

The Unbounded School

Education Beyond the Walls

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Public education has long been a tool for state authorities to establish and indoctrinate societal moral and civic standards, a stance that has shifted in modern society. In Canada, provincial public education systems have undergone a series of reforms in the last quarter century in response to a competitive globalized world where data driven results, efficiency and performance are the central concerns. Education has become a tool to indoctrinate standards rather than a tool to liberate the mind. Evidence of standardization by ways of institutionalized schooling is visible in the architecture of schools. The resulting layers of material boundaries as well as layers of bureaucratic protocols dissociate the school from society. This thesis seeks to challenge the intellectual and physical boundaries surrounding the architecture of education and asks: to whom does the school belong? And whom does the school serve?

Through Hannah Arendt's critical essay on modern education for mass society and Paul Goodman's social criticism on the organized system and its effect on the youth of his generation, this thesis attempts to redefine the process of education as an emancipatory, life-long process for its students as well as a civic and collective responsibility for society. For education to become a means of emancipation, a school must become a material supporter to its students and teachers in their pursuit of spatial agency over their learning environments. The architectural exploration aims to reframe the design proposal for an urban high school in Toronto as an educational network that uses the city's existing infrastructure as an extension of the school. George Baird's architectural conditions of publicness provide the theoretical framework to unpack the implications of publicness in the role of education. The Unbounded School begins with a radical reconception of spatial boundaries that entangle the school with the city and education with the community. Ultimately, the school returns to the students and to the city, and the essence of education returns to its public and emancipatory mandate.

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Dedication

To all the teachers and mentors who have taught me the value of learning.

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Introduction

Our current education system is in crisis: a crisis brought on by the way we define education, and a crisis eminently visible in the resulting designs of our schools. Crises are however opportunities to rethink and challenge what we have perhaps become complacent to. Moments of crisis are the birth of hope, resilience, creativity and will.¹ The crisis of our current education system is not one of student performance, but one of purpose and motivation behind our collective understanding of education. The thesis begins at this underlying foundation, by challenging the definition of education and what that definition means for students going through the system. In the Foreword to Paulo Freire's *Pedagogy of the Oppressed*, Richard Shaull wrote that “education either functions as an instrument that is used to facilitate the integration of younger generations into [...] the present system and bring about conformity *or* it becomes ‘the practice of freedom,’ the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of the world.”² How we interpret the role played by education in our society matters, and Shaull's statement points to the crossroad education currently faces: educate to conform or educate to transform. While a conformist approach views education as the process of acquiring knowledge through institutionalized schooling, a focus on emancipatory education recentres the process around the ability of students to question and challenge the existing system.

The Ontario Act of Education defines in its preamble, “the purpose of education is to provide students with the opportunity to realize their potential and develop into highly skilled, knowledgeable, caring citizens who contribute to their society.”³ While this written purpose remains ambiguous as to whether it aligns with the conformist or transforming side of Shaull's proposal, what we see in policy are systematic revisions that prioritize performance assessment, like standardized tests, over students' development into caring, active citizens. The disjunction between the system's actions and intended purpose is a part of the current problem in education with widespread implications on “student-teacher relationships, engagement with the curriculum, and levels of

1 Sébastien Turbot, “La crise de l'éducation,” TEDxLaRochelle, January 4, 2017, video, 15:29, https://www.youtube.com/watch?v=MH_hyh6vHoQ

2 Richard Shaull, foreword to *Pedagogy of the Oppressed*, Paulo Freire (New York: Continuum, 1993), 16.

3 Education Act, R.S.O. 1990, c. E.2, c. 25, s. 1 (2009).

motivation” of students.⁴ Through Hannah Arendt’s critical essay on modern education for mass society and Paul Goodman’s social criticism on the organized system and its effect on the youth of his generation, this thesis attempts to redefine the process of education as an emancipatory life-long process. When students can think critically and participate in the development of their own education, this is emancipation.

The school environment, itself a physical embodiment of the societal value placed on education, reinforces the conformist approach and limits opportunities for students to actively participate in changing the system. The political and social intentions embedded in the education system are revealed to us through the school’s architecture. If policy and architecture both point to the conformist approach, can students perceive education as a means for the practice of freedom? This leads to the second investigation: the impact of the school environment on students’ conception of space, ownership, agency and subsequently their role in the creation of their educational environment. The spaces that public education occupies in our city are behind closed doors and on private properties. Schools embody these boundaries within their walls, fences and locked doors. The opacity of the education system is built up through its layers of bureaucratic protocols as well as its layers of material boundaries dissociating the school from society. We need to ask: to whom does the school belong? Whom does school serve? These questions are central to a radical analysis of education and of the architecture of public schools.

Inspired by the approach of an alternative high school in Philadelphia that broke conventional education models by using the city as a school and the community as teachers, the thesis proposes a similar typology for an urban public school in Toronto. The intention is to reintroduce public education back into the public spaces of the city. This experimental pedagogy was first seeded from a collection of insights by Paul Goodman:

4 A disjunction that Lana Parker discusses more in depth in her publication: Lana Parker, ‘Creating a Crisis: Selling Neoliberal Policy Through the Rebranding of Education’, *Canadian Journal of Educational Administration and Policy*, no. Issue 183 (9 August 2017): 48.

“On the one hand, this City⁵ is the only one you’ll ever have, and you’ve got to make the best of it. On the other hand, if you want to *make* the best of it, you’ve got to be able to criticize it and change it and circumvent it... It seems to me *prima facie* to use the Empire City itself as our school. Instead of bringing imitation bits of the City into a school building, let’s go at our own pace and get out among the real things. [...] Fundamentally our kids must learn two things: Skills and Sabotage. Let me explain.

We have here a great City and a vast culture. It must be maintained as a whole; it can and must be improved piecemeal. It is relatively permanent. At the same time it is a vast corporate organization; its enterprise is bureaucratized, its arts are institutionalized, its mores are far from spontaneity: therefore, in order to prevent being swallowed up by it, or stamped on by it, in order to acquire and preserve a habit of freedom, a kid must learn to circumvent it and sabotage it at any needful point as occasion arises.”⁶

Goodman’s pedagogical vision used the city as the primary educator, the teacher as a mediator and the students as the instigator of social change. The city comprised of its built and human resources would have the collective task of introducing the world to the students by offering their spaces and their guidance. The teacher, as the mediator, would negotiate the innate curiosity and energy of youth with the mandate to preserve as well as challenge aspects of society. The students, as active members of society, would claim responsibility towards their city by choosing, occupying and appropriating spaces outside the classroom. In Goodman’s scenario, a physical school that epitomizes the institution is restrictive and should be discarded. However, the city is raw and its complexity overwhelming. It is more productive to borrow the essence of a city and bring it into our conception of what can consist of a school. In that sense, can the spaces for education become, along with teachers, a mediator between the city and the students, a training ground for the city that acts as a place of refuge for experimentation and contemplation?

5 The Empire City that Goodman is referring to is New York City.

6 Paul Goodman, *The Grand Piano*, (New York: Colt, 1942), 48.

The design components of this thesis focus on the secondary (grade 9 to 12) level of education, and the reasons for this decision are threefold. First, education at the kindergarten and primary level have received significant attention by architects and spatial designers in recent years. Secondly, when addressing public education and access to education, compulsory attendance⁷ ends around grade 12, while higher education in Canada is not a requirement and is still a privilege largely limited by socio-economic factors. Finally, the tension between the adult world and the youth is at its peak in the secondary cycle of education. From a legal viewpoint, a person under the age of majority is considered a dependent with no rights of ownership. Hence, in this thesis *childhood* is used to designate the period between infancy to adulthood, as per the Canadian legal system. Youth, adolescents and teenagers are used interchangeably in the following text.

The first chapter, *the school in theory*, builds a theoretical framework on which this thesis will challenge the conventional meaning and purpose of education and its built form—the school. It asks: how has the school environment become so detached from the common world? How have students and children been disenfranchised from their environments, therefore their cities?

Centering the investigation on the school and its contextual relationship with the city, this often neglected, yet interdependent relationship between the school and the city can be understood through three paradigmatic scenarios: the school in the city, the school as the city and the school is the city. The following chapters examine each paradigm and how each of these can inform a different design perspective.

The second chapter, *the school in the city*, looks closely at the evolution of the school's connectivity to the rest of the urban fabric to see how the urban morphology is reflected in the school typology and in turn, how they reflect a societal attitude towards youth and their education. This chapter draws a visual timeline of the changes school typologies have undergone in the last century.

⁷ The age varies between provinces in Canada. In Ontario, education is mandatory until the age of 18.

The third chapter, *the school designed as the city*, proposes a series of design considerations stemming from the idea of ‘borrowing the essence of the city’ to promote an education that is truly public. Using George Baird’s examination of publicness through architectural conditions as a design strategy, *the school designed as a city* applies those conditions of publicness into a design proposal for a core unit in the educational network of the Unbounded School.

The design portion of this thesis forms a conceptual exploration into how this paradigm shift is defining the boundaries of a school—where are the limits of school property, what is a classroom, who is the teacher and when is the school open—can change how we fundamentally understand education’s role in society. The Unbounded School is an educational network with an architecture and pedagogy that begin with a radical reconception of spatial boundaries. Rather than proposing set programmatic functions within the school, a spectrum of spatial conditions—from private to public, loud to quiet, bright to dim, connected to isolated, etc.—is imagined to accommodate for various learning environments and to offer students and teachers spatial ownership over their school. Spatial ownership in this project operates on the basis of right to use and is about agency over space rather than property possession. The proposed design positions the architecture and the pedagogy with the emancipatory nature of education to inch closer to an environment that promotes the practice of freedom.

The concluding chapter, *the school is the city*, revisits the city as an educator through Paul Goodman and Colin Ward’s aspiration for education and highlights the experimental school of the Philadelphia Parkway Program. The chapter summarizes the design of the Unbounded School as a network system that connects the school with the city through opportunistic occupation of the adjacent urban environment. When pedagogy starts with space through the act of reclaiming public space for education, *the school is the city* becomes a site for larger social change.

The School in Theory



In her essay “Crisis in Education,” Hannah Arendt unpacked the essence of education and the role education plays in our modern civilization. According to Arendt, the essence of education lies in its task to transmit knowledge and responsibility to the next generation with the aim of preparing them for the task of the maintenance and renewal of our common world. Arendt summarized that education is “where we decide whether we love our children enough not to expel them from our world and leave them to their own devices, nor strike from their hands their chance at undertaking something new, something unforeseen by us, but to prepare them in advance for the task of renewing a common world.”¹ Her definition not only exposed the importance of education in the act of conservation of our society but also reminds us that education is a civic and collective responsibility.

