formation, with offset levels to provide varying spatial openness and connect the activity of the spaces to those adjacent, forming strong contiguous relationships (Figure 6.25). These relationships are strengthened by the breakout spaces created by active edge conditions connecting the nodes. In this way, the interface can cultivate inspiration through the relationships of the shared studios and cross-pollination between disciplines. The aggregation of multi-use studios across the volume connects students as they locate themselves in their environment voluntarily, rather than prescribed by institutional scheduling.

FIGURE 6.24 The approaching view towards the central lounge space, showcasing the physicalized social network.

FIGURE 6.25 Perspective section showcasing the visual connection to different spaces through offset levels and nodal reveals.

KEY
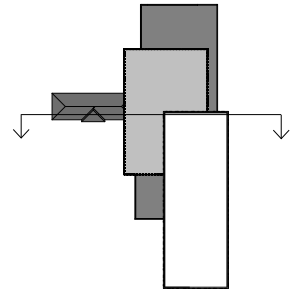
FIGURE 6.26 Inside the Rapid Prototyping Centre, exhibiting real-place content sharing

The simultaneity of different projects taking place within the same vicinity creates a physical interest community between a diverse range of individuals within the university. These social connections are predicated upon the authenticity of chosen environment and real-place content sharing. Many of these production nodes have been specifically designed for exhibitionist creation, where glazed reveals in the workshops exhibit the activity happening within. Figure 6.27 demonstrates content sharing between adjacent spaces through these reveals. For instance, in the Rapid Prototyping Centre, the glazed reveals and tiered equipment platforms turns project manufacturing into a performance for the onlookers in the gallery node or edge condition above (Figure 6.26).
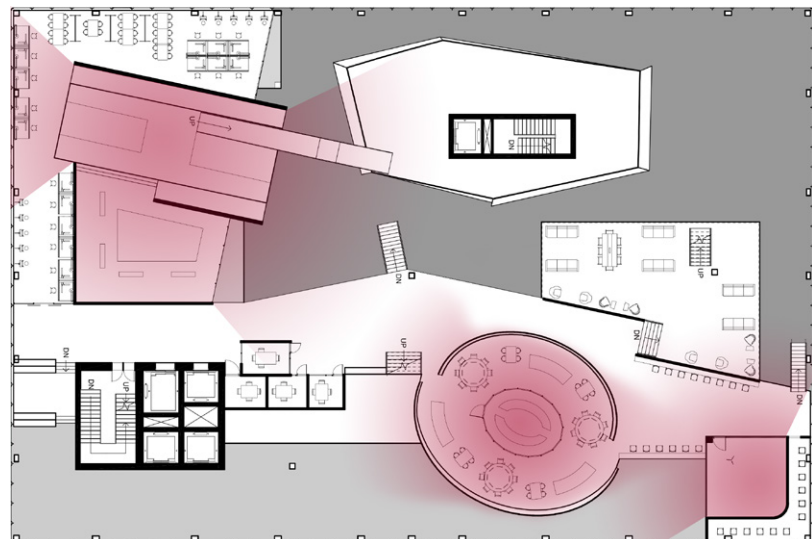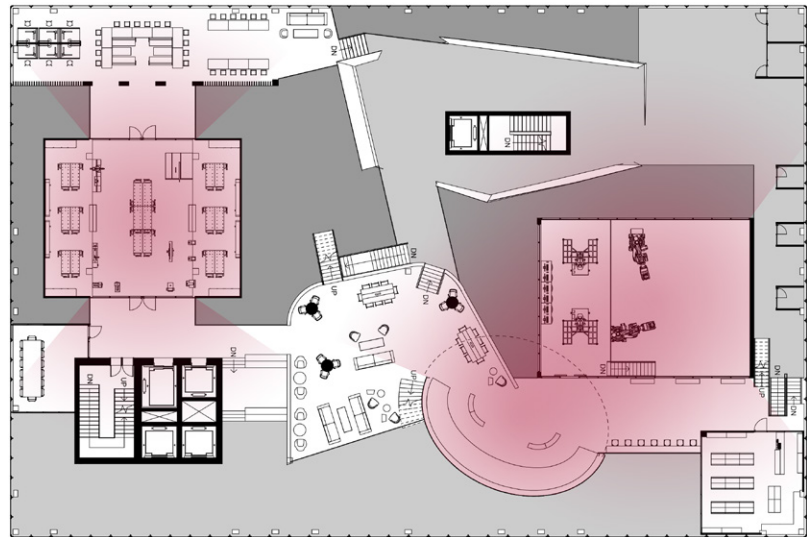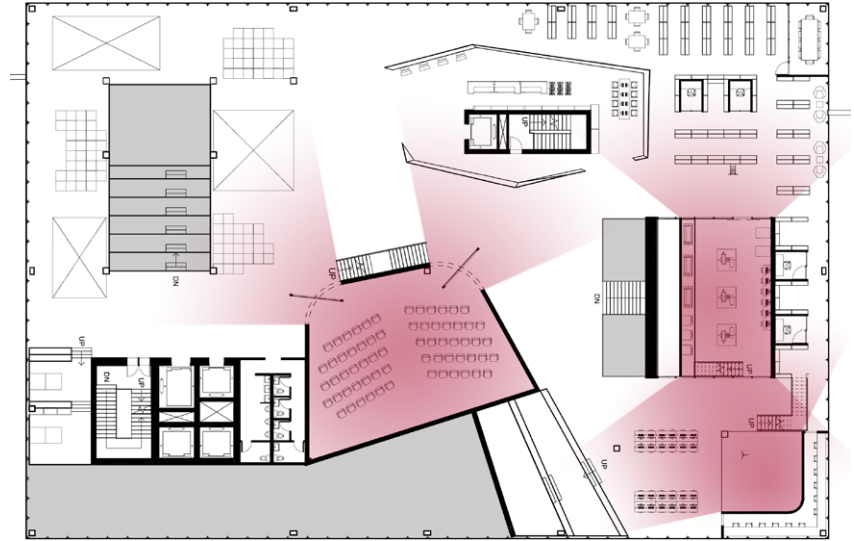
FIGURE 6.27 Plan diagrams highlighting ambient content sharing across horizontal openings

FIGURE 6.28 Inside the Model Gallery, exhibiting real-place content sharing

Opportunities for real-place content sharing are further supported by three gallery spaces dispersed throughout the volume, showcasing final student work. Their entries are integrated into the experiential narrative of the opportunistic junctures, with cues to their content through curated reveals (Figure 6.28). By showcasing glimpses of the displays intermittently through the journey, the user is further inclined to visit these spaces, thus mediating their experience of place.

The network of physical space responds to the need for variations in scale to foster different types of social relations. In general, the more central sectional relationships present the most social connection points, meanwhile the spaces occupying the corners of the volume are removed from this scale, veering away from ubiquitous connection and optioning privacy and social intimacy if desired by the user. Integrated breakout spaces are designed to flow out of the programmed areas to facilitate engagement in the happenstance encounter. These varying social scales are demonstrated in the sectional drawing in Figure 6.29. An informal lounge space is perched in the centre between nodes of strong sectional relationship, designed as an interstitial connection nucleus. The seating areas located on the mezzanine edges provide a sensory connection the activities below and above. Meanwhile the more enclosed areas behind the solid walled nodes provide a more private experience with decreased visible and auditory connection. Overall, the Ideas Incubator offers a much greater range of social spaces to inhabit than the other two masses, providing the means for the user to connect, escape, and experience varying degrees of intimacy in between.

FIGURE 6.29 Perspective section illustrating the varying range of social scales across the interface
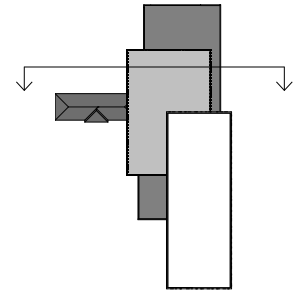
6.4 COMMUNICATING AGENCY IN THE ARCHITECTURAL INTERFACE

The interface should communicate both use and access to the user through ambient cues. Here the more micro-scale interventions in architectural language are explored that affect the awareness of affordances in one's environment. These interventions explore the interplay of form and materiality, creating expressive gestures that mediate the individual's experience and punctuate their memory of the place.

Renovations were made at the thresholds of the main building and the Sharp Centre that rethink the design interface of the building as a whole

(Figure 6.30). Threshold cues express the transition between Art and Incubator, and Incubator and Design portions of the building. The open, transparent feel of this added middle layer contrasts the closed and concentrated feel of the lower and upper volumes. Hence, the vertical shifts into this central level act as a release into an unrestricted spatial environment where the most agency is experienced. These threshold interventions involve perforating the existing floor plates to create a sectional connection between the other volumes.
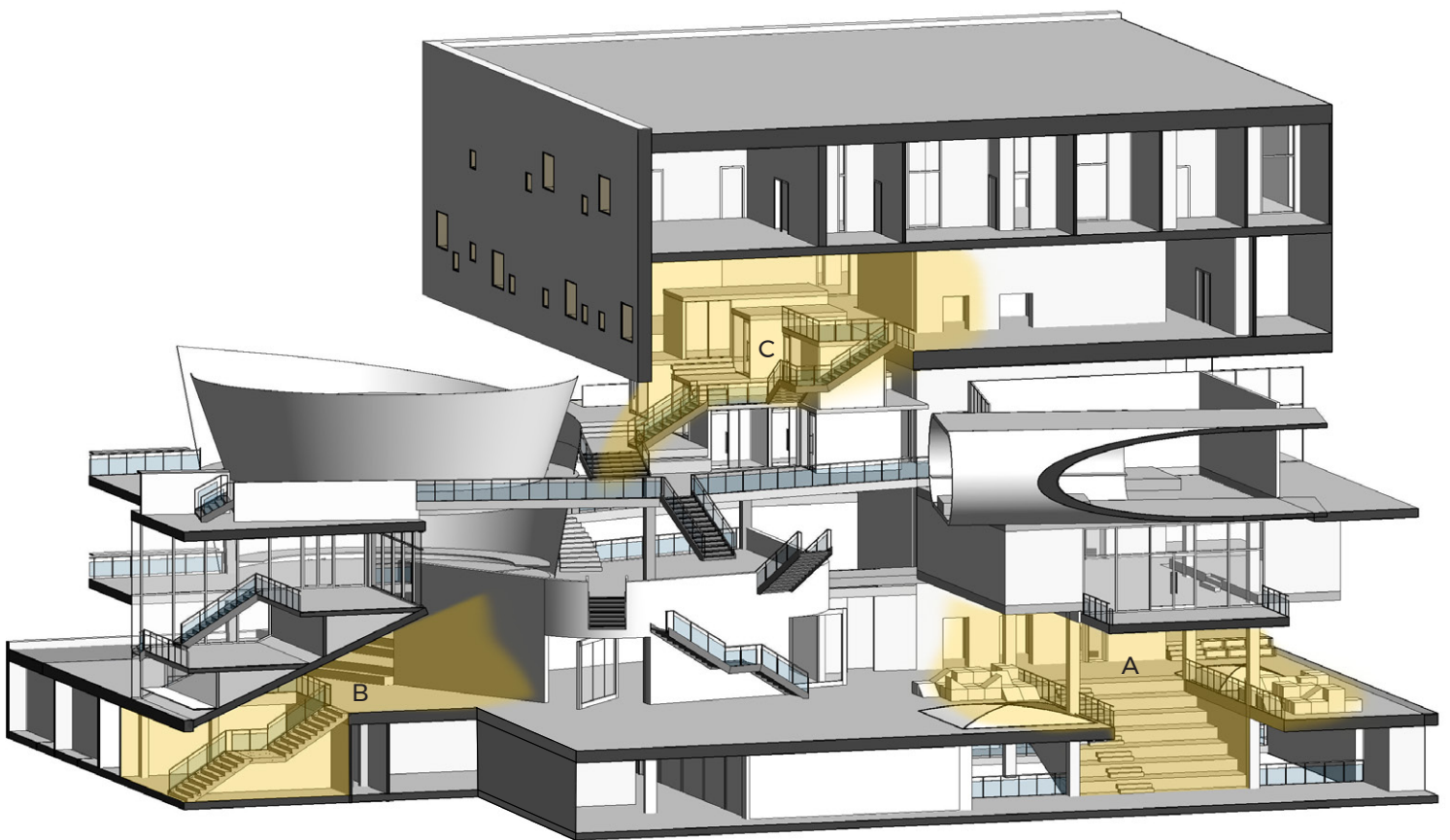
FIGURE 6.30 Axonometric Drawing featuring the thresholds into and out of the addition volume
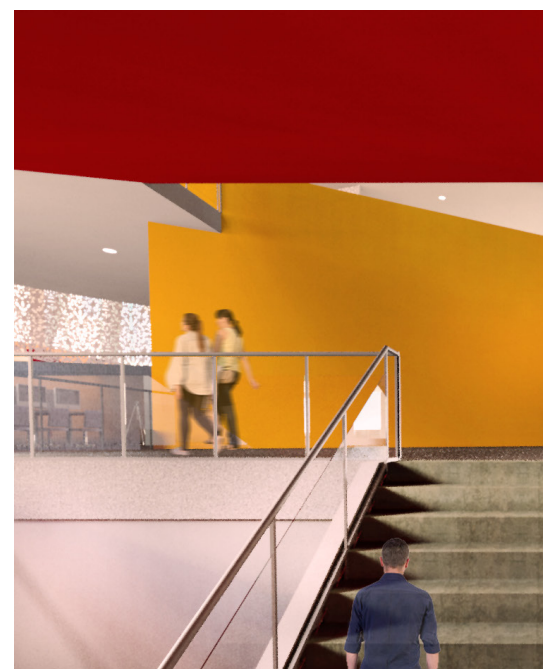
Intervention A involves the angular penetration into the main atrium through a seating integrated stair that rises up through the centre of the open plan work space (Figure 6.31). Intervention B consists of a stair connecting the fourth floor gallery space to the centre of the Incubator's first level. The angled red plane overhead acts as a circulatory cue to the user, opening up the view from the gallery to the Presentation Room beyond (Figure 6.32). The degree of incline overhead corresponds to the volumetric proportions of the above node. Finally, Intervention C features the threshold between the Incubator and the Sharp Centre, cumulating in the connection to its only third space at the extended elevator landing (Figure 6.33). This series of stacked private work rooms integrates the circulation amidst the rooms in a winding descent. It connects the above open plan lounge with these private, compartmentalized nodes, inviting the entry and appropriation by groups of students passing through.
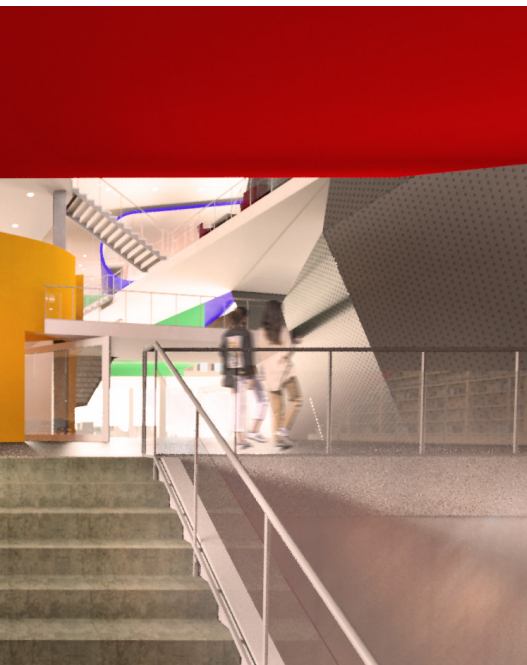
LEFT TO RIGHT

FIGURE 6.31   Intervention A: the threshold between main building atrium and the southwest corner of the Ideas Incubator

FIGURE 6.32   Intervention B: the threshold from fourth floor gallery space to the Presentation Room of the Ideas Incubator

FIGURE 6.33   Intervention C: the threshold from the top level of the Ideas Incubator to the Sharp Centre's third space.