Arendt argued in her essay that the crisis in education is the result of three common assumptions about education.² The first assumption is that children are capable of forming an autonomous world of their own and that it should be left to them to self-govern. The second assumption is that the act of teaching is the most valuable skill that a teacher can possess, even more valuable than their expertise in the matter they are employed to teach. The last assumption is that learning can be substituted for the act of doing. In sum, the collective renouncing of responsibility for children, loss of authority and false purpose for learning are the cause of the crisis in education. While Arendt made a compelling argument about the common misconceptions about education, she provided few applicable changes to the system. Furthermore, her adamant stance on maintaining a clear distinction between the intellectual capabilities of adults and children justified an insular environment under the pretext of protection: “the child against the world, the world against the child, the new against the old, the old against the new.”³

Following that stance, the school becomes an indispensable institution that forms the threshold space between the protected and unprotected worlds:

1 Hannah Arendt, *Between Past and Future: Six Exercises in Political Thought*, 3rd ed. (Cleveland, Ohio: The World Publishing Company, 1966), 13.

2 Arendt, 5.

3 Arendt, 11.

“Normally the child is first introduced to the world in school. Now school is by no means the world and must not pretend to be; it is rather the institution that we interpose between the private domain of home and the world in order to make the transition from the family to the world possible at all. Attendance there is required not by family but by the state, that is by the public world, and so, in relation to the child, school in a sense represents the world, although it is not yet actually the world.”⁴

Though Arendt argued that politics should not interfere with education⁵, the inescapable reality of public education for mass society is that it requires the state to be involved, rendering education a public and political matter. It is once again this ambiguous stance about education’s position at the fringe of home and the world that points mass education to the same crossroad as mentioned by Richard Shaul.

Conventionally, our education system is understood to be ‘public’ only in a narrow socio-economic sense of the word—that is, publicly funded. In this thesis, the definition of public education is explored in its fuller and wider spatial sense as part of the public world, one that reflects the dichotomy mentioned in Arendt’s previous passage. In *The Fall of Public Man*, urban sociologist Richard Sennett considers the first historical use of the word ‘public’ to mean ‘common goods of society.’ He expands on how the definition of the word was later changed to mean the opposite of ‘private.’ Our modern understanding and use of the word are largely consistent with this second definition creating a dichotomy between ‘public’ and ‘private,’ especially with regards to space. Visibility becomes a pivotal point in the relationship between these two conditions: public as “open to the scrutiny of anyone,” and ‘private’ as “sheltered region of life defined by one’s family and friends.”⁶ Through countless sets of imposed boundaries, physical and intellectual, the divide between the object of education and its bureaucratized protocol is further deepened and is preventing education from being truly public.

4 Arendt, 9.

5 Arendt, 11.

6 Richard Sennett, *The Fall of Public Man*, 1st ed. (New York: Knopf, 1977), 16.

Reflecting on Arendt's criticism of modern education, is the protective nature of education the reason behind the detachment of the school from the common world? How has it caused the youth to be disenfranchised from their cities and students from their schools? More importantly, is architecture acting as a support to the publicization and emancipation of education or does it form a part of boundary limiting those actions? The following segments investigate the failures of our current education system through two sets of imposed boundaries: an intellectual boundary and a physical boundary that structures our current approach towards the school and its organized education system.

The Intellectual Boundaries

In the first instance, the intellectual boundaries imposed onto students by the current education system are tied to the acceptance that knowledge distribution is like any other goods and services in that it can be capitalized. The capitalization of knowledge implies that the teacher, as a figure of authority on knowledge, can control at what instance and under what condition knowledge can be transmitted to the students. In a classroom setting, withholding knowledge eliminates opportunities for self-directed learning and critical thinking. This traditional pedagogical model is what educational theorist Paulo Freire called a 'banking model of education,' where students are treated like empty vessels who are only capable of acquiring knowledge if they are being explicitly taught, like 'empty piggy banks,' they wait for knowledge to be deposited.⁷

The impact of critical pedagogy, a philosophy of education founded by Freire in the 1960s, can be unpacked and reinterpreted in our contemporary educational climate. Initially, this paternalistic teacher-student relationship places the student as the oppressed and the teacher as the oppressor. Students are victims of self-depreciation, a result from internalizing the opinions of their teachers on them.⁸ This cycle of self-depreciation starts by students who are not convinced that their reasoning and knowledge is valid. An attitude as such then further inhibits their critical thinking leading to a conformist mentality, an attitude that

7 Paulo Freire, *Pedagogy of the Oppressed*, New rev. 20th-Anniversary ed (New York: Continuum, 1993), 53.

8 Freire, 45.

extends to their life outside the classroom. This perpetual self-discredit promotes what Freire called a submergence into a ‘culture of silence.’ However, in a highly institutionalized and bureaucratized public education system like Ontario’s the relationship of oppressed and oppressor need to include the system itself in this power dynamic. In this scenario, teachers along with students are together oppressed by the bureaucracy of the education system.

The system is maintained through a tight and insular set of parameters, creating a simulation for learning, an environment deprived of real consequences and real interactions. The matter of what is being taught and to whom, is a common question posed by many educational theorists. However, to quote Judith Suissa, professor of Philosophy in Education at University College of London and author of *Anarchism and Education*, the proper question should be by whom is the matter being taught?⁹ By raising the question of who should embody the role and purpose of the teacher, we are fundamentally questioning the legitimacy of a centralized government-controlled education system, and if there should be such a system.

Political thinker and social critic, Paul Goodman blamed the ‘indirectness’ of our society’s mode of proceeding to be its detrimental flaw.¹⁰ Though his comment referred to modern society at large, I can see how this ‘indirectness’ exists in the education system as well. He wrote, “we live increasingly, then, in a system in which little direct attention is paid to the object, the function, the program, the task, the need; but immense attention to the role, procedure, prestige, and profit.”¹¹ For Goodman, our society’s inefficiency to address real public needs was due to the fact that the system did not reward people who address the real object or source of the problem. Rewards are for those who follow protocol, profit targets, upholding prestige and remaining in clearly defined roles. The ‘blurring of the object,’ as Goodman described it, makes it easier to monitor and standardize outcomes, from test scores to graduation rates. Standardization becomes a by-product of the attention placed on role, procedure, prestige and profit.

9 Judith Suissa, *Anarchism and Education: A Philosophical Perspective*, Routledge International Studies in the Philosophy of Education (London ; New York: Routledge, 2006), 5.

10 Paul Goodman, *Growing Up Absurd: Problems of Youth in the Organized System*, 4th ed. (New York: Random House, 1960), xii.

11 Ibid.

In North America, many educators today would argue that our education system's obsession with standardized testing and conformity in teaching methods started with a competitive need for innovation and technological advancement in an increasingly globalized world.¹² The neoliberal education model places students as human capital to be trained more efficiently to become a competitive resource in the global market.¹³ Pasi Sahlberg, Finnish educator and policy advisor, first mentions the trend of the Global Education Reform Movement when addressing the rise of educational reform starting as early as in the 1980s in Western countries. Sahlberg establishes five main features of these educational reform policies: (1) increase standardization, (2) focus on core subjects with removal of deemed 'superficial' courses, (3) low-risk teaching methods that ensure measurable performance results over alternative methods, (4) use of corporate management models based on national hegemony and economic profit, and (5) implementation of test-based accountability policies like tightened accreditation processes.¹⁴

Starting in the early 90s, the New Democratic Party created a report detailing the need for a public education reform to address the "extreme anxiety about what the future holds for Ontario's children, as well as of stress related to our apparent need to be 'competitive' in a ruthless globalized economy."¹⁵ In 1995, under the leadership of Mike Harris of the Progressive Conservative Party of Ontario, the government responded to the Royal Commission's report and put in place a series of neoliberal education policies that still have ongoing implications in our

12 Zander Sherman, 'Standard Issues: An Alberta Teacher Wants to Liberate Our Schools from the Educrats', *The Walrus*, 21 November 2013; Katrina Onstad, 'Who Gets to Be Gifted? : Kids in the Gifted Program Are Disproportionately White and Affluent. How Streaming Became Another Form of Segregation', *The Walrus*, 19 September 2018, <https://thewalrus.ca/who-gets-to-be-gifted/>

13 Stephanie Chitpin, 'Mike Harris's "Common Sense" Attack on Ontario Schools Is Back — and so Are Teachers' Strikes', *The Conversation*, 21 January 2020, <https://theconversation.com/mike-harriss-common-sense-attack-on-ontario-schools-is-back-and-so-are-teachers-strikes-130190>.

14 Pasi Sahlberg, "Global Educational Reform Movement is here!," *PasiSahlberg.com* (blog), 2012, <https://pasisahlberg.com/global-educational-reform-movement-is-here/>

15 Ontario, ed., *For the Love of Learning: Report of the Royal Commission on Learning* (Toronto: The Commission : Publications Ontario [distributor], 1994). <http://www.edu.gov.on.ca/eng/general/abcs/rcom/full/volume1/introduc.html>

contemporary educational context.¹⁶ The government called for a reform in the education system as it deemed school management—school boards and teaching staff—ineffective and inefficient.¹⁷ Many administrative offices such as the Education Quality and Accountability Office (EQAO), a branch of the province’s Ministry of Education that focuses on mandating teachers and their classrooms to hit targeted performance goals was passed into law. Our government favoured an outcome-based system that puts measuring academic performance as education’s primary target.

Lana Parker, a Canadian researcher in the field of education policy uses the term ‘curriculum of accountability’ to describe the government’s neoliberal agenda for education. She argues policies derived from the ‘curriculum of accountability’ has led the Ontario government to measure and report educational success and achievements exclusively through standardized data for over two decades. The danger of the term accountability is that it “excuses our lack of participation in democratic spaces by offering scapegoats and shallow policy solutions. It connotes a sense of authority: that there is someone to compel action and to punish for failures. It allows citizens to think that there is someone who is supposed to act, to be responsible, and to blame.”¹⁸ The wave of policy reforms under neoliberalism creates an illusion that puts teachers, parents, students and taxpayers under a false sense of security that the government is being held responsible for providing a quality and competitive education system.