FIGURE 6.34 Cues from an opportunistic juncture indicating different nodes with slight reveals to their interior activity.

Throughout the Ideas Incubator, formal gestures and specifically placed reveals influence patterns of movement and give cues to beyond. With the presentation centre projecting into the centre of the volume, the corners have been angled to encourage the flow of movement around this mass, with rotating glass reveals channelling movement into the space when it is open for use (Figure 6.34). Angular reveals in the Access Centre open up the perforated skin for user entry and views to the available facilities inside (Figure 6.35). The angles across the interface are dependent upon the intersections of the extended lines from the nodes, allowing locally specific relationships between nodes rather than a set overarching grid (Figure 6.36). These localized relationships and framed reveals communicate the circulation and function to the user, allowing them to navigate the interface with greater intentionality.

FIGURE 6.35 View from the Art Library to the Access Centre.
Angular reveals allow glimpses of the facilities that dwell within.
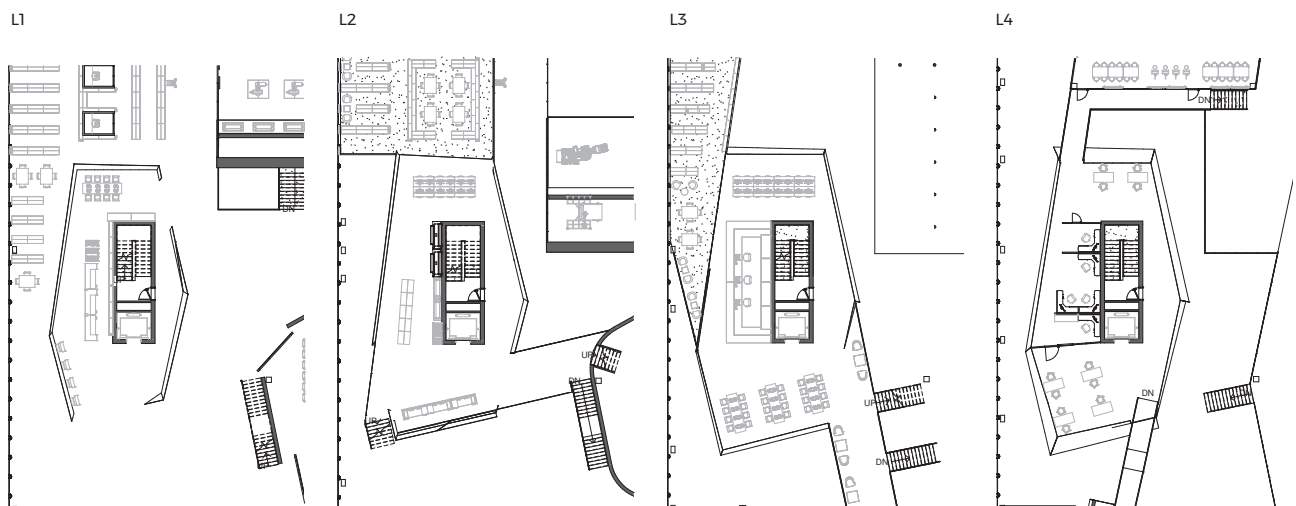
FIGURE 6.36 Plans of the Access Centre showing the angled
walls and their relationship to the surrounding nodes.

FIGURE 6.37 Material cues delineating node transitions and spatial orientation within the network.

FIGURE 6.38 Exterior materials of the nodes give cues to the activity beyond, providing atmospheric identification.

The interface also communicates through materiality choices specific to each node. Wrapping materials around the masses creates a visual continuity for means of orientation and symbolic nodality. Shifts in materiality help delineate where one space starts and the next begins. As seen in Figure 6.37, the change in materiality between circulation platform and central lounge delineates the edge condition from the node. From this platform, the user can see through to the Physical-Hybrid Gallery denoted by the curvilinear pattered wall, displaying the work of the Physical-Hybrid Computing Lab above. As part of the same node, the computing lab is located directly above the gallery and the above patterned wall peeks through the floor slab, communicating that the node continues beyond the floor slab.

Node materials not only express their own atmospheric identities, but differentiate themselves from those adjacent, creating spatial juxtapositions between nodes in the interface. In Figure 6.38, the wood stack walls of the Art Library allude to a warmer, more natural atmosphere than the refined industrial aesthetic of the Rapid Prototyping Centre. This in turn is juxtaposed by the perforated metal screen of the Access Centre that merges with the Art Library. These materials are testaments to their interior use and atmosphere through cultural associations. The traditional library aesthetic inherently cues what will be found beyond, while the red-framed glass indicates an enclosed exhibition. The adjacent perforated metal creates interest in the user while maintaining a degree of privacy from the surrounding network. The material associations are tactfully employed as ambient cues to engage with the intentions of the user, cultivating symbolic nodality within the network.
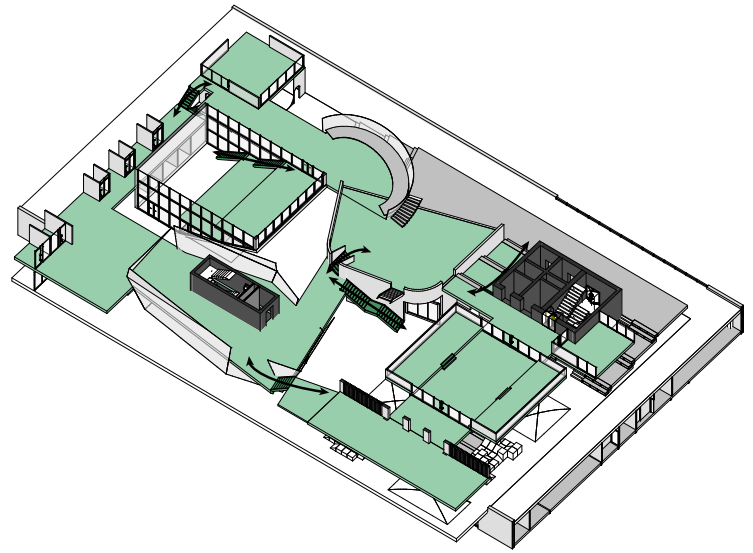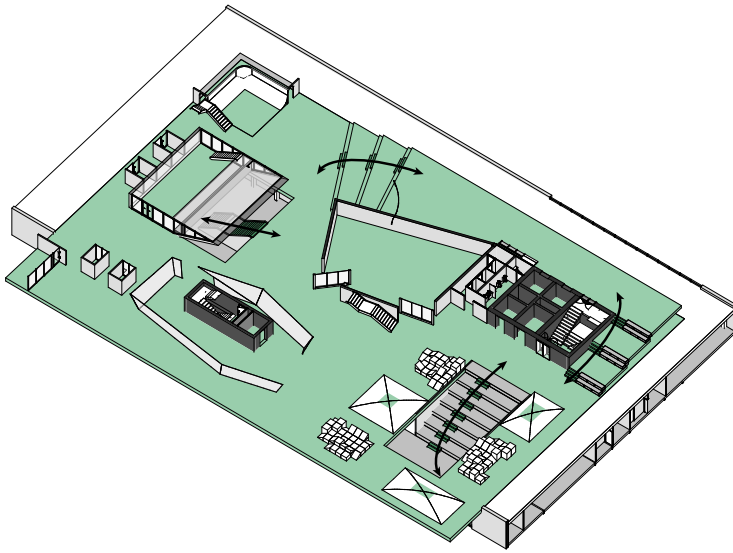
6.5   PRIVILEGING JOURNEY IN DESIGN

Privileging the journey in design includes employing the shifting narratives to mediate selective settlement - finding your place within the building. In order to design these journeys for increased agency, shifting narratives must be carefully curated to provide options to the user without overwhelming them with a complex circulation system. Instead of an imposed system of hallways, the horizontal circulation between spaces is fluid and specific to each edge condition, forming intentional contiguous

relationships between nodes. Instead of a single feature stair and cores, the network consists of multiple pathways of smaller scale that allow the user to traverse the sectional spans of the building, privy to the unfolding spaces and social interactions around each corner (Figure 6.39). This creates an interface that is mediated by the varying field of architectural elements, contrasting the repetitive hallway conditions of the top and bottom volumes.

In section, the opened vertical circulation
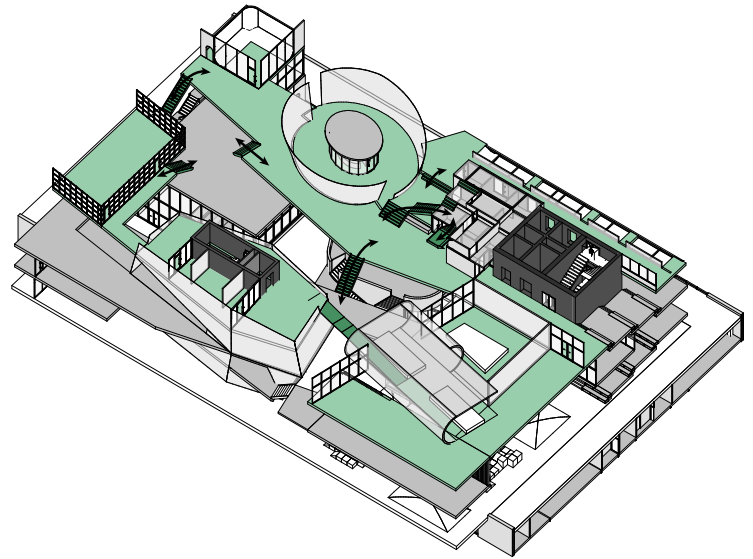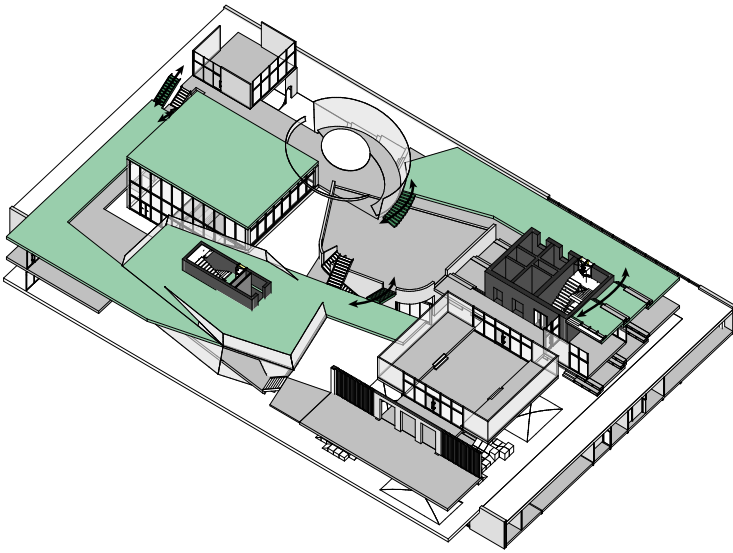
FIGURE 6.39 Axonometric circulation diagrams showcasing the possible vertical and horizontal narratives.

through the interface redefines the vertical movement through the building from direct to flaneuresque. The Ideas Incubator features a central web of platforms with an open stair that connects to a network of third places as well as directs the individual's gaze up to potential spaces to inhabit. In conjunction, the journey features many integrated vertical circulation methods, some of which are featured in Figure 6.40. Callout A shows a half level stair directly connecting two adjacent nodes. Callout B depicts the integrated design library stacks, configured into a series of staggered seating platforms that act as an edge condition between the lounge and the library. Finally, callout C features the winding stairway through the offset collection of group work rooms, presenting their volumes as stepping stones to access the next level. The vertical connectivity of the Ideas Incubator makes each floor plate less isolating, granting the user the agency to traverse the network through their own chosen narrative.
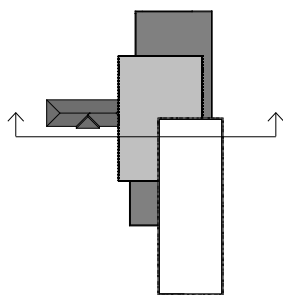
A

FIGURE 6.40 Sectional perspective demonstrating how the Ideas Incubator privileges the journey through integrated vertical circulation.

In the Ideas Incubator, views of the diverse identities of the nodes punctuate the experience of the users as they traverse the building, often appearing as suspended volumes (Figure 6.41). Instead of hallways lined with doors set perpendicular to the flow of movement, certain entrances, reveals, or signifying form are offset from the circulation path. These penetrate the individual's field of vision from each juncture, giving them an idea of the activity happening down that route. These individual forms are designed at a comfortably occupiable human scale, rather than dominating the spatial experience. Mediating place selection involves the presentation of varying work spaces from key junctures. From these junctures, the user is given glimpses into of multiple

work atmospheres along adjacent paths. Examples of these junctures occur in Figures 6.42-6.43. Both of these junctures express studio conditions beyond that are of varying formality, social scale, and atmospheric characters. From the circulation spaces, the user observes multiple options to situate themselves, with their chosen narrative speaking to their intentionality. For instance, if the user was looking for a place to read, they might choose to lay in the floor hammocks along the perimeter with good natural lighting and casual atmosphere. On the contrary, they might require auditory or visual barriers to study, in which they are presented with the option to use the enclosed study rooms adjacent (Figure 6.42).
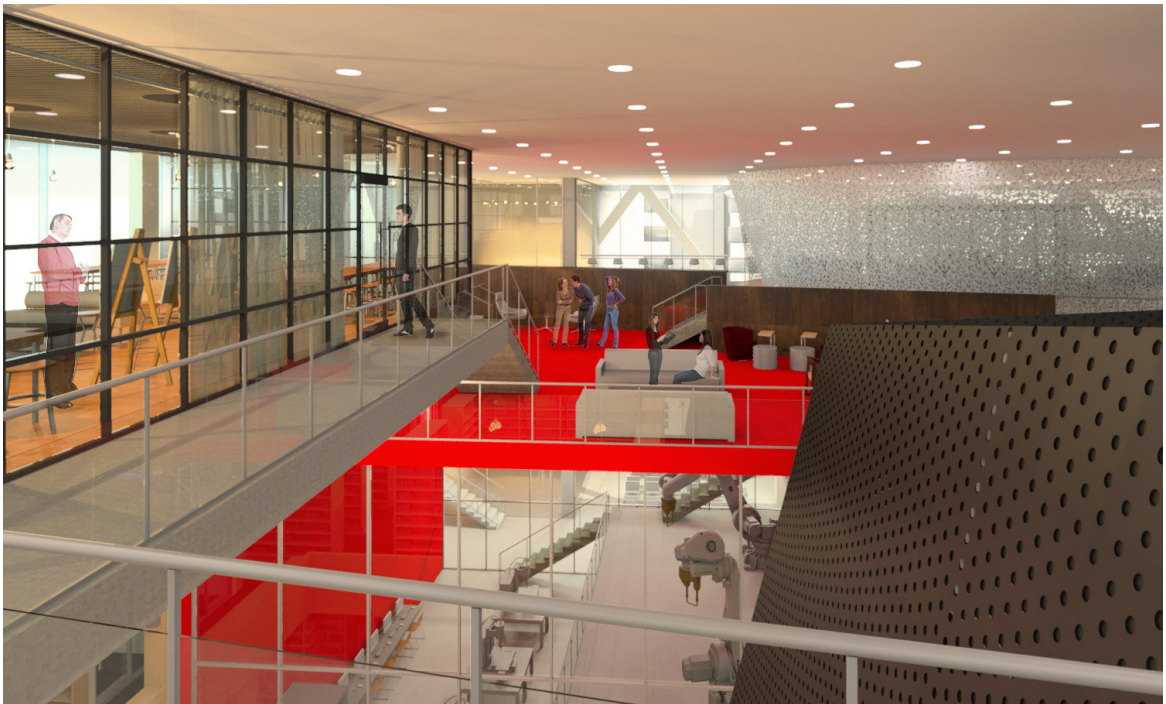
(LEFT) FIGURE 6.41 The appeared suspension of volumes in the network presents themselves to the user as options for settlement.