In reality, the neoliberal agenda strips teachers of their authority as educators and makes it harder for them to act as mediators for the benefit of students’ development. Echoing Arendt’s call for a collective responsibility towards education, Parker urges the rejection of our current neoliberal model of education for a system that supports the democratic participation of everyone involved including students.

16 Lana Parker, ‘Creating a Crisis: Selling Neoliberal Policy Through the Rebranding of Education’, *Canadian Journal of Educational Administration and Policy*, no. Issue 183 (9 August 2017): 45.

17 Chitpin, ‘Mike Harris’s “Common Sense” Attack on Ontario Schools Is Back — and so Are Teachers’ Strikes’.

18 Parker, ‘Creating a Crisis: Selling Neoliberal Policy Through the Rebranding of Education’, 54.

The Physical Boundaries

In Western societies, the demarcation of spaces for children not only systematically excludes children from the adult world, but also infantilizes children up to the legal age of majority and diminishes their sense of responsibilities as participants of society. Children are seen and understood, under the traditional conception of the socially developing child, as human ‘becomings’ instead of human ‘beings’.¹⁹ If we choose to understand children as complete humans, “a person, a status, a course of action, a set of needs, right or differences—in sum, as social actors,”²⁰ our designed environment should treat them as such. Instead, from an early age, schools are designed to protect children from the world, while at adolescence, these environments are designed to protect us and our world from the youth.

The spaces that public education occupies in our city are behind closed doors and on private properties. Schools embody these boundaries within their walls, fences and locked doors. The embedded political and social intentions behind educational system are revealed to us through its architecture. We need to ask: to whom does the school belong? Whom does school serve? From metal fences around schools to locked doors at 4:00pm sharp, these boundaries are clear indicators that the educational spaces that we have built are not for students to use and inhabit on their own terms. These spaces serve a centralized governmental schooling system. Students have limited access to school facilities, especially outside of school hours and adult supervision. Urban sociologist Ray Oldenburg remarks, “scholastic progress is checked sporadically but the location of the bodies is accounted for several times a day.”²¹ Monitoring becomes the real purpose of compulsory education.

In the current public school system, there is little opportunity for input and engagement from the very society it takes part of. The division between the adult world and the world of the youth is heightened

19 Allison James, Chris Jenks, and Alan Prout, *Theorizing Childhood* (New York: Teachers College, Columbia Univ, 1998), 207.

20 James, Jenks, and Prout, 207.

21 Ray Oldenburg, *The Great Good Place: Cafés, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* (New York : [Berkeley, Calif.]: Marlowe ; Distributed by Publishers Group West, 1999), 278.

between the walls of the school. The system actively segregates the two worlds under the pretext of protecting the innocence of the adults-to-be from the politics and complexity of the real world. Arendt would argue that this separation is necessary to some degree. The newness of each generation brought onto this world is, according to Arendt a responsibility of protection, as she further explained that “[...] the child requires special protection and care so that nothing destructive may happen to him from the world. But the world, too, needs protection to keep it from being overrun and destroyed by the onslaught of the new that burst upon it with each new generation.”²² However, it is exactly this depiction of this innate ‘savagery’ in youth that encourages our society to further drive a separation between youth and adults. This annoyance of teen hooligans and their misbehavior is dealt with by many adults through their daily interventions. In one instance in a Nottinghamshire housing estate in the UK, fluorescent pink lights were installed in underpasses to keep adolescents from loitering.²³ The pink light would highlight the teenagers’ acne-blemished skin and in turn, would discourage them from gathering under the unflattering light. Teenagers are constantly viewed as out of place when they are seen out of school.

Adolescents have little agency and ownership over their school and even less over the city. Herb Childress, an American ethnographer, studies teenagers’ territorial markers to claim, occupy and appropriate spaces in the adult world. His essay, “Teenagers, Territory and the Space of Appropriation” redefines the term of ownership for an age group who legally cannot own property. The disenfranchised youth must use other behavioural tactics to claim space, like physical presence, regularity of attendance and thoroughness of occupancy in terms of visibility and sound.²⁴ These tactics are stronger indicators of ownership than absent corporate or public owners of the property, in this case, the district school board. However, as Childress explains, “the youth claiming function is deemed illegitimate, because our culture operates under a tenure model rather than a territory model of land use, because we think of space as owned rather than occupied.”²⁵

22 Arendt, *Between Past and Future: Six Exercises in Political Thought*, 8.

23 “Pink Lights Put off Spotty Teens,” BBC News, March 25, 2009, http://news.bbc.co.uk/2/hi/uk_news/england/nottinghamshire/7963347.stm

24 Herb Childress, ‘Teenagers, Territory and the Appropriation of Space’, *Childhood* 11, no. 2 (May 2004): 198, <https://doi.org/10.1177/0907568204043056>.

25 Childress, 200.

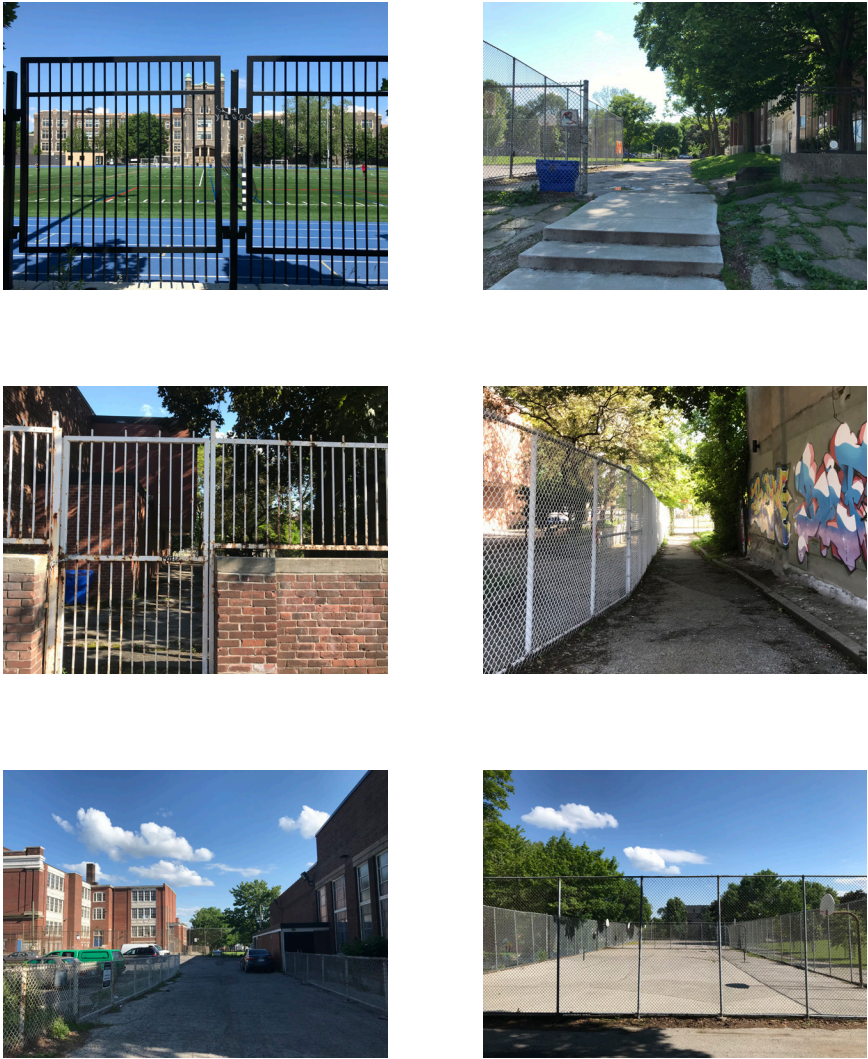


Fig. 1 Fences and gates from a selection of high schools in Toronto



Still, the act of occupying space through a tenure model of fluid occupation is a simple but powerful act of sabotage to conventional territory model of land use.

Student Protests: Breaking Down of Boundaries

Students' right to occupy school property as a means of protest is often deemed illegal and inappropriate. The genesis and the actions of student protests reveal themselves as pressure points in the public educational system. On both the physical and intellectual level, protests are where students challenge their given civic status, resist oppression and try their hand at changing the status quo. However, more often than not, students are told that they cannot occupy schools, cannot protest on school property because the facilities and land do not belong to them. But by occupying school property, subverting typical assembly gatherings, the voices of the students spill onto the public sphere to challenge the concept of publicness in education. This increase in visibility makes education once again a public concern, a public responsibility that involves everyone.

An example of a student protest that successfully impacted change on academic freedom is the 1964 Free Speech Movement that took place at University of California in Berkeley. The design of the school demonstrates the aim of architecture to transmit a political and educational agenda. The student protest and occupation were facilitated and even designed for by architects Vernon DeMars, Donald Hardison and landscape architect Lawrence Halprin. The architecture of the Student Union and the civic space in Sproul Plaza were in support of the rise of post-war citizenry amongst university students.²⁶

Feminist and political theorist Judith Butler argues that “material environments are part of the action, and they themselves act when

26 Claire Robinson, “Architecture in Support of Citizenry: Vernon DeMars and the Berkeley Student Union,” *Journal of Architectural Education* 70, no 2 (2016): 236, doi:10.1080/10464883.2016.119767