(TOP) FIGURE 6.42 Juncture of studio optioning from informal work to formal work.

(BOTTOM) FIGURE 6.43 Render showing varying work atmospheres at an opportunistic juncture.

The interface of the Ideas Incubator has been designed to individualize the user's journey by creating a network of circulation systems between nodes that encourages exploration. Overall, the primary nodes are larger and more easily accessible, while the more private nodes are hidden, making the experience of finding and claiming them an integral part of each individual narrative. When designing for selective isolation, the spaces are less central and more sequestered. For instance, the private work spaces in the Art Library provide both visual and auditory barriers. This circulation path is the most secluded and least travelled, providing greater privacy. This space is designed to be more intimate, with formal study spaces scattered between the rows of stacks (Figure 6.44). These quiet workspaces face away from the busy street as to not promote distraction, while allowing the benefits of natural light to enter the space. Conversely, the Design Library features flexible, open study space. The informal structure of space and its visual and auditory connections create a learning environment that is more conducive to collaboration (Figure 6.45).

Beyond these visual stimuli, auditory cues can also be heard through the perforations in the floor plates as well as the selective reveals occurring in many of the spaces. For instance, if the individual was looking for a quiet place to study, they would be drawn away from the more bustling centre of the network and towards the quiet and sequestered breakout areas. By providing a diversity of nodal conditions, the individual is given more liberties in their educational experience. By recognizing the affordances in their environment and appropriating certain spaces into their narrative, the individual with a more revered sense of place.

TOP TO BOTTOM >

FIGURE 6.44 Render in the Art Library showcasing the more intimate and defined study spaces between stacks.

FIGURE 6.45 Render approaching the Design Library showing the open, informal study space
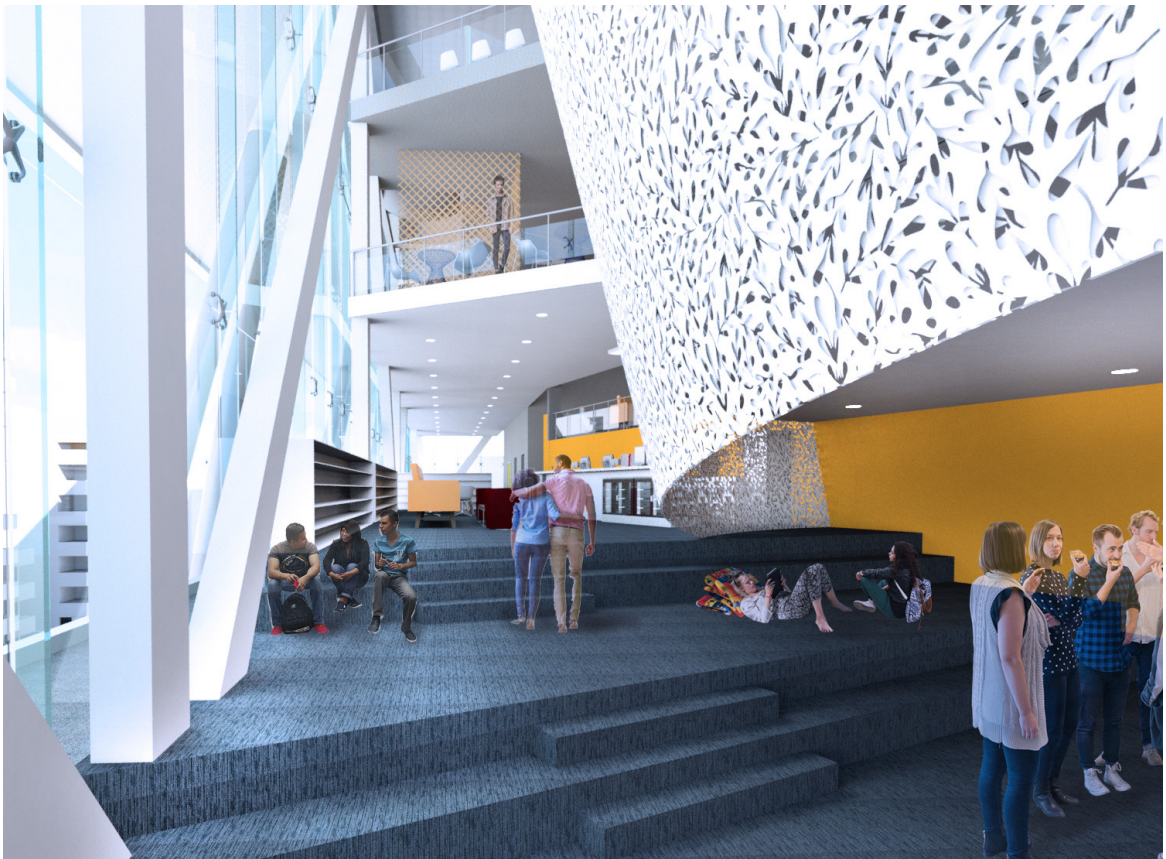
6.6   ACTIVE LAYERS – PRODUCING AGENCY THROUGH OPPORTUNISTIC JUNCTURES

The design interface of the Ideas Incubator has been created using the layering of ambient cues, shifting narratives, network connectivity and dispositional identity (Figure 6.46). The implementation of these layers in the project has been outlined in the following extrapolations of perspective images (Figures 6.47-6.50). These images feature the design of opportunistic junctures, which are intersections from which passages branch off. These are crucial to designing a building for individual agency as they are moments of empowerment for the user in which they heuristically construct their vision of place. From these points, the user is faced with multiple options, shaping their path through the building and the experiences encountered along the way. These junctures are designed in such a way that sensory stimuli can communicate programmatic activity or spatial qualities to the user from that position. In this way, the architecture is designed for possible intentions rather than simply framing behaviours.

NETWORK CONNECTIVITY
interacting in the interface

AMBIENT CUES
presenting the interface

SHIFTING NARRATIVES
navigating the interface

DISPOSITIONAL IDENTITY
defining the interface
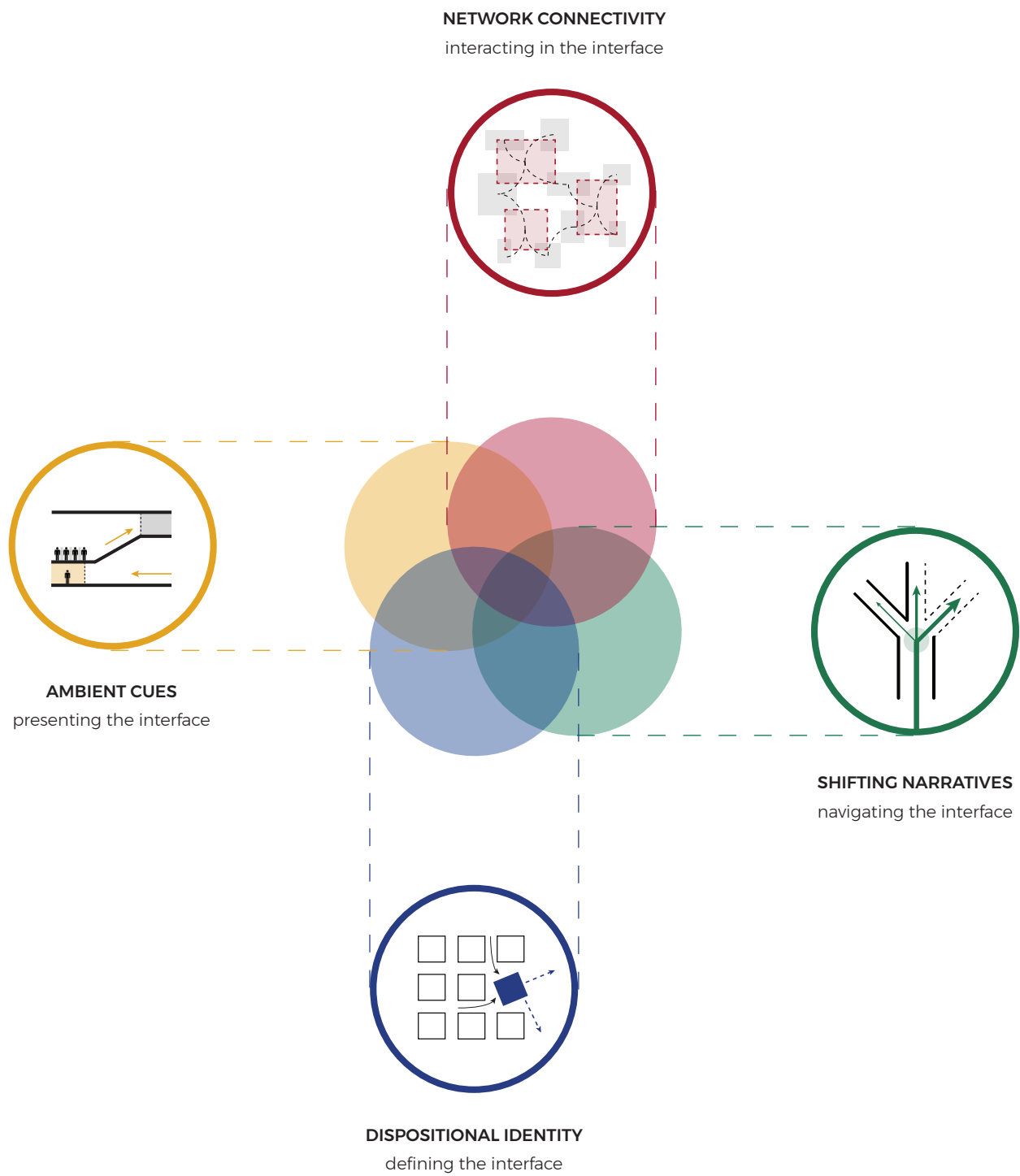
FIGURE 6.46 Concept diagram of the formation of the design
interface from the overlapping layers

AMBIENT CUES
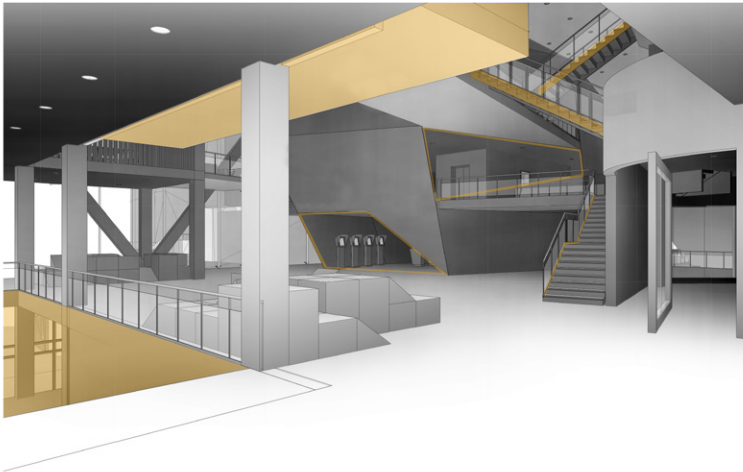
SHIFTING NARRATIVES
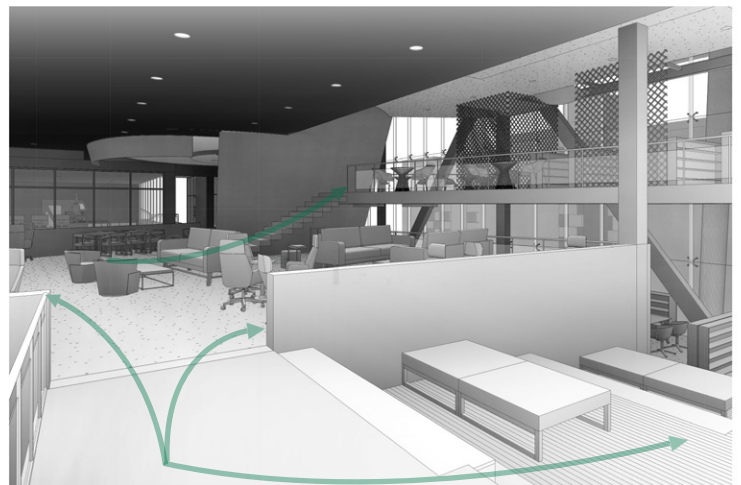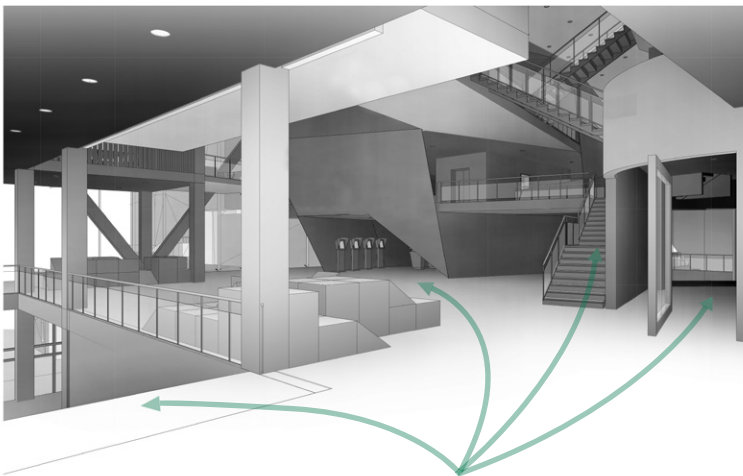
Ambient cues are used to present the user with spatial affordances in movement and use (Figure 4.47). People take cues from their physical surroundings that shape the social context of space. If these cues call attention to opportunities, rather than enforce and structure behaviour, the user's agency is designed for. At the scale of the node, this theory can be used to extrapolate architectural gestures that are intrinsic to form, functionality, or aesthetics, as integral mediating elements in the experience.

FIGURE 6.48 Series of opportunistic junctures outlining the possibility of movement through shifting narratives
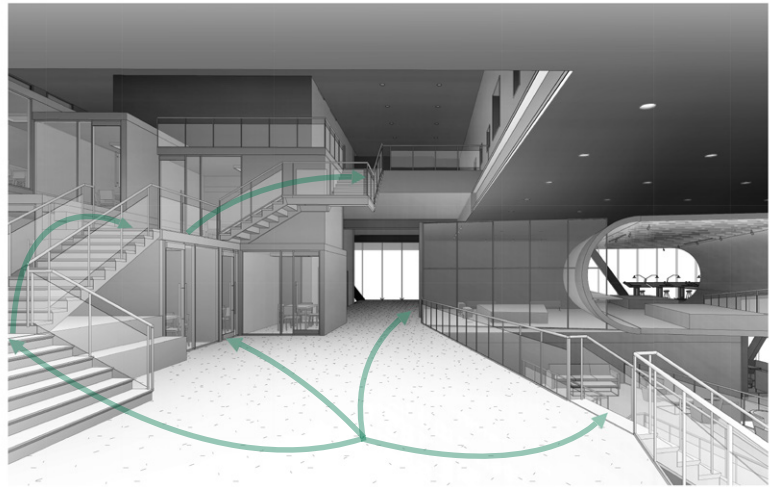
Shifting narratives casts architecture as an agent of individual experience, not conforming its subjects to particular conditions, but rather presenting them as possibilities for identification (Figure 6.48). Here, the users curate their experience actively through their own use of the interface, based on intentions toward different types of social interactions, ambient conditions, or voyeuristic opportunities.

NETWORK CONNECTIVITY
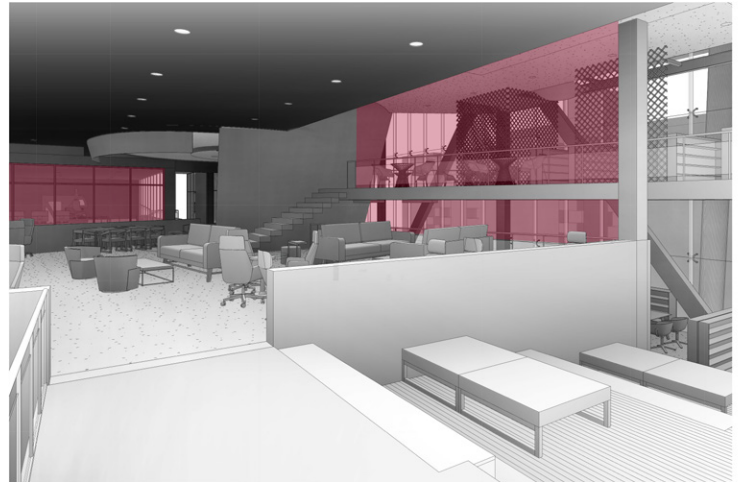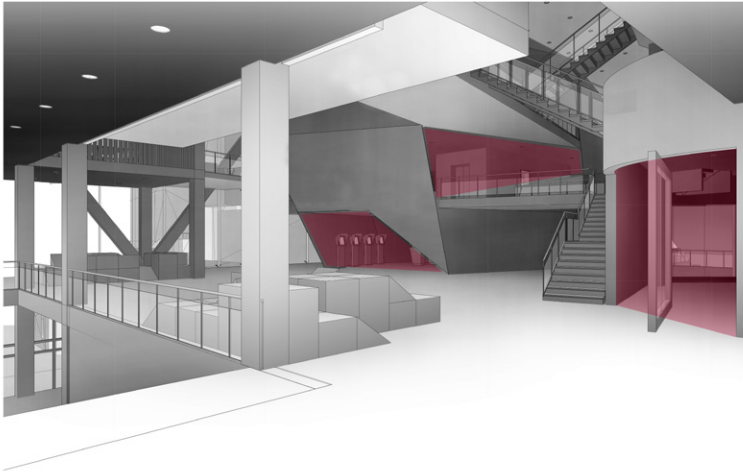
DISPOSITIONAL IDENTITY
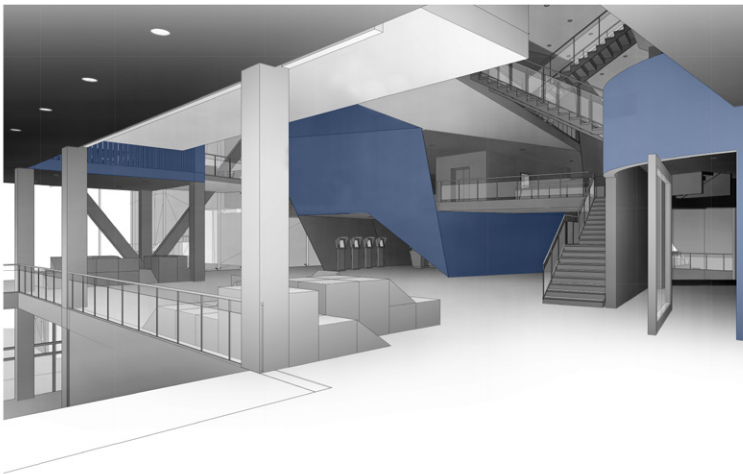
Network connectivity involves designing for the real-time, real-place interactions. Here, the network recognizes a simultaneity of different flows of users acting within the same realm. The connection of the nodes through reveals and edge conditions presents opportunities for these users to engage with one another as well as facilitating content sharing (Figure 6.49). Through this knowledge to action, the interface better facilitates interest sub-communities to form within the locality of the building.
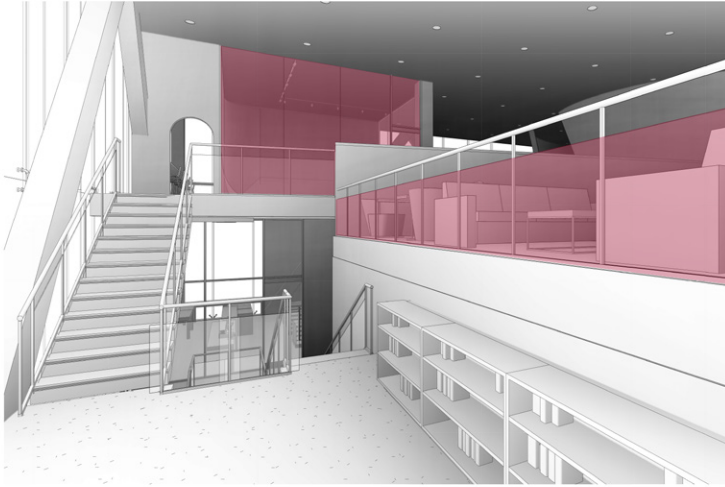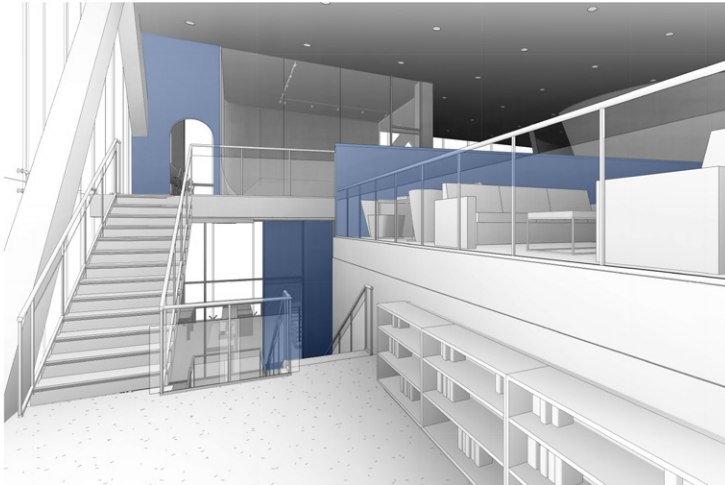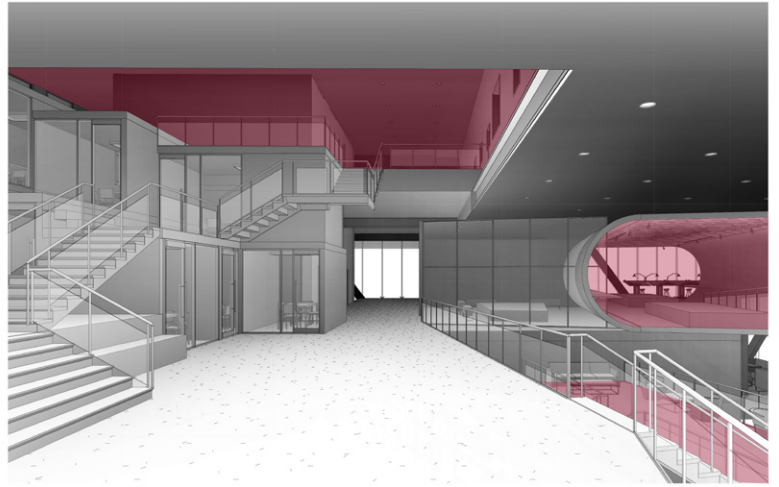
FIGURE 6.50 Series of opportunistic junctures outlining
instances where form or materiality projects nodal identity
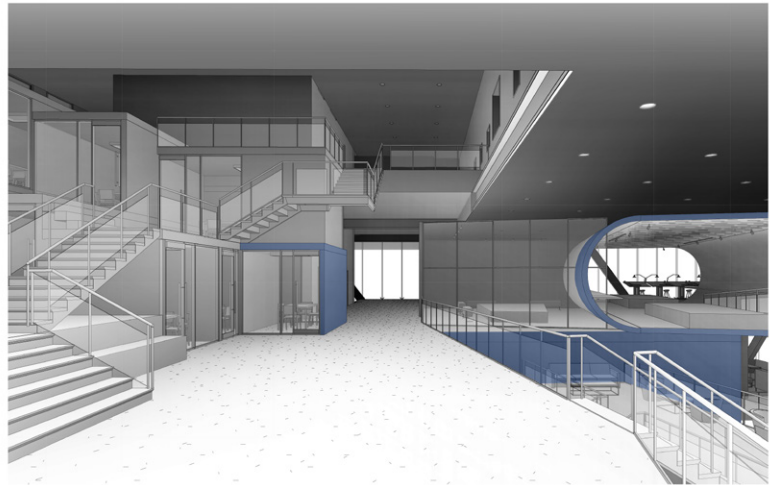
Dispositional affordances dictate use that is socially understood and reinforces the identity of the place. Distinctive nodal settings support heterogeneity in which the user associates certain contexts with states of intent, thus mediating the user's agency (Figure 6.50). While their meaning will be appropriated by different individuals or groups respectively, the shared symbolic meanings reinforce the cultural identity of the place.

THE INTERFACE OF PLACE
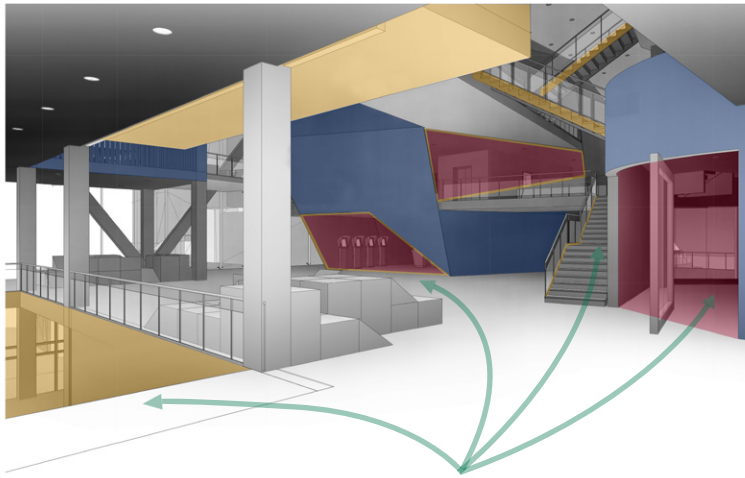
FIGURE 6.51 Series of opportunistic junctures featuring all four layers of the interface outlined.
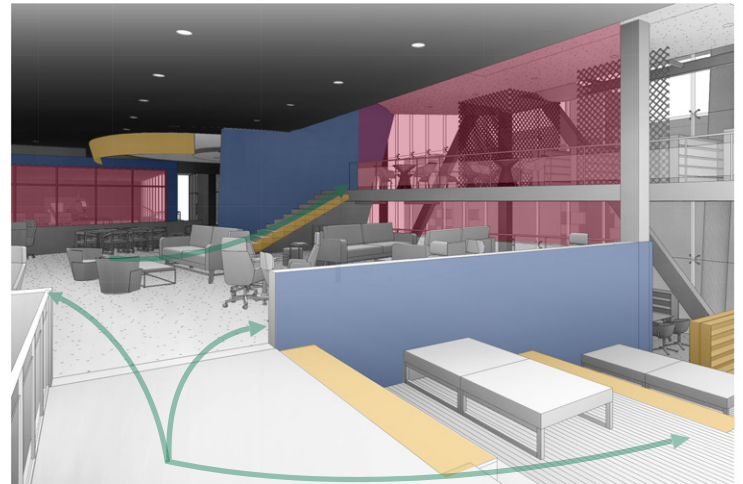
🟨	AMBIENT CUES
🟩	SHIFTING NARRATIVES
🟥	NETWORK CONNECTIVITY
🟦	DISPOSITIONAL IDENTITY

The layers interact with one another to form a whole, created as a gestalt architectural vision. The interface would not be an effective producer of agency without the integration of all four layers (Figure 6.51). The dispositional identity of the nodes punctuates the journey of individual narratives, with the materials signifying their content to the surrounding network. The reveals made in the nodes create interest in the activity happening beyond, with edge conditions that connect the spaces and the people within. The multiple options for travel individualizes each journey, where environmental stimuli, social appropriation, and nodal identity determine the selective settlement of the user. Ambient cues tie the experience together, communicating the different spaces, connections, and opportunities available to them. Separately, the layers are individual facets of place-making, but in conjunction, they form a user interface where agency is experienced.

"Empowerment implies a capacity to perceive one's real interests and connect them reliably to an imagined future."[2] The design of these junctures empower the user, mediating their selection of settings and connecting them to platforms for their appropriation. Overall this leaves the user with an increased sense of agency that resonates deeply with the digital natives and contemporary citizens alike.
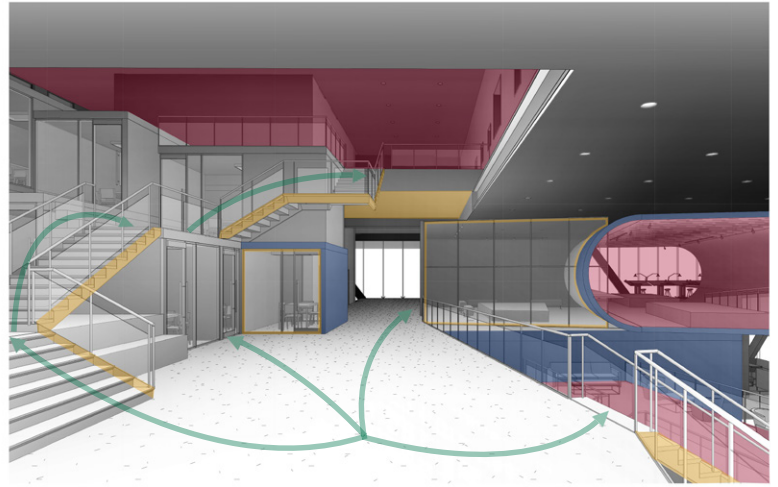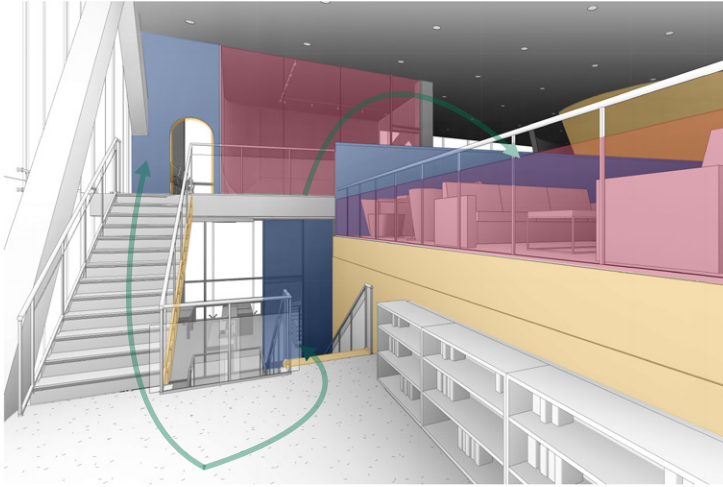
ENDNOTES

1. Dovey, Kim. *Framing Places: Mediating Power in Built Form, 49.* 2nd ed. London: Routledge, 2008.

2. Ibid, 15.

SPECULATIVE CONCLUSIONS

The design of the addition to OCAD University sought to transform the experience of place for the user, responding architecturally to digital culture. The added volume allows students to transition from the *machine* of scheduled classes, prescribed motions, and structured activities to an *interface* that supports spontaneous interactions and the choice of environment. The layering approach developed in this thesis was instrumental in achieving the interface, producing experiences of agency for the user. The design layers mediate the journey, settlement, and appropriation of the spaces created within. Furthermore, their amalgamation in the interface produces feelings of empowerment, resonating highly with the digital natives and forming attachments to the place and its memory.