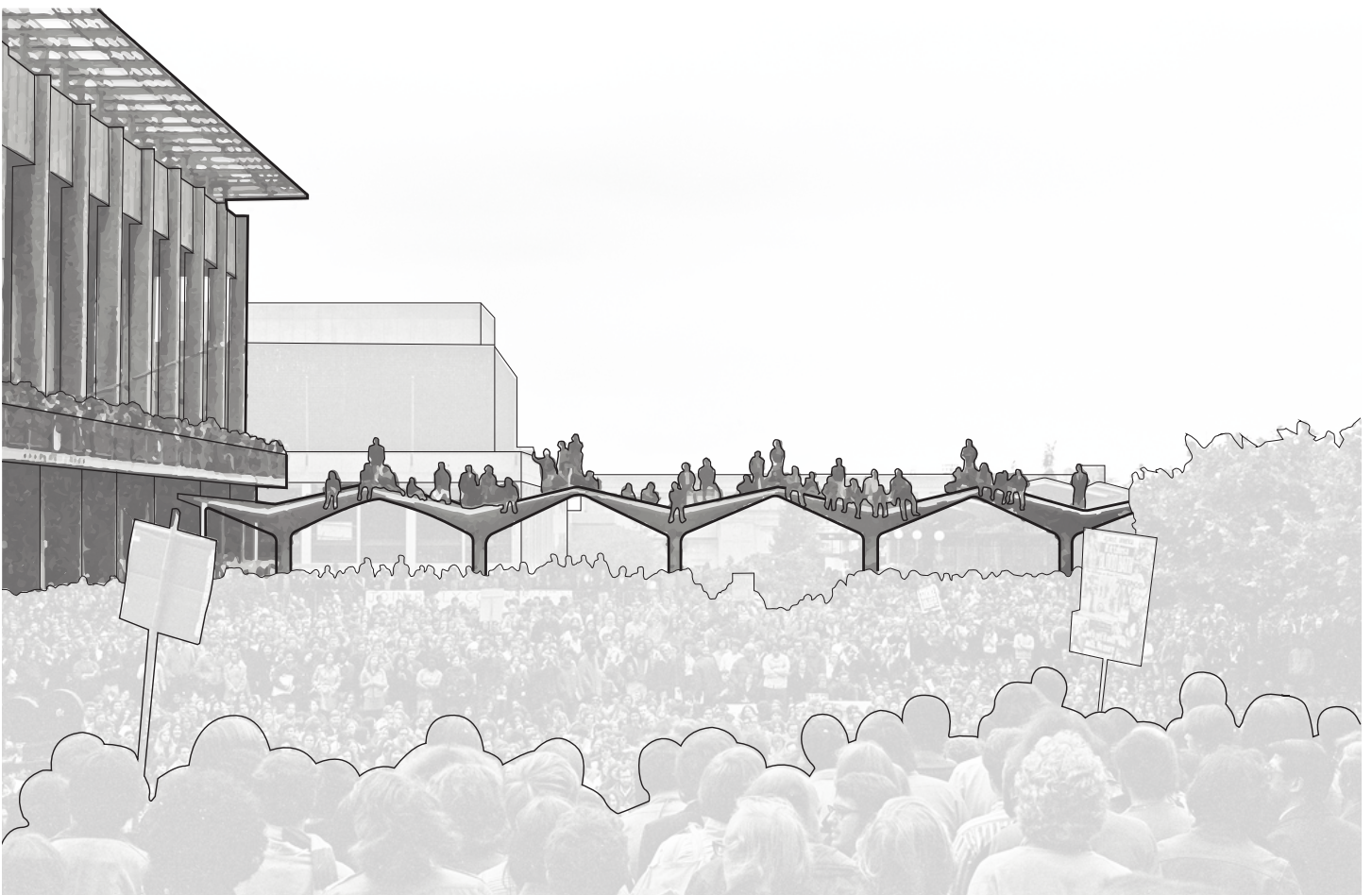


Fig. 2 View of the Sproul Plaza and the Student Union Complex
*Collage scene of 1964 Free Speech Movement demonstrating
the democratic nature of the spaces at UC Berkeley.*

they become the support for action.”²⁷ At these moments of insurgency manifested as acts of protests and occupation, “assembled bodies articulate a new time and space for the popular will.”²⁸ The Sproul Plaza and the Student Union Complex of UC Berkeley were the material environments acting politically in conjunction with the students during the political movement. The civic oriented design of building and the plaza, through its covered walkways, extended balconies and open plaza, were fundamental actors in the success of the Free Speech Movement.

While occupying the school, the students resisted, restructured and abolished existing institutional structures of their environments. Thousands of students gathered and assembled on Sproul Plaza to protest against the University’s ban on on-campus political activities and to demand the administration to recognize their rights to free speech and academic freedom. The protest created a microcosm of anarchy, spontaneous and self-directed learning. The teaching assistants would continue to lecture on the plaza and give ‘freedom class’ to encourage political activism.

Despite the fact that the government and some media outlets painted these moments of political outcries as chaotic and violent, the important takeaway of these events is how powerful knowledge can be if it is uncensored and prompted by questioning the authority in power. These occupations present themselves as alternative setting for a kind of informal learning.

Arendt argued that the present-day loss of authority is not a result of students discarding educational authority. Rather, the loss of authority in schools is a result of adults refusing “to assume responsibility for the world into which they have brought the children.”²⁹ Parents, politicians, teachers, members of the community are rejecting their responsibility to act as mentors to the younger generation. Adult’s disengagement from education and transfer of responsibility are what Arendt posited to be the root of our educational crisis. For Arendt, the teacher’s role and mission

27 Judith Butler, “Bodies in Alliance and the Politics of the Street,” in *Sensible Politics: The Visual Culture of Nongovernmental Activism*, ed. Meg McLagan and Yates Mckee (New York: Zone Books, 2012), 118.

28 Butler, 120.

29 Arendt, *Between Past and Future: Six Exercises in Political Thought*, 10.

should be “a representative of all adult inhabitants, pointing out the details and saying to the child: This is our world.”³⁰

The following chapters of this thesis posit that society’s general disengagement with public education is a direct result of the lack of visibility of public education in our daily lives. In our fast-growing urban cities, we see condominium towers skyrocketing over our city skylines, large urban redevelopments along our waterfront, expansion of our public transit system, repurposing of abandoned land into public parks. However, education is still operated out of a patchwork of generally underfunded facilities. The TDSB has more than 450 schools in the elementary and secondary level that are over 40 years old, with only 30 new schools built in the last 20 years.³¹ The capital renewal backlog of the school board, the amount of funding required to bring all the schools in the district up to standard, is approximately \$3.5 billion.³²

What does a crumbling building tell a student about how society values their education or their self-worth? What does a building, detached from its context, barred by cement blocks and chained link fences tell a student about their rights to discover? Can we start to think about education beyond the wall, beyond the curriculum and in the city?

30 Arendt, 10.

31 Toronto District School Board, ‘The 2013-2014 Environmental Scan’, 2014 2013, 124, <https://www.tdsb.on.ca/Portals/0/AboutUs/Research/2013-2014TDSBEnvironmentalScan.pdf>.

32 Toronto District School Board, ‘Long-Term Program and Accommodation Strategy 2019-2028’, Appendix A, 12 December 2019, 1–7, https://www.tdsb.on.ca/portals/_default/ARC_helpful_info_docs/LTPAS2019_v3.1_Full_Version.pdf.

Area of secondary school space constructed and decade of construction

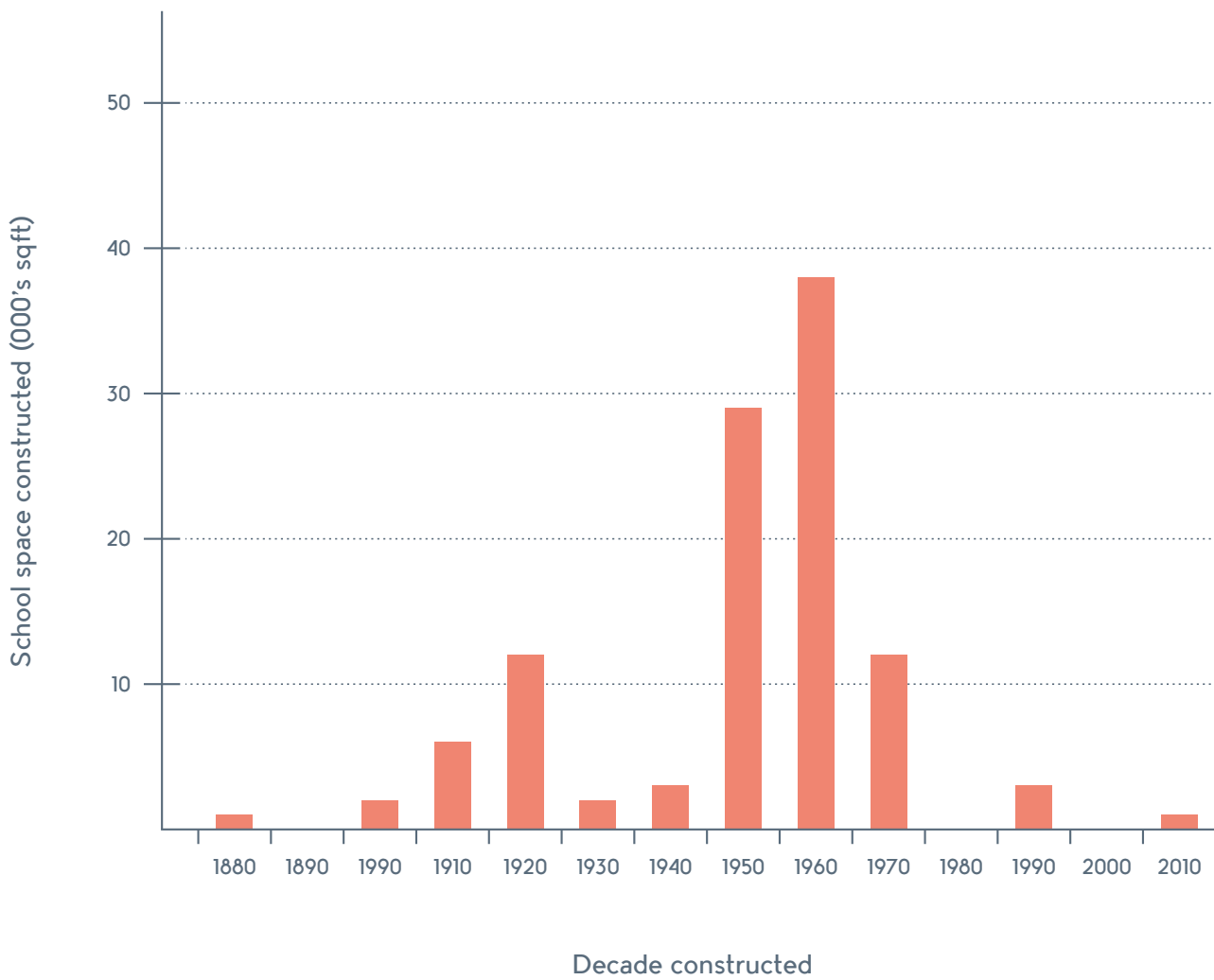
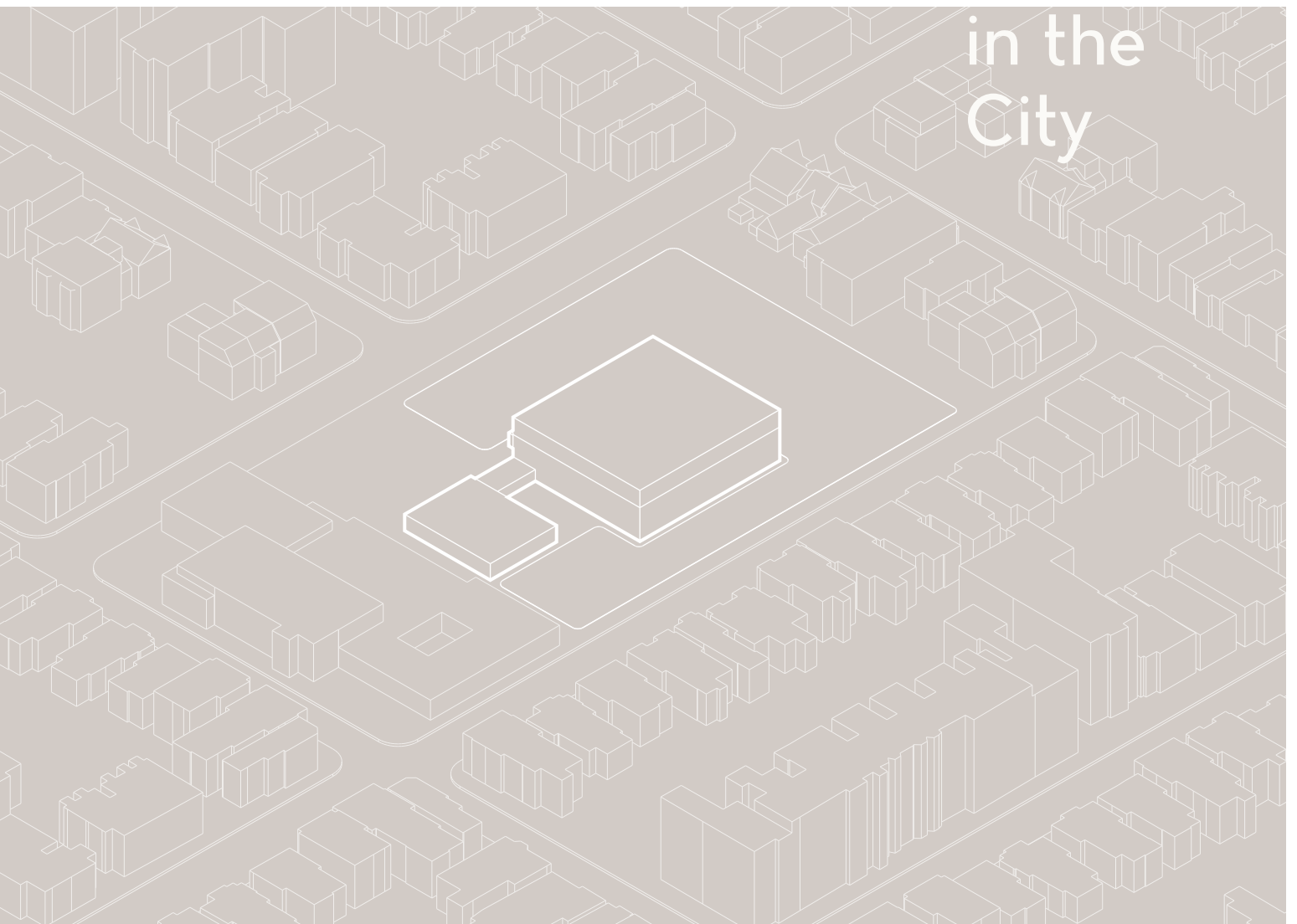