As Kim Dovey states, places are "the frameworks of possibility within which our capacities are realized or not."[1] The architecture of place shapes our vision of the world and our personal attachments to it. Rather than acting as an icon or framing idealistic behaviours, the built world should be designed to better communicate the agency that we have come to revere. Designing the interface of place through the proposed layering method addresses the desire for Digital Natives to find their own place and establish meanings within it. In this way, places can become producers of agency, extending the possibility spaces of the user. The layering method is more than just a sum of discrete aspects of place-making, rather it creates a gestalt architectural vision of individual agency.

Though reacting to the cultural shifts proliferated in the digital age, the proposed architectural solution is proactive. Not only does it provide an effective platform for digital natives to engage with physical places, but it also frames opportunities for activity to extend beyond the

structured behaviours of institutional settings. Architecture should not act as a passive backdrop to digital interactions, but rather create platforms for the active participation of digital natives in society. This approach to architecture cultivates opportunities for social exchange, content sharing, and community involvement within the locality of real, physical places. It attends to the desire for spaces to reflect individual needs and desires, while ensuring the empowerment of citizens in their social environment. In this way, architecture serves as an active mediator of spontaneous exchange.

While the design project explored a reconstruction of post-secondary educational architecture, this approach to architecture can be applied to many building typologies whose physical operations have become flexible in the digital age such as offices, libraries, schools and community centres. By dissolving the traditional power structures enforced by striated architectural configurations, this revised architecture reflects the current social context, making the user experience more engaging and maintaining their physical relevance with increasing virtualization. This work can further extend to a revisitation of third spaces such as cafes, meeting places, and recreation halls

— reflecting a greater sense of agency yearned for by today's digital culture and those to follow.

In this age of information superabundance, architecture can offer a different kind of mediation — not through words but through meanings and gestures of the ambient. In the midst of all these changes, we must recognize that one of the great pleasures in life is the discovery of affordances in place. With the appropriate method of structuring spaces, there can be increased agency. The result is an architectural interface that communicates opportunity, contributing to the heuristic formation of individual landscapes of place.

ENDNOTES

1. Dovey, Kim. *Framing Places: Mediating Power in Built Form,
      19.* 2nd ed. London: Routledge, 2008.

APPENDIX A:
DESIGN DRAWINGS

DUNDAS STREET WEST

BEVERLEY STREET

MCCAUL STREET

ST PATRICK STREET

STEPHANIE STREET

N

0   10   20   40m
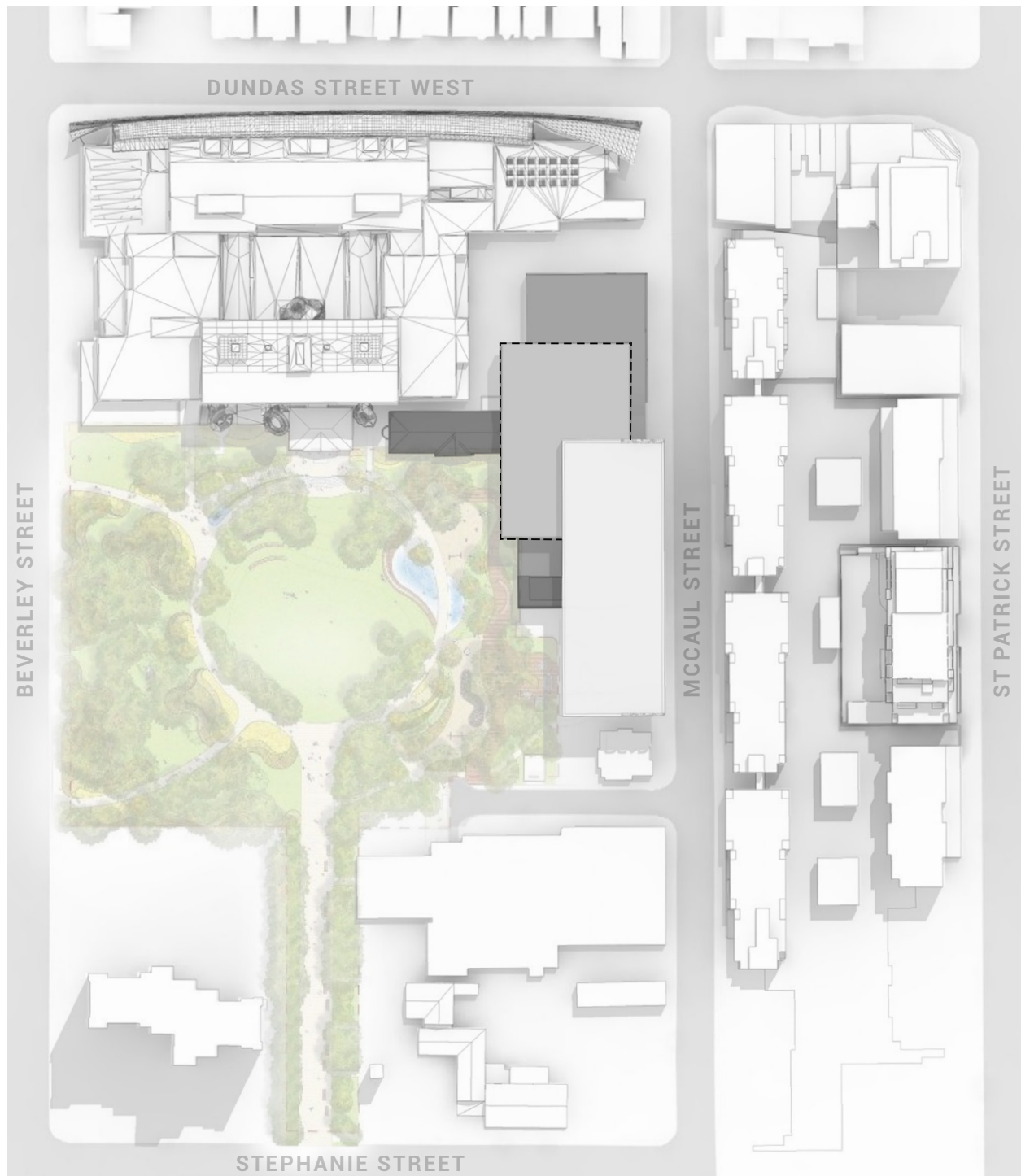
FIGURE A.1 Site plan with the Ideas Incubator outlined

FIGURE A.2 Level 1 floor plan of the addition

LEVEL 1 - 12 775 mm

PROGRAMMING

01. Connection to Main Building
02. Art Library
03. Group Work Room
04. Single Work Room
05. Rapid Prototyping Centre
06. Photo Cyclorama
07. Open Seating Field
08. Open Seating Cubes
09. Design Library Transition
10. Presentation Room
11. Library Circulation Centre
12. Washrooms

0   2   4   8m

N

PROGRAMMING

01. Media Output Centre
02. Art Library
03. Group Work Room
04. Single Work Room
05. Rapid Prototyping Centre
06. Student-run Cafe
07. Design Library