Fig. 3 “Area of secondary school space constructed and decade of construction”
Data obtained from TDSB publication

The School in the City



How can we employ architecture to better understand society's shifting sentiment toward the youth and their education? By looking closely at the evolution of the school's connectivity to the rest of the urban fabric, we can see how the urban morphology is reflected in the school typology and in turn, they reflect a societal attitude towards youth and their education. By drawing a visual timeline of the changes school typologies have undergone in the last century, we can devise a better strategy to approach the school of the 21st century. Borrowing the framework of professors of architecture Teresa Heitor and Alexandra Algre's research, we can track how the role of school buildings in cities changed over four periods: mid 19th century, early 20th century, post-war and contemporary school design.¹

Schools, like any other material objects designed by adults for children, enforce with them a generational way of thinking about childhood and education. In the mid 19th century, a growing interest in public education was motivated by increasing literacy and by its potential "as a means to cultivate a sense of citizenship and loyalty" in the coming generations.² The Collegiate Gothic style of industrial schools exerted institutional and civic importance through their monumentality. Their austere envelopes stood tall as landmarks on main streets reflecting discipline, power and civil morality. Gothic Revival architect, Ralph Adams Cram defined the purpose of the style to have "the power to bend men and sway them as few have who depended on the spoken word. It is for us, as part of our duty as our highest privilege to act...for spreading what is true."³ Architecture and art were vehicles for a certain way of thinking, representing a set of values of a particular class, and ethnicity. Youth delinquency in urban areas became a problem that could be solved by compulsory education.

At the beginning of the 1900s, upper-middle class families developed a sentimentalized concept of children that led to the social construction of

1 Alexandra Algre and Teresa Heitor, 'School-Place as a Collective Urban Entity', *EURAU'12*, 2012, [http://in-learning.ist.utl.pt/images/M12/EURAU\(TH+AA\).pdf](http://in-learning.ist.utl.pt/images/M12/EURAU(TH+AA).pdf)

2 Philip Oreopoulos, *Canadian Compulsory School Laws and Their Impact on Educational Attainment and Future Earnings*, Research Paper Series / Analytical, Statistics Canada 251 (Ottawa, Ontario, 2005), 7.

3 Edwin Slipek, *Ralph Adams Cram : The University of Richmond, and the Gothic Style Today* (Richmond, Virginia: Marsh Art Gallery, University of Richmond, 1997), 19.

childhood with a focus on nurturing and education.⁴ Childhood became a concept that could be spatialized at home, at school and in our cities. At the centre of this paradigm shift, spatial designers, architects and urban planners, played a crucial role in delimiting the boundaries of childhood in the material world.⁵ To put it simply, “the material world is where childhood (as adults define it) and children (as real participants) intersect.”⁶ With this shift in view of childhood, schools became one of many designated islands for children to occupy. Islanding of childhood, a concept coined by German scholars Helga and Hartmut Zeiher, is the isolation of individual children from adult spaces but also other children’s spaces.⁷ The trend of child-centered design disassociated education from the monumentality of Revival Gothic style and placed schools at the heart of residential neighbourhoods. Education, for a short period, was deinstitutionalized and humanized for the betterment and protection of children’s physical and cognitive development.

Child-centered design was an opportunity for many progressive educators to partner with architects to rethink the school environment. This modular typology for public schools began as a successful design experiment by Perkins, Wheeler and Will and Eero Saarinen in 1941 with the Crow Island School in Winnetka, Illinois. The socio-economic context of Winnetka plays an important part in understanding the possibility and success of the Crow Island School. Situated in a small affluent suburban town north of Chicago, Winnetka seems to have been an exemplary neighbourhood for the progressive education ideas of the time to flourish. The primary school became one of the first examples of the modernist International Style in North America. At the centre of a new residential district, the architects followed the logic of participatory design by sitting in on classes and interviewing the teachers and students. “The original plan of the building challenged the hegemony of the

4 Marta Gutman and Ning De Coninck-Smith, eds., *Designing Modern Childhoods: History, Space, and the Material Culture of Children*, The Rutgers Series in Childhood Studies (New Brunswick, NJ: Rutgers University Press, 2008), 3.

5 Ning de Coninck-Smith and Marta Gutman, ‘Children and Youth in Public: Making Places, Learning Lessons, Claiming Territories’, *Childhood* 11, no. 2 (May 2004): 133, <https://doi.org/10.1177/0907568204043048>.

6 Gutman and De Coninck-Smith, *Designing Modern Childhoods*.

7 John R. Gillis, ‘Epilogue: The Islanding of Children—Reshaping the Mythical Landscape of Childhood’, in *Designing Modern Childhoods: History, Space, and the Material Culture of Children* (New Brunswick, NJ: Rutgers University Press, 2008), 316.

The Unbounded School

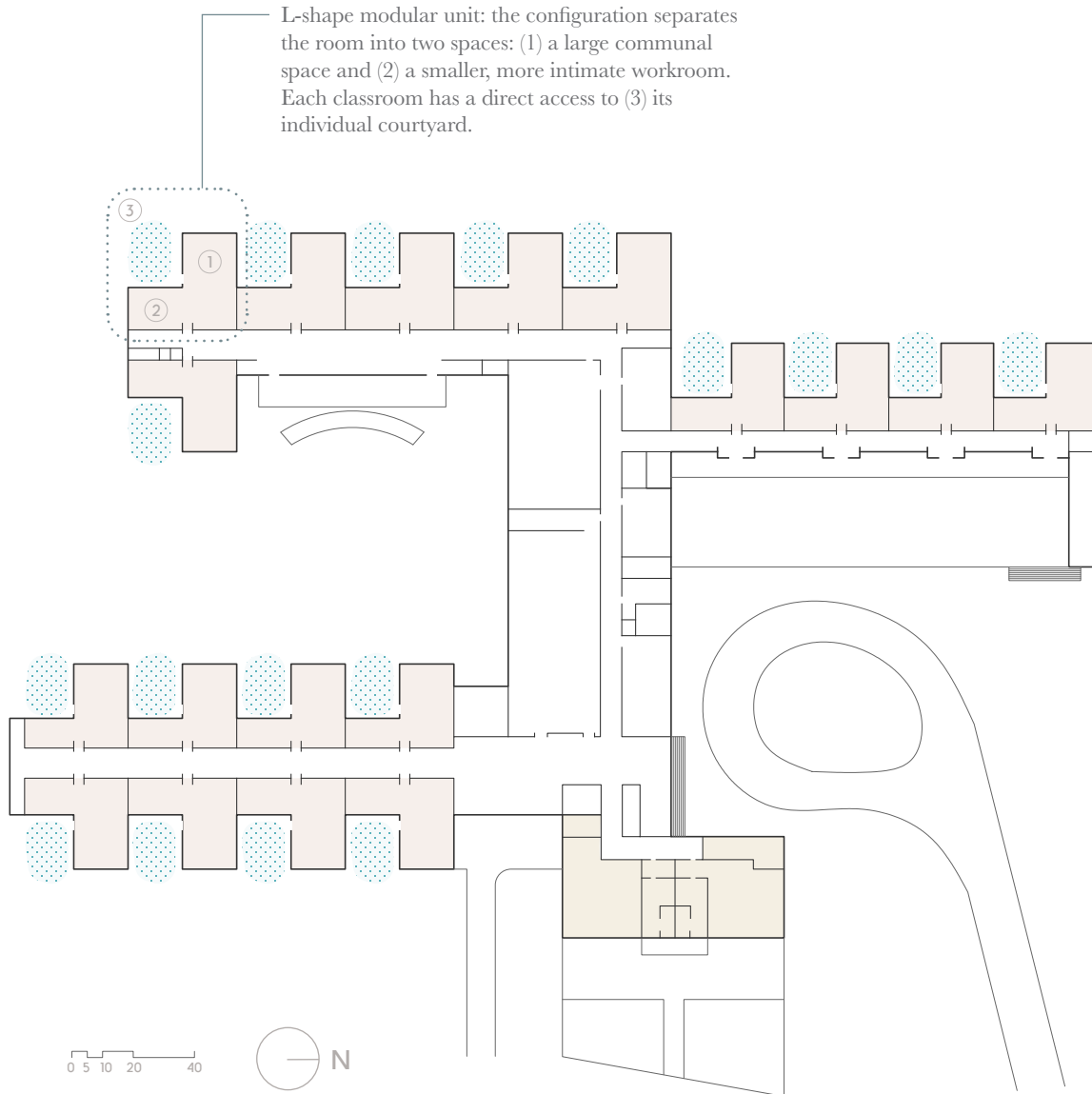


Fig. 4 Crow Island School floor plan by Perkins Wheeler, Will and Eero Saarinen (1940-1941)
Diagram showing L-shape modular unit with courtyard

classroom. Here, it was envisaged that teachers and their pupils would engage in ever more complex scenarios that required flexible spaces that would inevitably be transformed again and again to support different purposes.”⁸ The clean, orthogonal aesthetics of the school and its use of mass-produced industrial material made the Crow Island School the ideal model for many schools in North America. However, the construction boom which ensued copies of a similar layout were not designed with the same unique considerations as the Crow Island School, nor were they placed in a similar context to Winnetka, Illinois.

This new world of childhood designed by municipalities, educators, architects and parents grew larger and the boundaries became more defined after the two world wars. The separation of children and youth from adult spaces was institutionalized by series of policies and the culture of protected childhood. Authors of *Designing Modern Childhood*, Marta Gutman and Ning de Coninck-Smith explain that “the creation of a specialized material culture for children, the demarcation of differentiated buildings for them, and the separation of lives of children and adults constituted a radical change to customary life in Western society.”⁹ In the industrialized West, it was understood that children should not work amongst the adult world. Instead, they should spend their days learning and playing in an environment purposefully designed for them. These social reforms created a body of legislation to protect children from exploitive labour. Shared spaces where children and teenagers would occupy in the presence of their elders were mostly within the domestic sphere and less in public spaces.¹⁰ “Spaces unregulated by adults—streets, alleys, stoops and yards—were no longer deemed suitable spaces for children to be.”¹¹

By the second half of the 20th century, all Canadian provinces raised the minimum school leaving age to 15 or 16. Compulsory education combined with an increased youth population created higher numbers

8 Catherine Burke, ‘Looking Back to Imagine the Future: Connecting with the Radical Past in Technologies of School Design’, *Technology, Pedagogy and Education* 23, no. 1 (2 January 2014): 50, <https://doi.org/10.1080/1475939X.2013.838450>.

9 Gutman and De Coninck-Smith, *Designing Modern Childhoods*, 5.

10 Gillis, ‘Epilogue: The Islanding of Children—Reshaping the Mythical Landscape of Childhood’, 320.

11 Gutman and De Coninck-Smith, *Designing Modern Childhoods*, 4.

in school enrollments for the next decades. Higher demand in a shorter timeframe made the standardized model for public school buildings a popular choice. “The process of erosion of progressive values in public sector schooling” started in the 1970s for the United Kingdoms with Margaret Thatcher as the Minister of Education.¹² Yet, it was during her premiership from 1979 to 1990 when the education system in the United Kingdom saw a return to neoliberal education policies and standardized control of education. Architects and educators Aoife Donnelly and Kristin Trommler characterize the introduction of the National Curriculum in 1988 as “locking down spatial opportunities for teachers” to exert over their spaces and instead “a return to the former hegemonic classroom model.”¹³

The political context of the UK inspired many North American states and provinces to implement similar neoliberal policies and to tighten provincial and state control over curriculum and limiting individual teaching freedom of teachers. Architecturally, the mass-production of highly replicable buildings was justified by the price tag and served the purpose of state standardization of distributed content and environment. The main design intentions driving the mass-produced schools are efficiency and uniformity for easy reproduction. Rows of classrooms are placed around the perimeter of the building while the other functions are enclosed at the core, deprived of natural light. The consequences of this layout can be seen in the narrow corridors lined with rows of metal lockers leaving circulation spaces feeling claustrophobic and cold. The hallway-to-classroom organization made these new schools ideal for control and monitoring of student’s everyday behaviours and activities. Though these infrastructures did meet the demand to accommodate large numbers of baby-boom era children into schools, the standardized cells-and-bells¹⁴ typology of public school buildings, especially at the secondary level continues to fail to address the tension between the institutional curriculum and the complexity of the real world.

12 Aoife Donnelly and Kristin Trommler, ‘The Democratic Design of David & Mary Medd’, *The Contemporary Journal and E-Flux Architecture*, no. Architectures of Education (20 March 2020), <https://doi.org/10.31411/TCJ.02.04>.

13 Donnelly and Trommler.

14 Cells-and-bells refers to a popular school design: double-loaded concrete block walls that emerged in the mid-20th century.

By the 1980s and 90s, public schools across North America underwent substantial administrative changes as part of the global reform movement. Some resulting effects on the architecture of the schools were expansion of the building footprint, extension of catchment areas to service multiple residential districts to overlap areas for services and facilities. With a rapid increase in enrollment, the Ontario Ministry of Education and Training issued a 25-year projection report regarding capital funding and reconfiguration of school facilities to address the increase in enrollments without resorting to building new facilities. Not all of the recommendations from this report are feasible or practical for the individual school boards to pursue without the aid of the provincial government. For example, some of the more creative solutions for efficient use of existing teaching spaces were based on rethinking the typical class schedule. Year-round schooling where groups of students attend the institution at a staggered time of the year could be a proper solution if implemented collaboratively. Nevertheless, this solution disrupts cultural and social habits (family vacation plans, holidays align with family members etc.) and have some additional costs like the installation of an air conditioning system that costs approximately five to ten percent of the cost of a new school building.¹⁵ Other recommendations require less collaboration and impart less immediate shock to the school's constituents like the use of portables, the enlargement of class sizes and the amalgamation of existing schools.

School boards across the province were not incentivized to consider long-term solutions. The report clearly expresses that the primary concern is the end result, and not the means by which the results were achieved. It states, "the Ministry of Education and Training encourage all school boards to increase the utilization of existing school facilities by implementing funding policies and practices designed to reward the school boards which use their facilities most effectively."¹⁶ If the use of portable classrooms equates to the same increase in capacity as staggering the schedules of the students, then it is clear that the former solution is quicker and easier for school boards to get provincial funding. For smaller

15 Educational Consulting Services (Canada) Inc. and RJR Educational Services Inc., 'Analysis of Capital Funding for School Facilities Final Report' (Ontario Ministry of Education and Training, September 1996), 5-6.

16 Educational Consulting Services (Canada) Inc. and RJR Educational Services Inc., 5-10.

alternative schools, the most secure financial option would be to move their facilities into larger standard stream schools.

The attention paid to the design of our classrooms, and even more broadly to our schools, speak loudly to societal values and demands for generation to come. In recent years, undercurrent reform regarding school design challenged the insular nature of educational environments. New building projects are centered around learning spaces: flexible, shared, community and outdoor spaces. A new emerging pedagogy derived primarily through spatial principles about learning is reshaping society's perception of school design in correlation to education. Educational buildings are seen as catalysts for social and urban regeneration. Architects and researchers like Prue Chile echo the social responsibility of designers when it comes to school design: "the building of good school is an important social responsibility for everyone involved; school is often the first 'civic' building children encounter and it becomes their first formative environment."¹⁷

The world of childhood is an invalid one according to Arendt,¹⁸ as the school assumes that the society formed by children is autonomous and should be left to them to govern outside of class hours. A series of handing over responsibility, from parent to education system, then from teachers to children's social groups, is the actual problem at the centre of youth delinquency. When faced with the exclusions from the adult world combined with the pressure of their peers, a teenager's reaction "tends to be either conformism or juvenile delinquency, and is frequently a mixture of both."¹⁹ The blame is not to be placed on overworked and underpaid teachers. Rather, it is society's trust in 'accountability' that gives power to institutionalized education schooling to become the sole entity responsible for 'educating' our children. The world of childhood disbars children from participating in the adult world, breaking the natural relationship between adults and children that is so fundamental to education. The boundaries of childhood drawn on the ground, on the basis of safety and better education, led adults to relinquish responsibility

17 Prue Chiles et al., eds., *Building Schools: Key Issues for Contemporary Design* (Boston ; Basel: Birkhäuser, 2015), 9.

18 Hannah Arendt, *Between Past and Future: Six Exercises in Political Thought*, 3rd ed. (Cleveland, Ohio: The World Publishing Company, 1966), 5.