LEVEL 1.5 - 16 050 mm

N
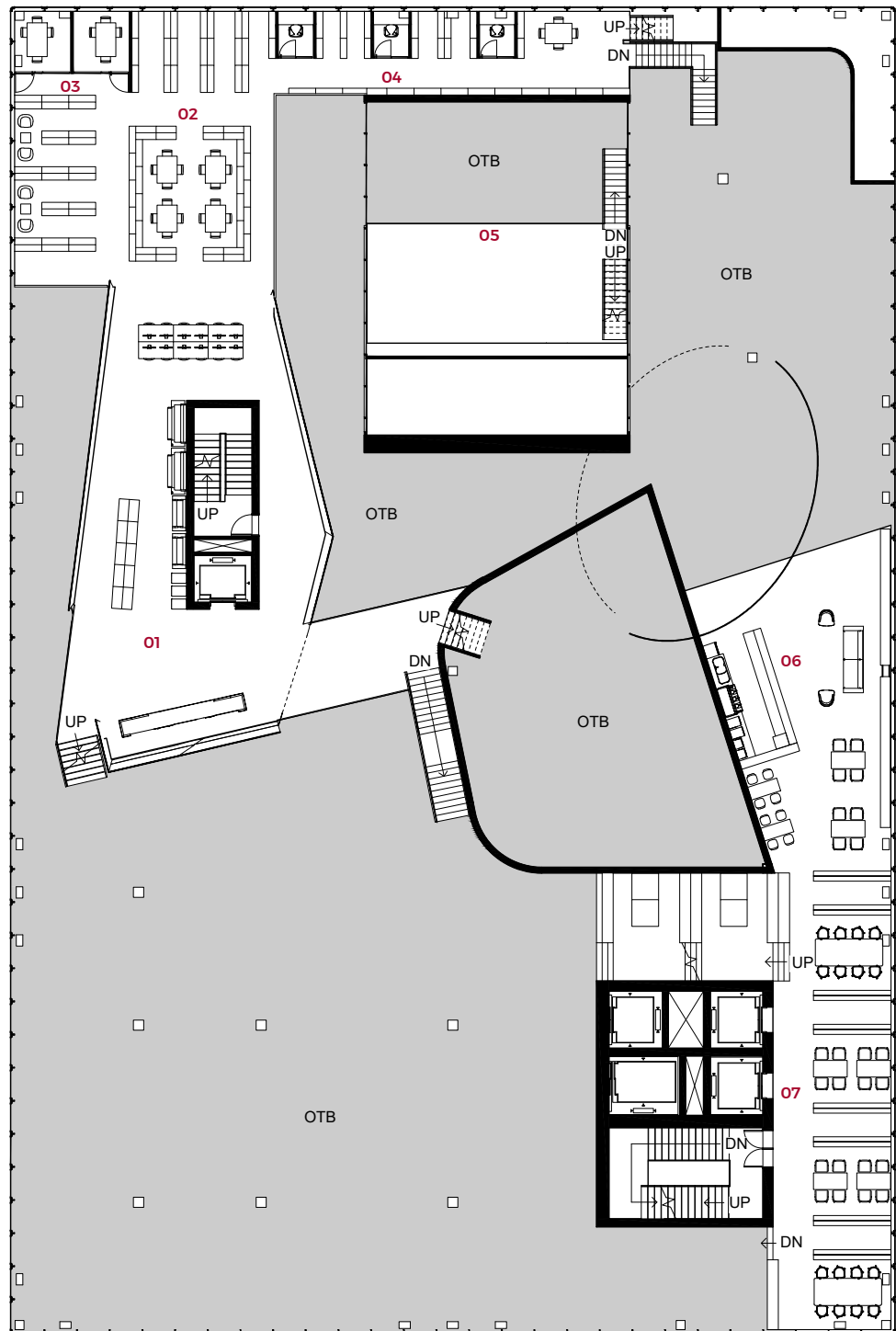
0 2 4   8m

FIGURE A.3 Level 1.5 floor plan of the addition

FIGURE A.4 Level 2 floor plan of the addition

LEVEL 2 - 17 175 mm
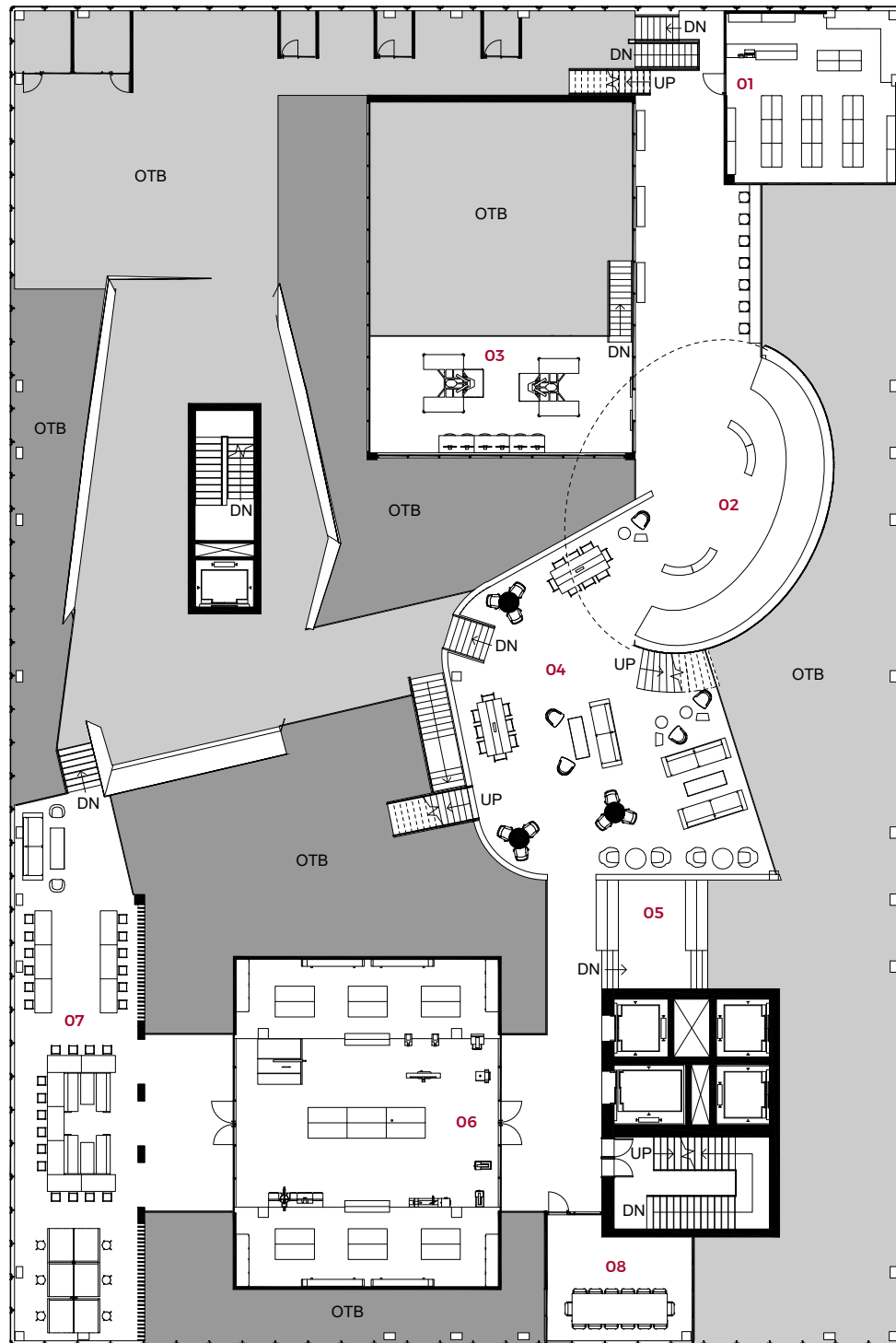
PROGRAMMING

01. Materials Shop

02. Physical-Hybrid Computing Gallery

03. Rapid Prototyping Centre

04. Central Lounge

05. Design Library Transition

06. Model-Making Centre

07. Flexible Studio Space

08. Conference Room

PROGRAMMING

01. Art Library

02. Resource Sign-Out

03. Design Library

LEVEL 2.5 - 19 300 mm

FIGURE A.5 Level 2.5 floor plan of the addition

N

0   2   4   8m
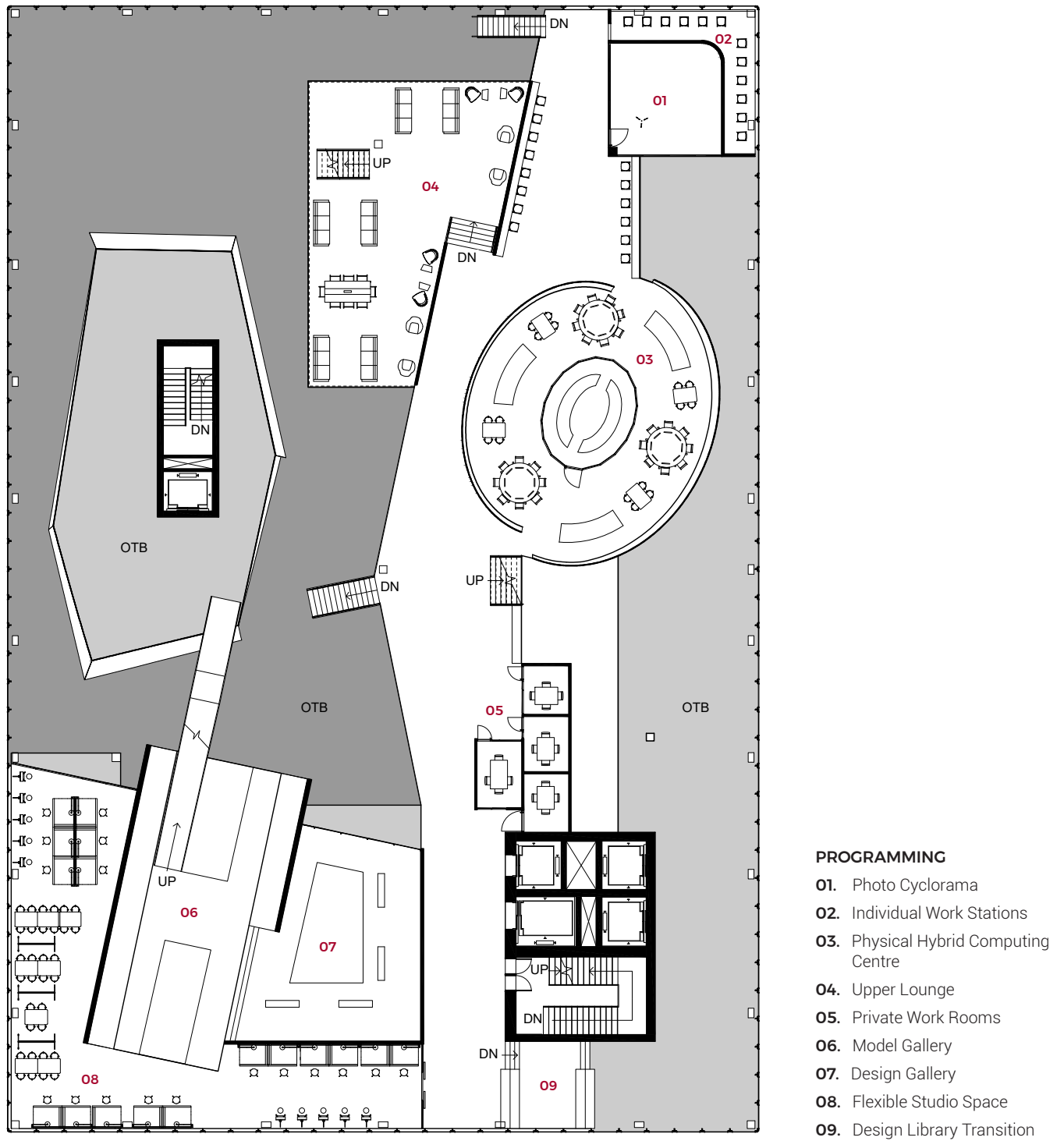
FIGURE A.6 Level 3 floor plan of the addition

LEVEL 3 - 21 550 mm

PROGRAMMING

01. Photo Cyclorama

02. Individual Work Stations

03. Physical Hybrid Computing Centre

04. Upper Lounge

05. Private Work Rooms

06. Model Gallery

07. Design Gallery

08. Flexible Studio Space

09. Design Library Transition

PROGRAMMING

01. Flexible Studio Space

02. Individual Work Stations

03. Research Assistance Centre

04. Hammock Lounge

05. Private Work Rooms

06. Connection to Sharp Centre
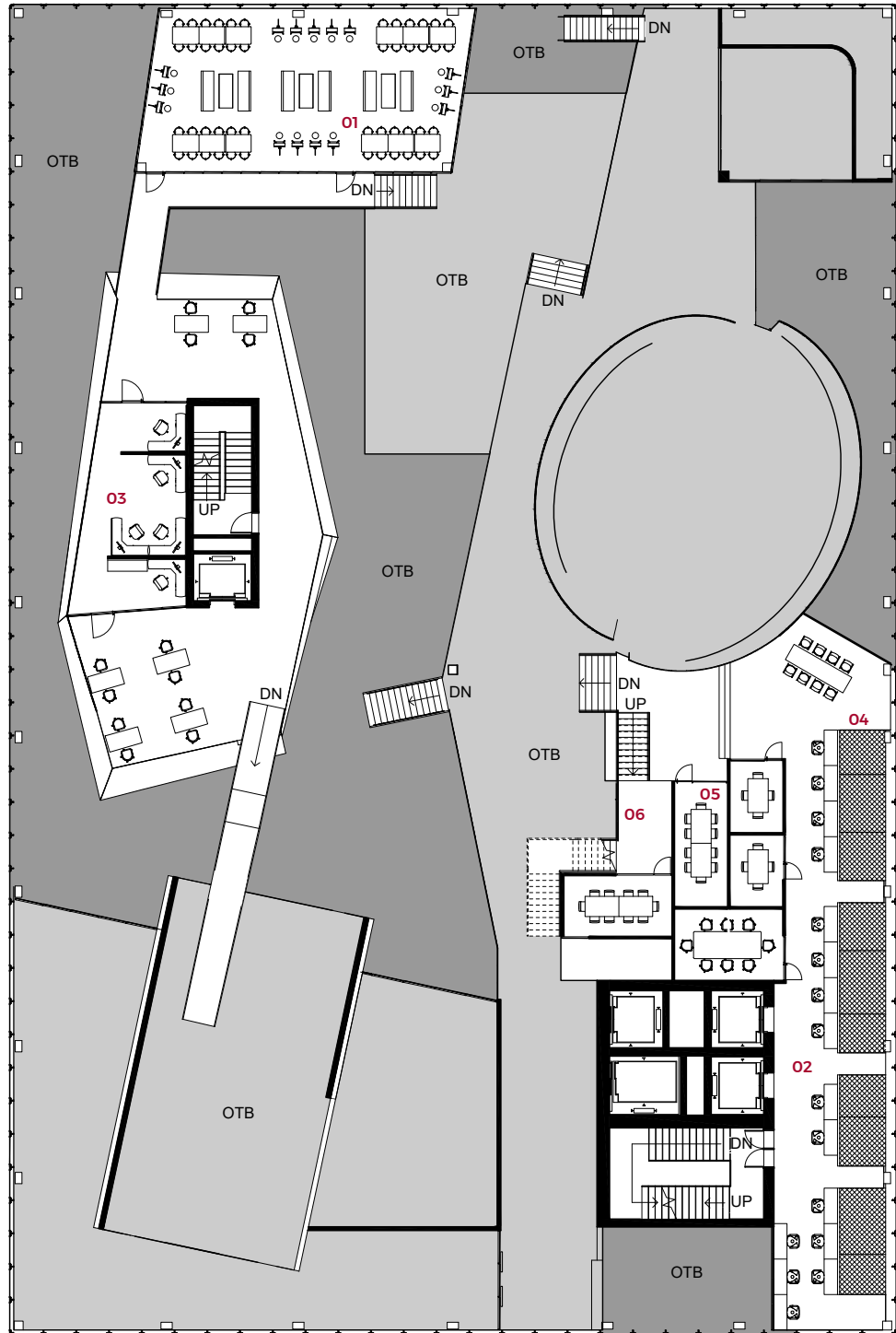
LEVEL 3.5 - 22 575 mm

FIGURE A.7 Level 3.5 floor plan of the addition

N

0   2   4   8m
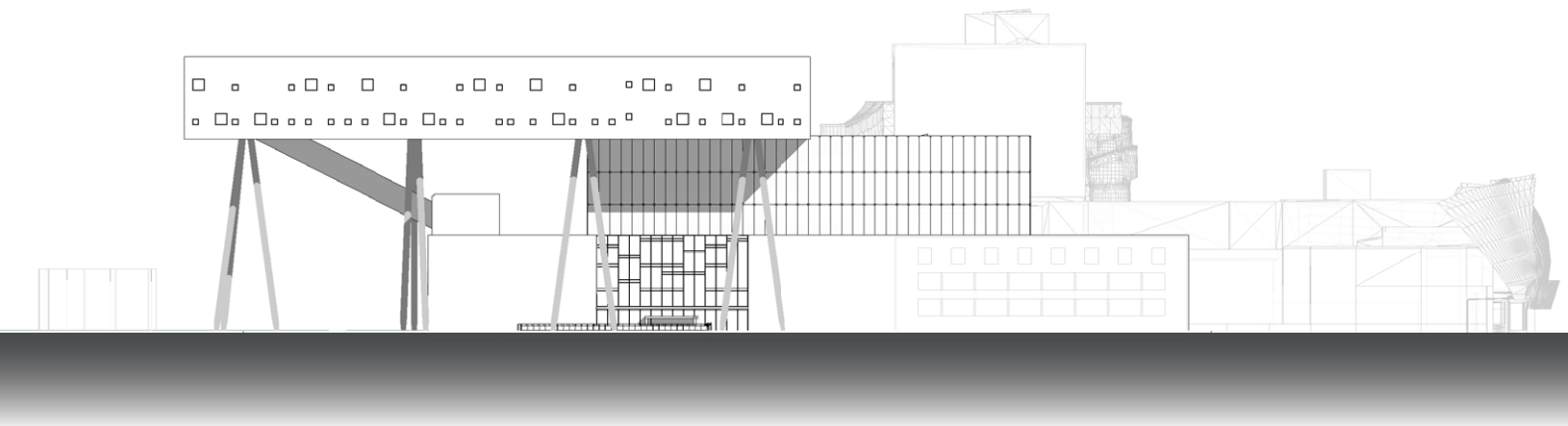
FIGURE A.8 East elevation
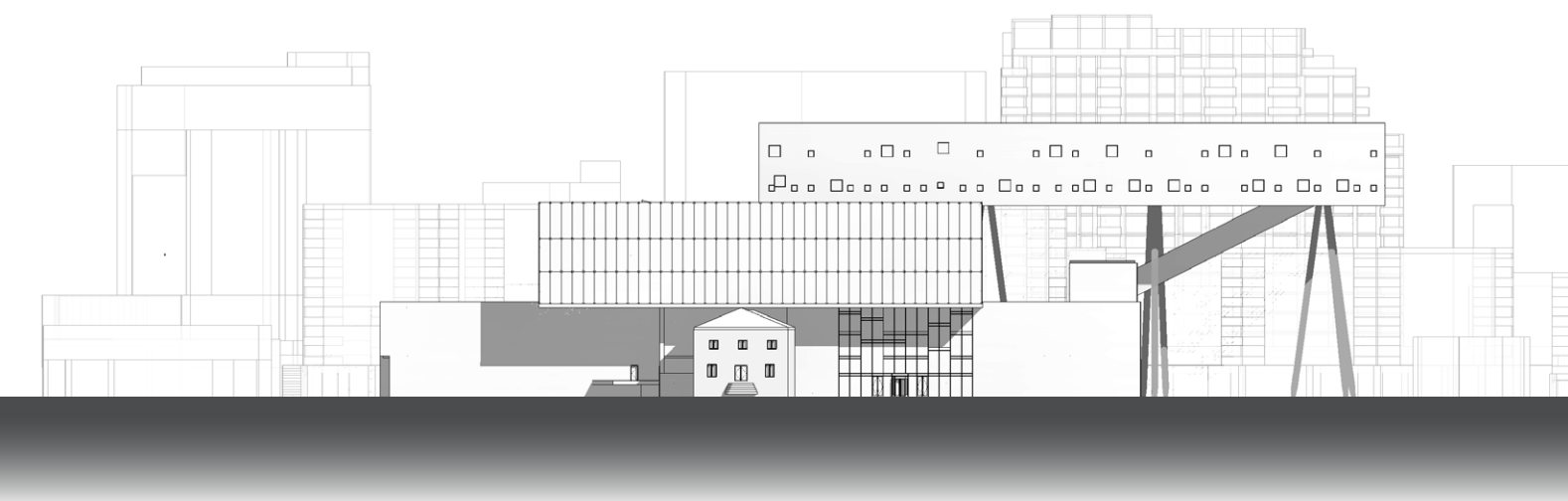
FIGURE A.9 West elevation
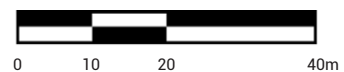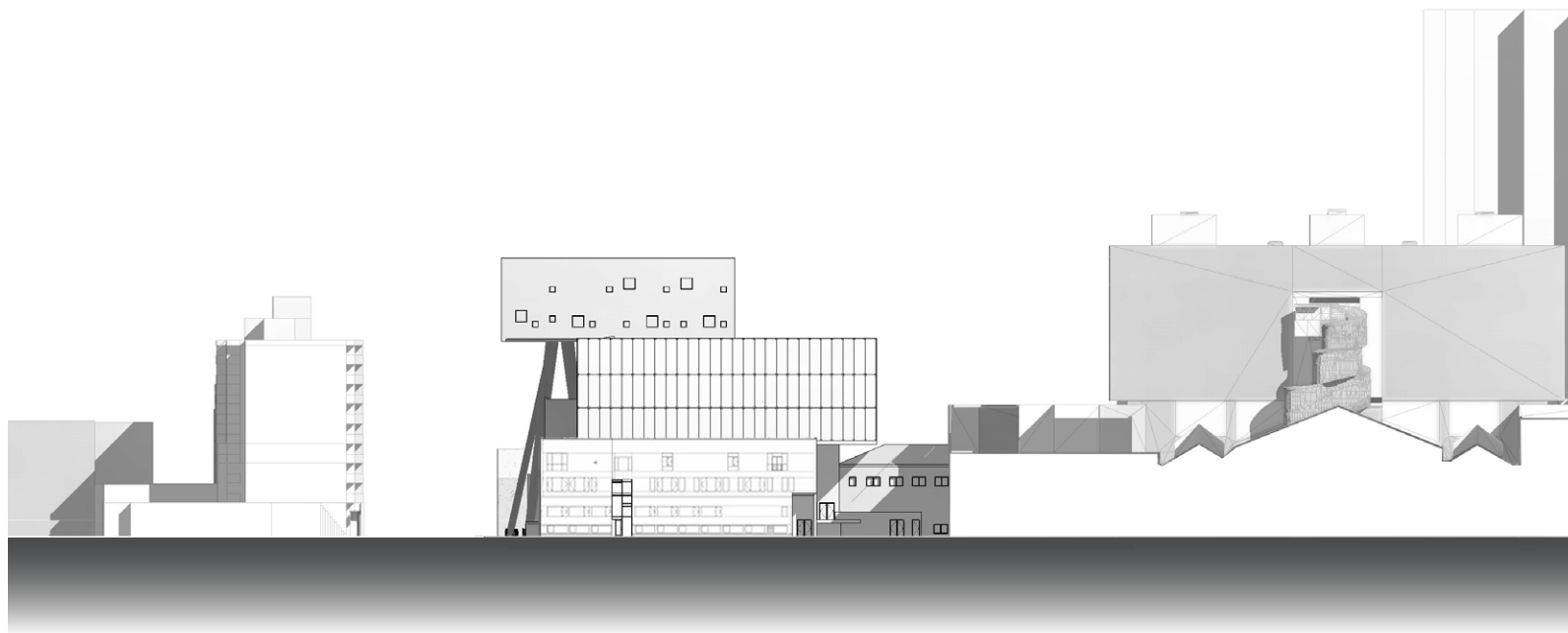
FIGURE A.10 North elevation
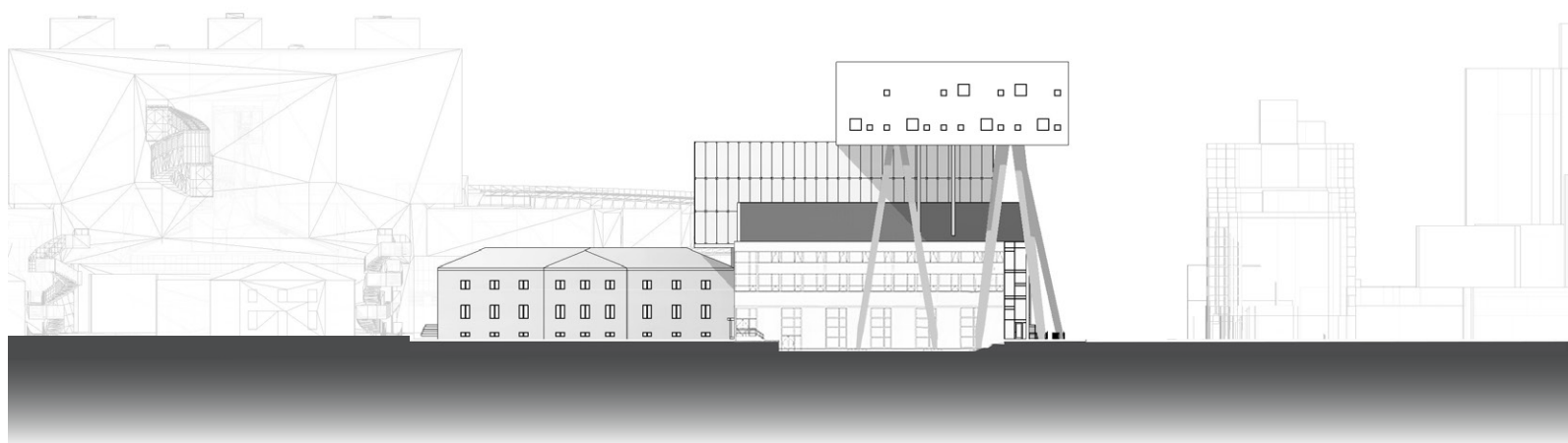
FIGURE A.11 South elevation

0   10   20   40m
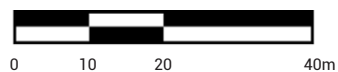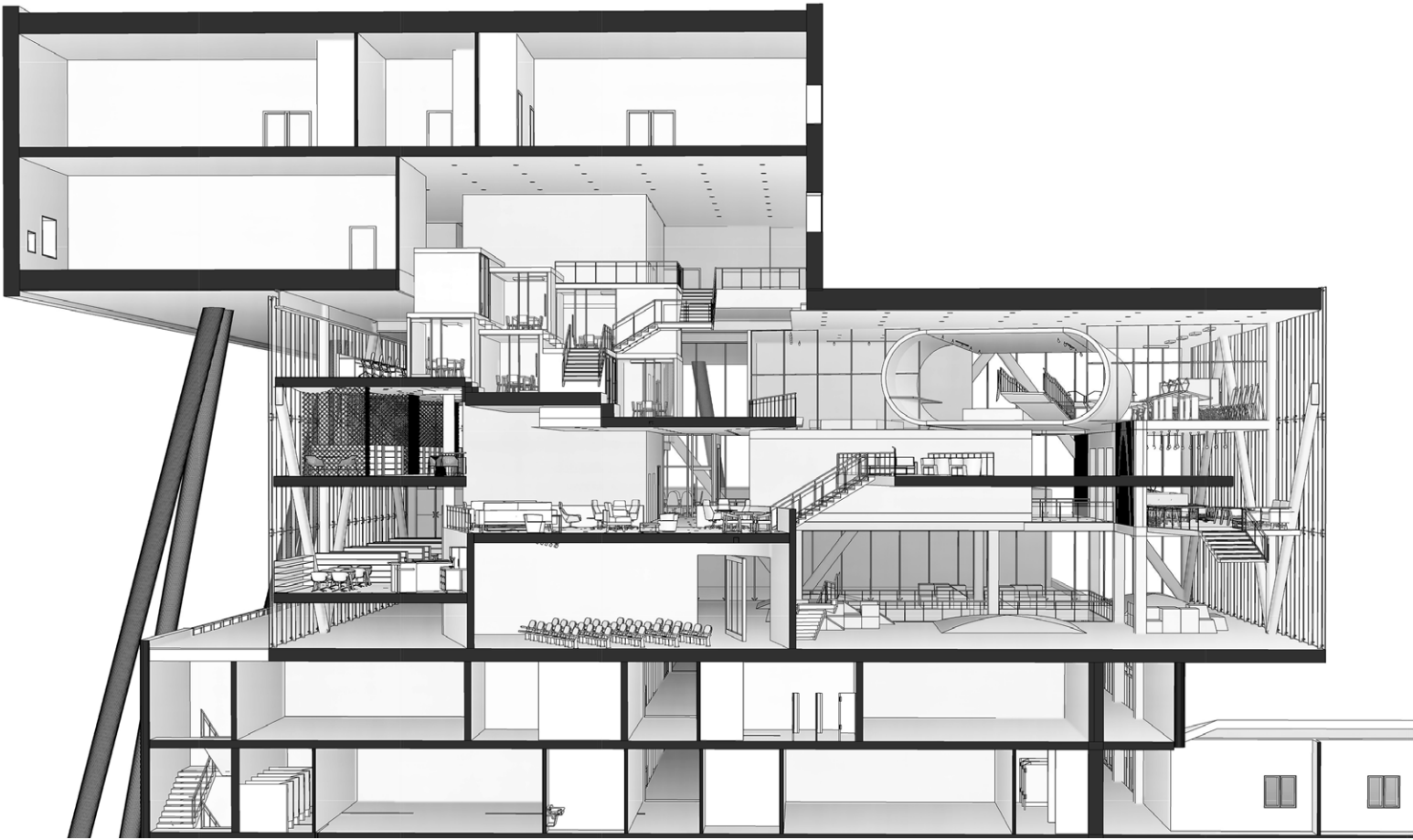
FIGURE A.12 Transverse perspective section 1, showing the offset level condition connecting the spaces in the Incubator

KEY

1   2   3
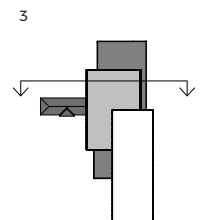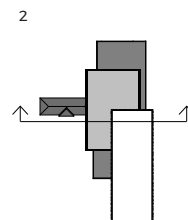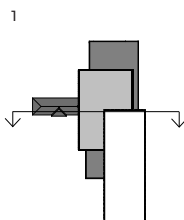
FIGURE A.13 Transverse perspective section 2, showing the integrated vertical circulation through edge conditions
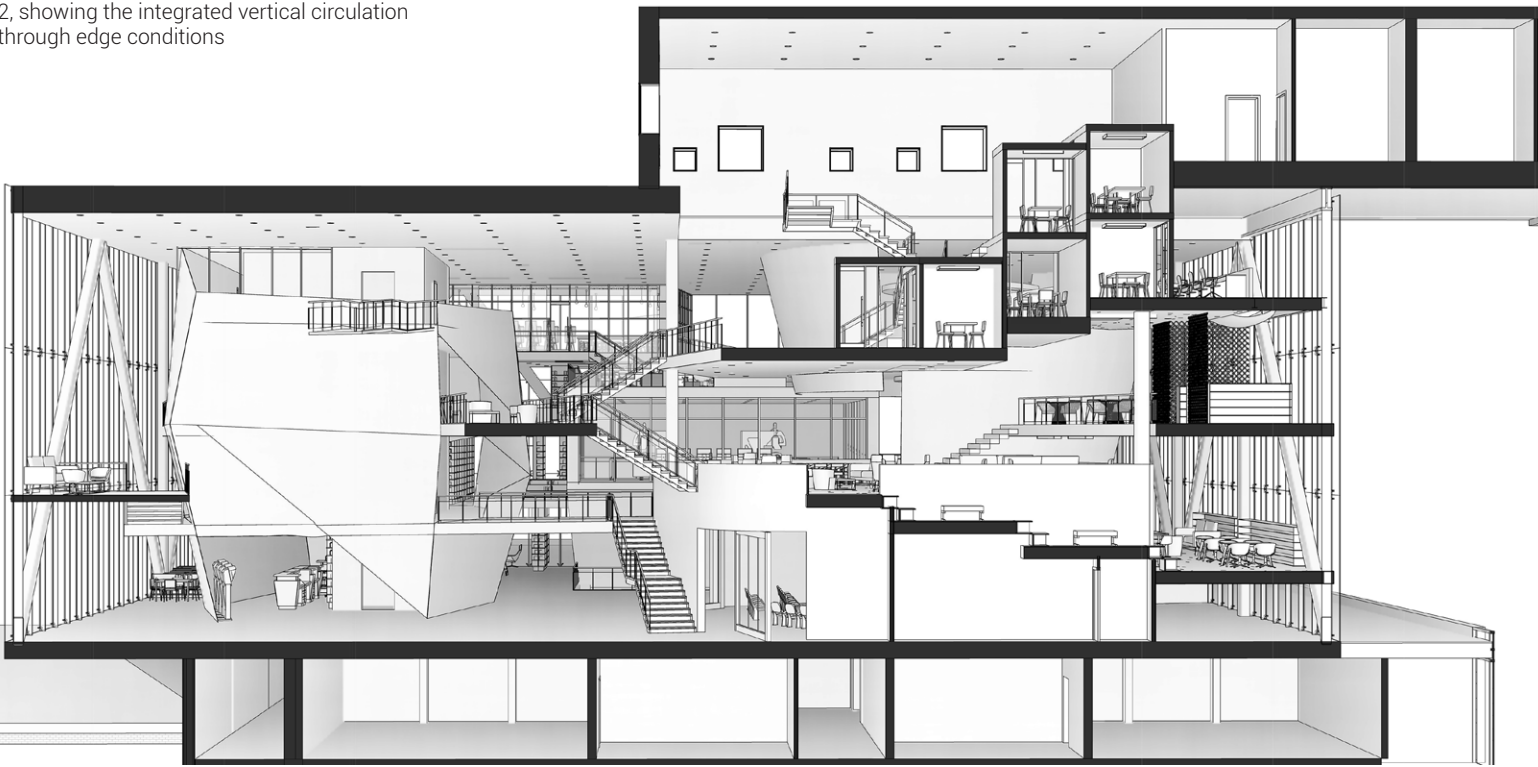
FIGURE A.14 Transverse perspective section 3, showing the range of social scales created throughout the interface

Longitudinal perspective section, showing the different nodes and their connections across the interface

KEY
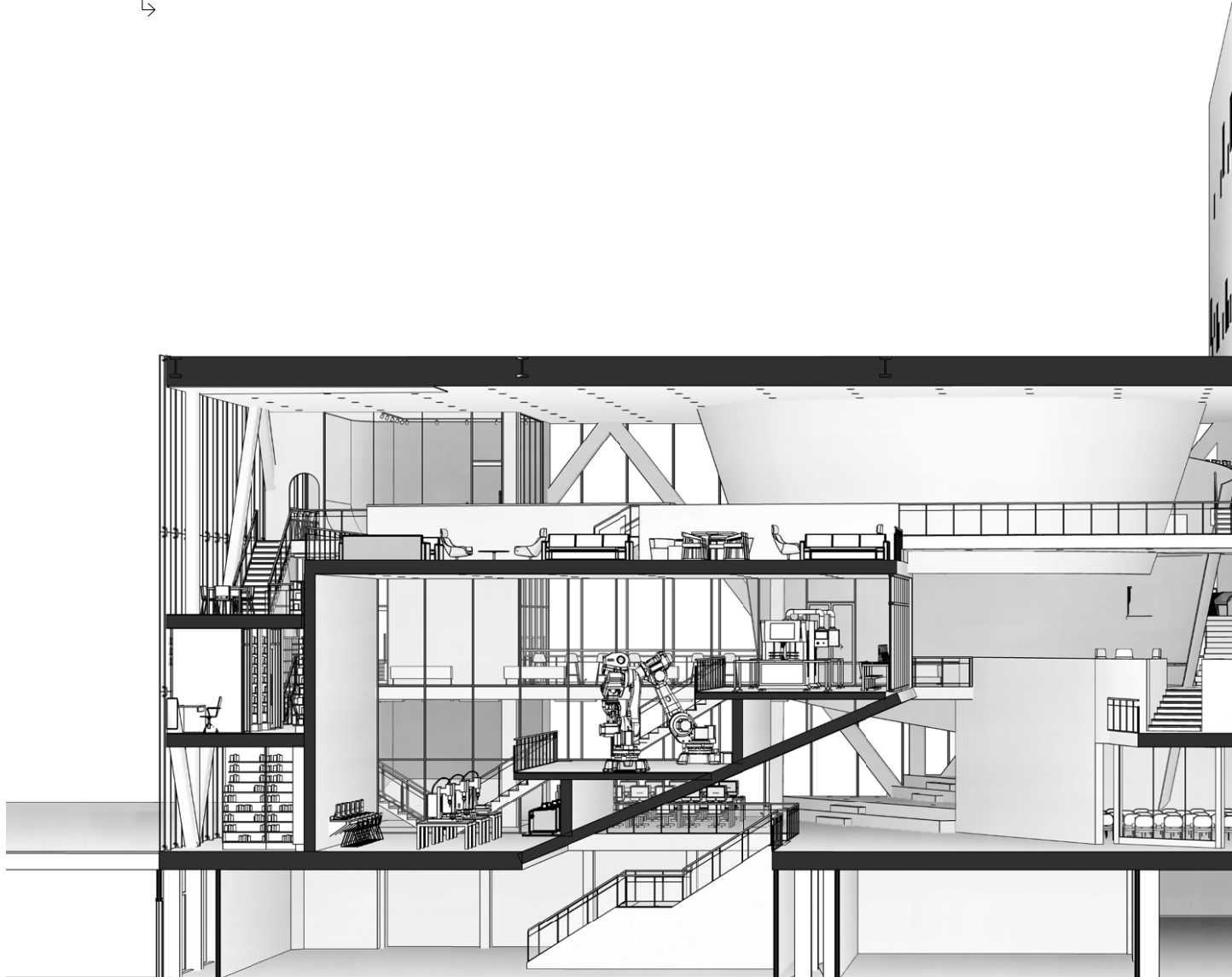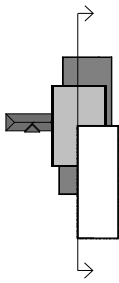
APPENDIX B:
MODEL PHOTOS

FIGURE B.1 Sectional model photo showing the variation of nodal identities

FIGURE B.2 Front view of the sectional model cut through the centre of the Ideas Incubator

FIGURE B.3 Back view of the sectional model showing the spaces against the McCaul Street facade

^ **FIGURE B.4** Sectional model photo showing the threshold between the main building atrium

v **FIGURE B.5** Sectional model photo showing circulation options and edge conditions between nodes

TOP TO BOTTOM

FIGURE B.6 Angled view of the sectional model from the south-west corner.