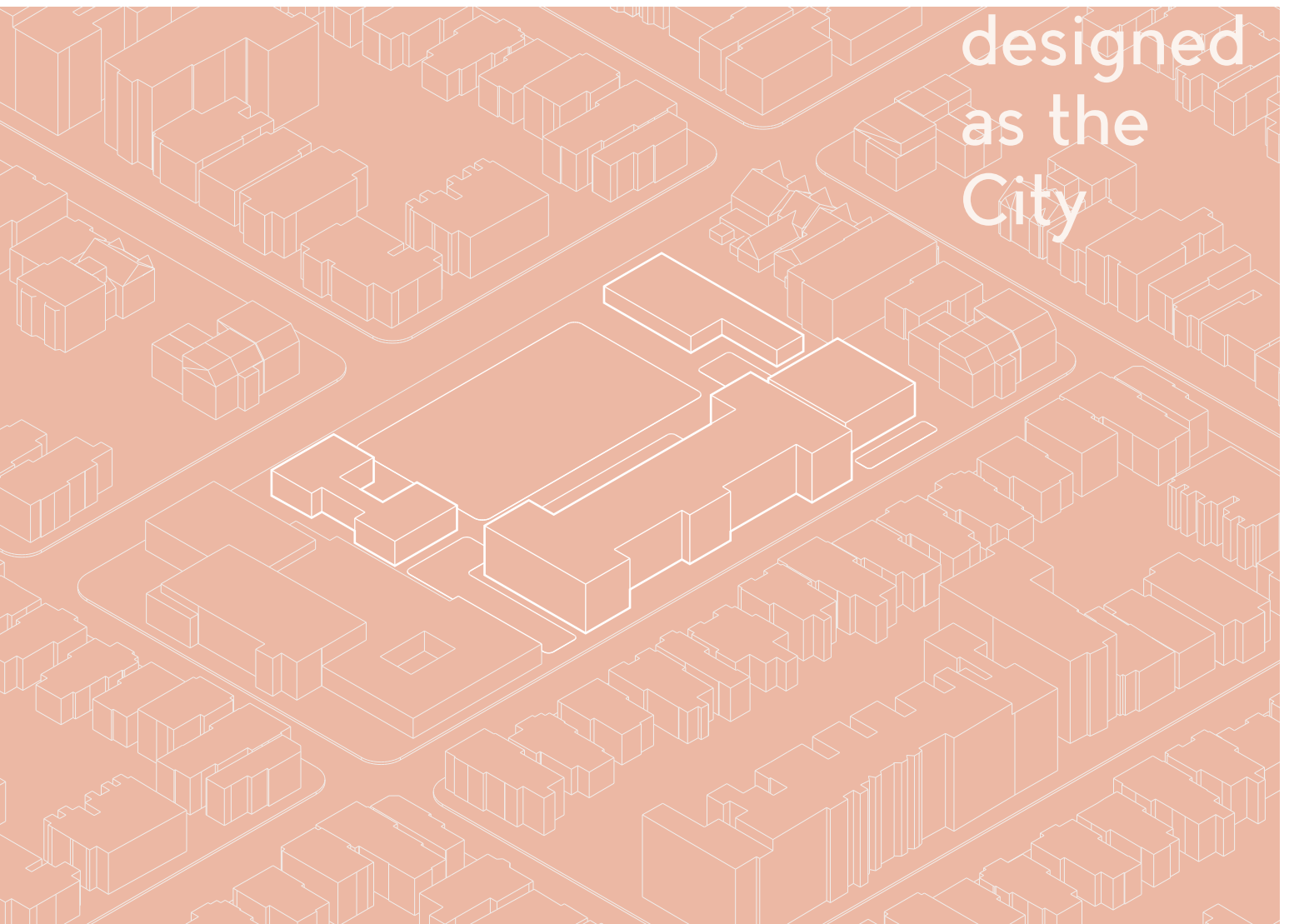
19 Arendt, 5.

of education to progressive educational methods and led the youth into a generational disengagement with the real world, reported by Goodman in *Growing Up Absurd*.²⁰

If education is regaining its civic presence, what can we expect the typology of the school to be? Civic education in our contemporary society is more about participation and engagement than civil morality and its representation through institutional monumentality. What takes priority then in the design of public schools if it is no longer the façade or the efficiency of classroom arrangements?

²⁰ Paul Goodman, *Growing Up Absurd: Problems of Youth in the Organized System*, 4th ed. (New York: Random House, 1960).

The School designed as the City



The previous chapter detailed how the shifting perception of teenagers and their educational environment can be attributed to an insular and disconnected school typology. In this second examination of the relationship between the school and the city, the design analysis and strategy are framed around the spatial dynamics of publicness to explore how they can inform the way we design an urban school. The transposability of publicness from urban areas to schools brings about a different approach in designing educational spaces, one that emphasizes civic education through action and visibility. This chapter uses architect and scholar George Baird's spatial configuration for publicness to establish a set of design criteria for a public school and how some of these principles can be seen through structuralist architect Herman Hertzberger's school designs.

For students transitioning from a protected family environment to the unpredictability of adulthood, the school as a microcosm of the city can help students to develop their sense of agency as well as perceive education as more than discipline and academics. For society, the perception of education as a common responsibility can be achieved through transcending the institutional barriers and into the realm of the public. To do so, the architecture of the school no longer functions as a barrier and instead becomes the mediator.

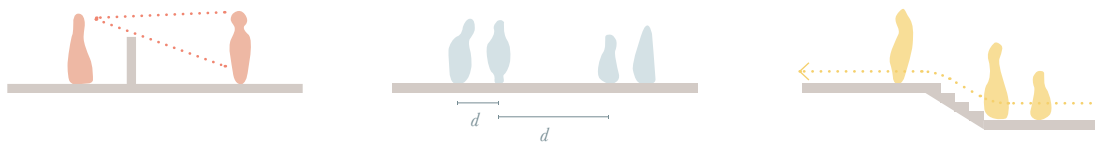
In Hertzberger's work, the intention to bring the city into the school is supported by the architect's pedagogical belief that "urban associations of the streets and squares allow the child to understand the domain of their classroom and its relation to the communal spaces shared with others" in order to achieve a sense of community.¹ In *The Spaces of Democracy*, Richard Sennett argues the importance of appropriate spatial conditions for the practice of democracy to be possible. He supports his argument through Aristotle's notion of the politics and writes "Aristotle's hope was that when a person becomes accustomed to a diverse, complex milieu, he or she will cease reacting violently when challenged by something strange or contrary. Instead, this environment should create an outlook favorable to discussion of differing views or conflicting interests."² If we can imagine the school as a training ground for the city, how could those terms of use change the physical and intellectual boundaries of the school?

1 Herman Herzberger and Robert McCarter, *Herman Hertzberger* (Rotterdam: nai010 Publishers, 2015), 135.

2 Richard Sennett, *The Spaces of Democracy* (Ann Arbor: University of Michigan, College of Architecture + Urban Planning, 1998), 19.

Spatial Configurations for Publicness

George Baird's examination of publicness through architectural conditions can inform the definition of what could be considered a successful public space. Baird establishes three fundamental architectural conditions of publicness: visibility, propinquity and continuity.³ Each of these conditions are derived from the first, visibility. Dimension of visibility is what Baird describes as propinquity, or proximity of bodies. Continuity is a spatial configuration that allows the viewers to discern the pathways of the space.



Architecture can frame, disperse, condense, obstruct, reveal and hide the object from the subject. Transparency through glazing is the most obvious method of rendering an object (or scene) visible while maintaining a physical barrier. But, while full height glazing facades might convey visibility, they do not necessarily afford porosity nor connectivity. In fact, when entire buildings are clad in glass panels, the façade becomes a pattern of alternating glare and quasi-discernible objects. There is a loss of focus on the intended object to be framed. Alternatively the viewing frame, transparency combined with an intention to focus to gaze, is a powerful architectural device to shift perception from distraction to focality, “for a moment, such an architecture enables one to transcend one’s condition of quotidian distraction, and to contemplate a larger deeper reality beyond.”⁴

Propinquity, or the measure of distance between persons, is the main factor to consider when designing for a spectrum of social interactions on plan and in sectional arrangement. Beyond the objective to make education more visible and porous, the spaces in the school must be calibrated to allow for successful interactions to happen. As with any successful public space, a variety of propinquity is important for users to feel like they can temporarily occupy an area of personal space.

³ George Baird, *Public Space: Cultural, Political Theory: Street Photography: An Interpretation* (Amsterdam: SUN, 2011), 94.

⁴ Baird, 104.