FIGURE B.7 Angled view of the sectional model from the north-east corner.

FIGURE B.8 Angled view of the sectional model from the south elevation.
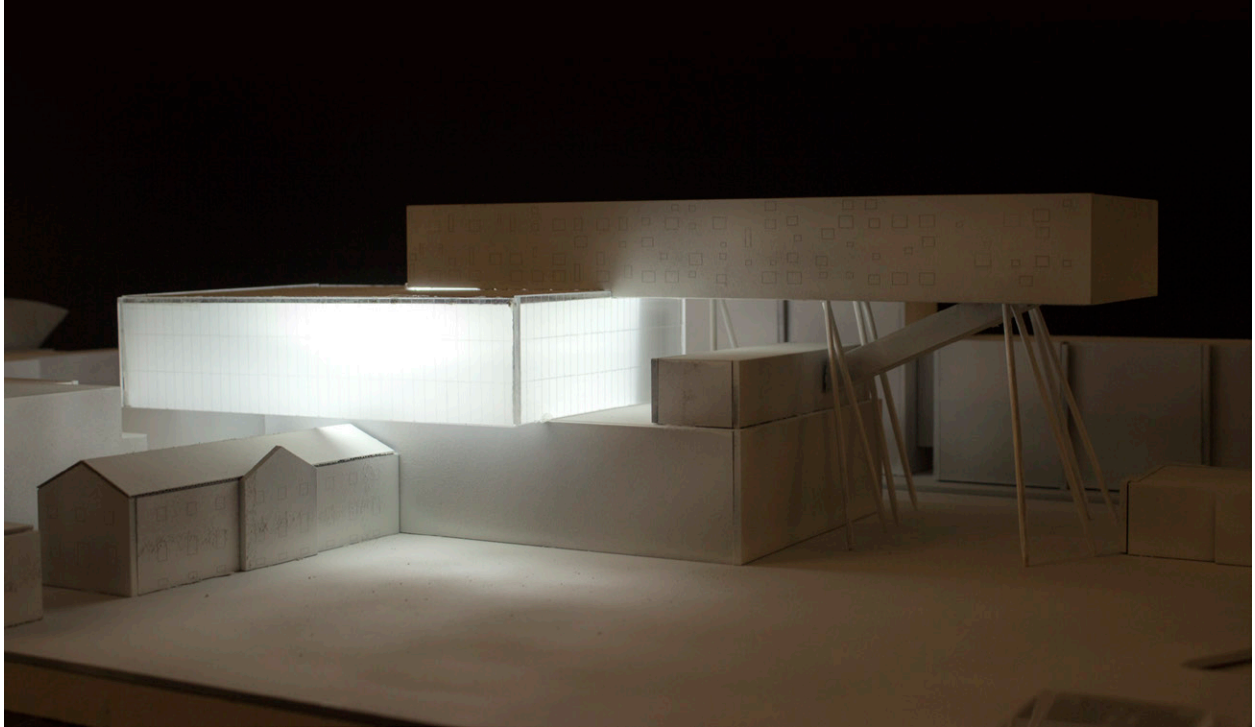
^ **FIGURE B.9**   Site model photo showing the addition from Grange Park

∨ **FIGURE B.10**   Site model photo showing the addition from above
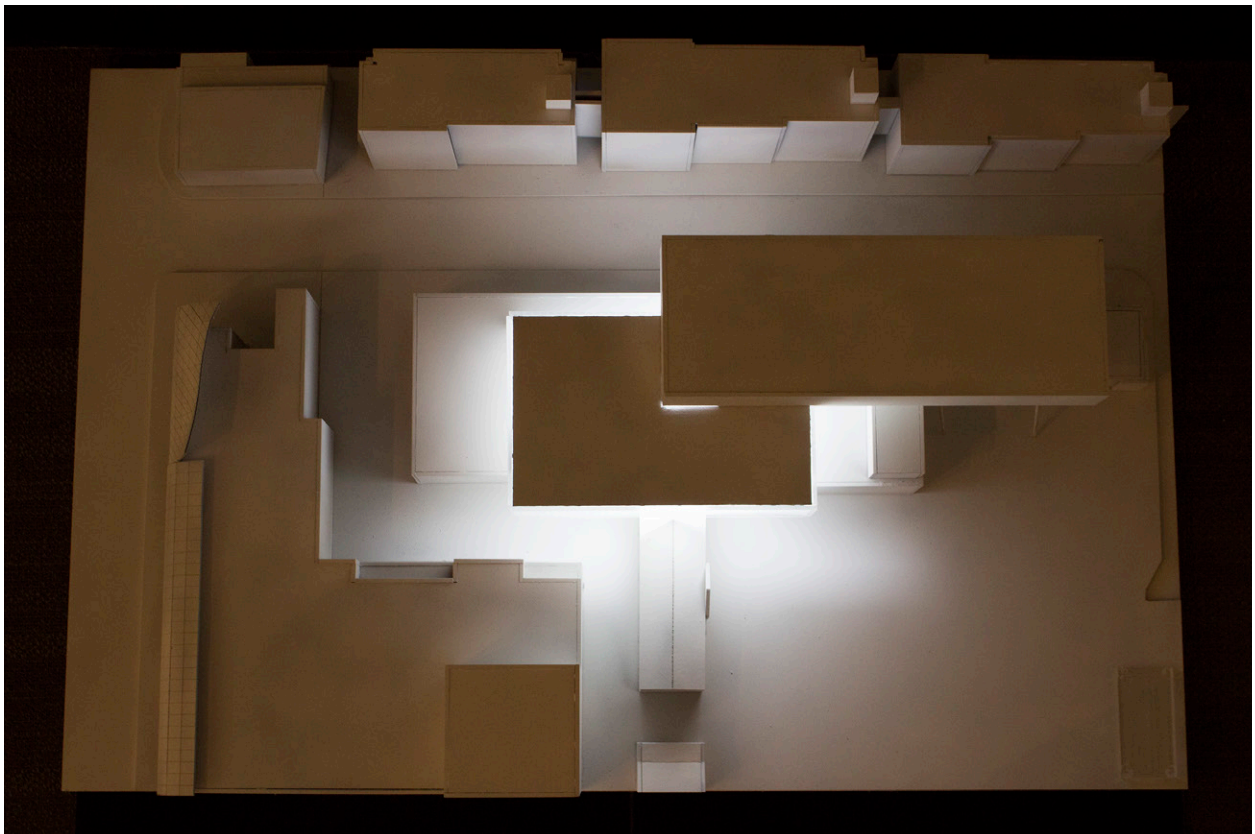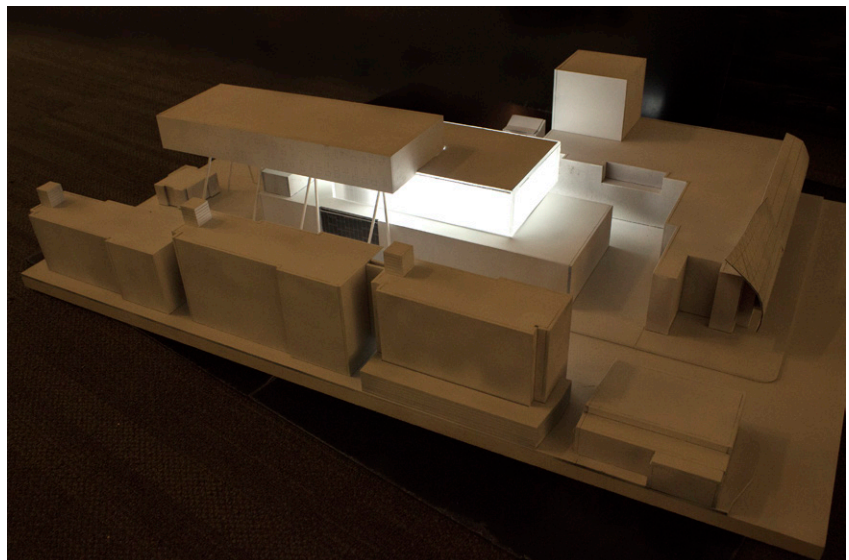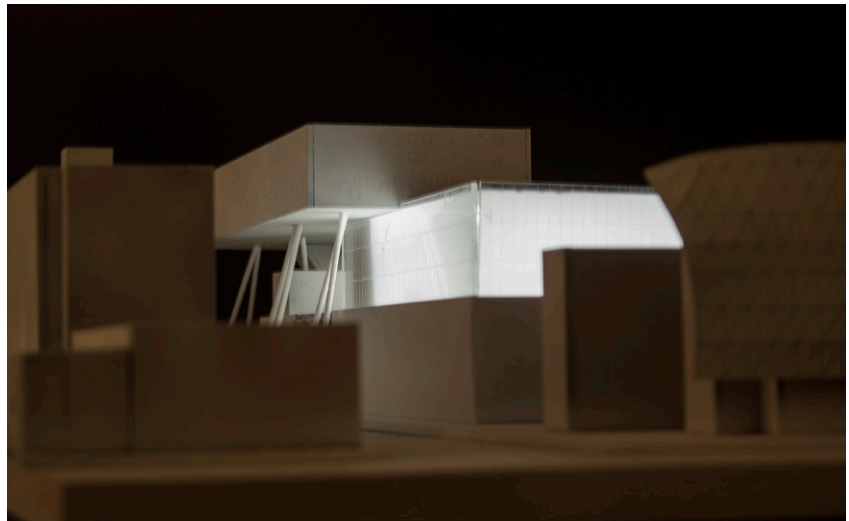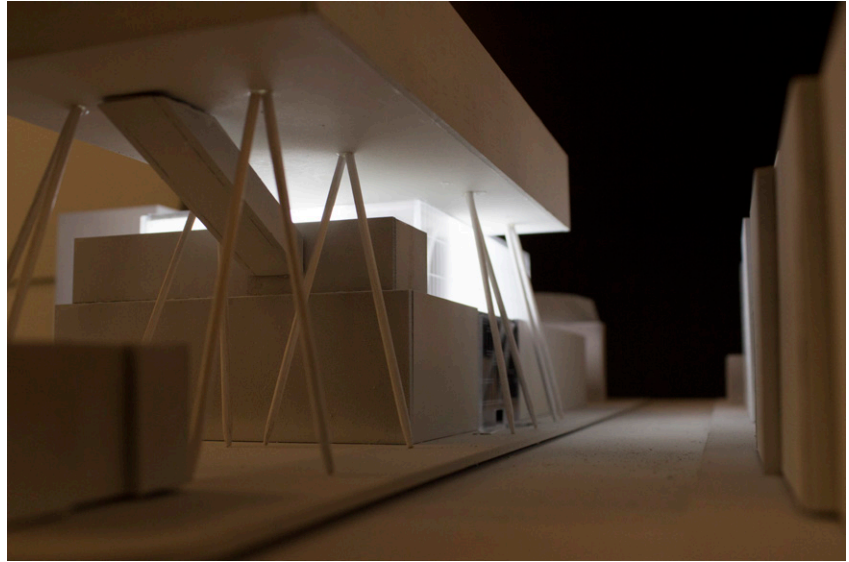
TOP TO BOTTOM

FIGURE B.11   Site model photo taken from the south-east approach to the building

FIGURE B.12   Site model photo taken from the north-east approach to the building

FIGURE B.13   Angled view of the site model showing massing relationships from above

^ **FIGURE B.14** Concept model photo of the relationship between place as image, place as producer, and place as container

v **FIGURE B.15** Concept model photo highlighting the colourful blocks, configured to represent a producer of agency

TOP TO BOTTOM

FIGURE B.16   Concept model photo taken from a corner angle

FIGURE B.17   Concept model photo taken from the longitudinal elevation view

FIGURE B.18   Concept model photo taken from the transverse elevation view

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Agency	the will or means of the user to act.
Ambient	relating to an individual's surroundings, particularly involving the more implicit elements of the surrounding environment.
Asynchrony	the state of disconnectedness in both time and place that is a result of the despatialization and temporality of 'network space'. The concept is believed to have diminished the importance of rigid frameworks of universal and linear time.[1]
Behaviouralism	advocacy of or adherence to a behavioral approach to social phenomena.[2]
Commonality	the state of sharing features or attributes.[3]
Content Sharing	the sharing of creative work, resources, and general activity, usually mediated by devices.
Cultural shift	a change in the ideas and values of a particular society as a result of a progressive movement. This thesis recognizes the cultural shift that privileges the individual in contemporary Western culture as a result of the digital age.
Digital Native	members of the generation that grew up with ubiquitous digital devices and are therefore highly predisposed to virtual interactivity.[4]
Digital Presence	the identity and actions of an individual carried out by the means of computational networks.
Network	a system of interconnected people or things that, when in conjunction, act as parts to a whole.
Disposition	(1) the inherent qualities of atmosphere and character. (2) the way in which something is placed or arranged, especially in relation to other things.[5]

GLOSSARY OF TERMS

In this thesis, disposition extends to both of these definitions with (1) referring to content and (2) referring to context.

Ecology   the relationship of individuals to one another and to their physical surroundings. See interface.

Edge Condition   the spatial relationship between two nodes.

The Individual   of or for a particular person[6]. In this thesis, the individual does not refer to identifiable respective persons but rather the concept of potential subjective experiences unfolding for different individuals within one architectural framework.

Institution   an organization founded for a religious, educational, professional, or social purpose.[7]

Intentionality   "intentionality counters behaviouralism with a concern for attitudinal or perceptive states that need not result in over actions, or that at least precede actions."[8]

Interface   a correlational term used in reference to the architectural structure versus the agency of an individual experiencing it.

Network   a group or system of interconnected people or things[9]. In this thesis, the term network attends to both the social network of people as well as the network of spaces that encompass it.

Network Connectivity   the design consideration focused on accommodating the simultaneity of different networks. It evaluates how the networks act both independently (intra) and between one another (inter).

Persistent Structures	architectural works continuing to exist or endure over a prolonged period. This term suggests a sense of permanence as opposed to pop-up, installation, or momentary trends in architecture.
Opportunistic Junctures	designed areas that connect multiple nodes to aid in the narrative selection of the user.
Pervasive Connectivity	the idea that almost all humanity is connected via the internet grid and ubiquitous digital devices.
Place	a site that is subject to respective interpretations based on physical, personal, social, and cultural appropriations[10]. This term is used as defined by theorist Yi Fu Tuan and is further explored in Chapter 2.
Re-mediation	to mediate again. Revisiting the architecture can re-mediate the experience of an individual with respect to their notions of place.
Rhythm-analysis	refers to the analysis fo patterns that arise wherever there is an interaction between a place, a time and an expenditure of energy.[11]
Shifting Narratives	a design consideration that takes into account the unfolding of multiple subjective experiences within an architectural work. It specifically focuses on the circulation and sectional experiences of the users as they traverse the various zones of the building.
Space	the objective characteristics of a site that can be described with universal understanding[12]. This term is used as defined by theorist Yi Fu Tuan and is further explored in Chapter 2.
Simultaneity	the situation of being in the same place and time as another person, creating the possibility of a happenstance encounter.
Structure	the arrangement of and relations between the parts or elements of something complex[13] i.e. the architectural arrangement of space and form within the governing institution.
Ubiquity	the anytime anyplace principle.
Ubiquitous Digital Devices	personal computing devices that appear to be ever-present in contemporary Western society (e.g. smart phones, laptops, tablets etc.).
Virtual	being on or simulated on a computer or computer network.[14]

ENDNOTES

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