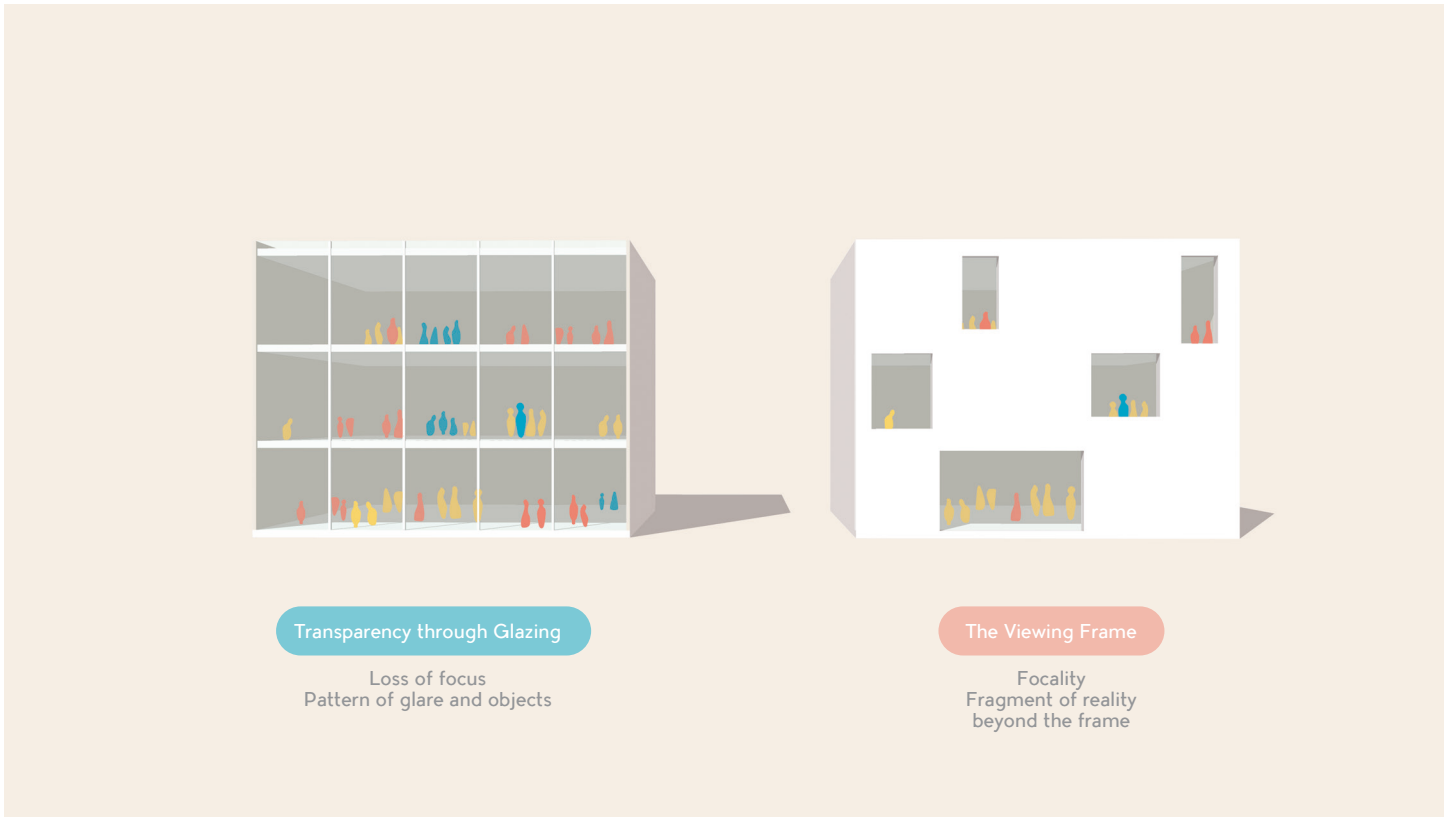


Fig. 5 Transparency in glazing versus the viewing frame

Apart from the measure of proximity of bodies in space, propinquity implies focality and distance that create a spatial condition of a periphery and a centre. A person's movement from periphery to centre, according to Baird, has a performative, declaratory quality. This performative quality is possible due to the fluidity between spaces, and it can be heightened by the condition of overlooking, "the fascinating architectural condition that links propinquity very tightly back to visibility."⁵ Visibility is tied to the sectional organization of the space in a unique condition of looking downwards.⁶ When addressing publicness for political action, as Baird does, the spatial range between periphery and centre describes a matter of bodily engagement. At the periphery, the engagement is through distracted observation and at the centre, the engagement is through action in full appearance. Between periphery and centre, an architectural device of either a screen, colonnade or an elevated platform creating a downward view changes the engagement from distracted observation to participation in partial exposure.

5 Baird, 113.

6 Baird, 113.

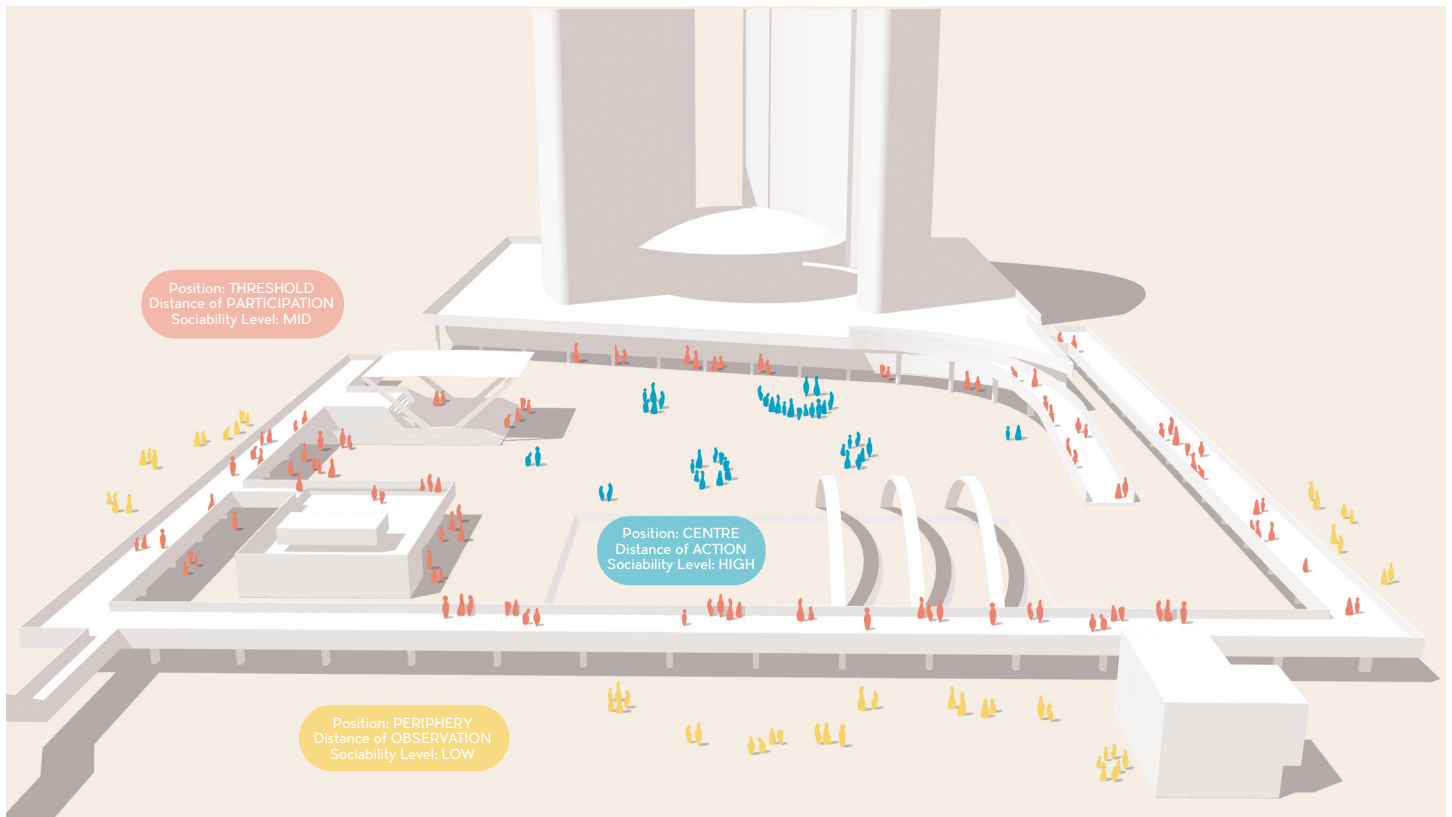


Fig. 6 Architectural conditions of publicness in Nathan Phillips Square

Lastly, the fluid movement from a state of distraction to focality is enabled by the architectural condition of continuity. Continuity in public spaces means that the gradient of sociability “between greater and lesser focal intensity will be as subtle, and as finely graduated as possible” with no abrupt ending.⁷ In the example of Nathan Phillips Square, the public network of the streets lead pedestrians through and into the square with no interruptions. The condition of downward view and continuity make up the conditions of both the elevated walkway and the ramp up to the roof plateau. Multiple entrance points onto the ramp are accessible from all three street sides. Once up the stairs, the elevated walkway guides your movement while your focus is kept by the lower plaza. The curve of the ramp allows for viewers to look back at the centre plaza while making their way up to the roof. When “no conscious intention to ‘enter’ the space is required,”⁸ the architecture of the space becomes an active participant in assisting the viewer to move to a state of focality.

7 Baird, 117.

8 Baird, 116.

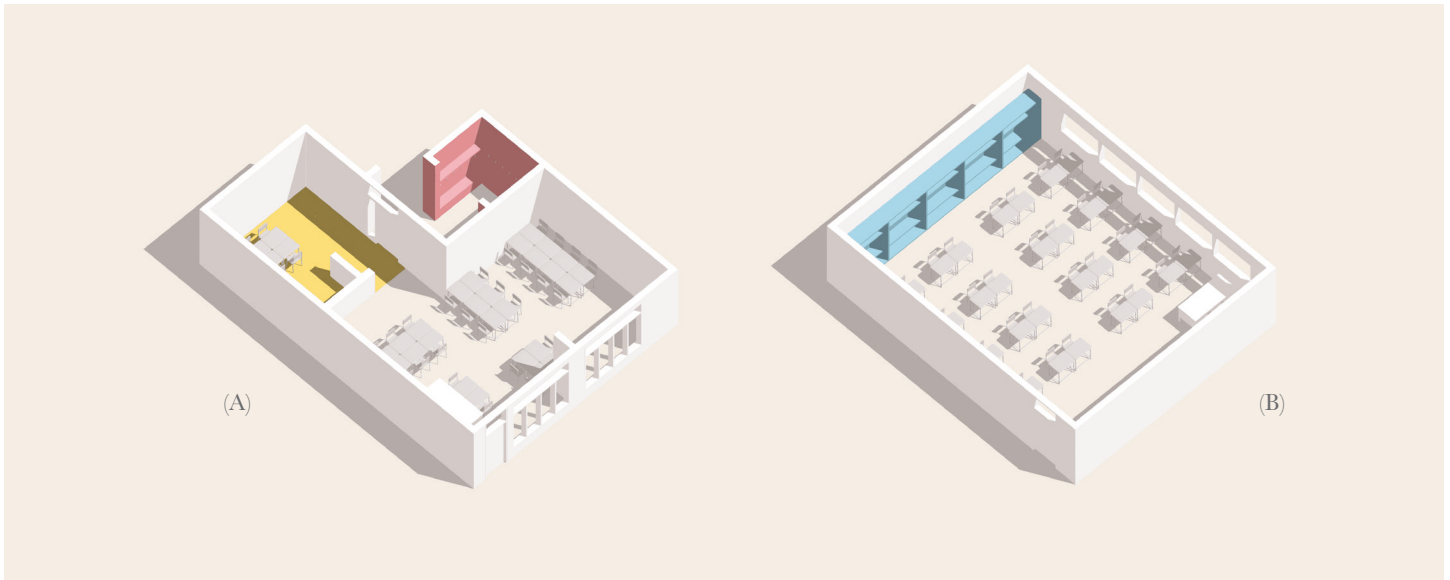
In many ways, structuralist architect Herman Hertzberger transposed these spatial dynamics of publicness into the design of his schools. In most of his schools, he includes a multi-functional amphitheatre that acts as a ‘town square,’ a performance and assembly space. The lighting strategy is methodically thought-out to bring natural light into the space, mimicking an open-air condition. “If the school is supposed to be a city, it’s very important where the light comes from, from the side or from above. In the streets, the light comes from above and it’s a specific condition.”⁹ The view of the amphitheatre is visible from all floors and he achieves that visual continuity through staggering floors and different conditions of overlooking.

Hertzberger employs the condition of propinquity through his design of threshold zones between classrooms and corridor as areas where it “is difficult to tell whether it belongs to the classroom or not, so it has a sort of double use.”¹⁰ These transitional spaces offer a different learning experience as they can be used as circulation, transition or enclosed rooms. The Delft Montessori school by Hertzberger separates the coat hangers and lockers from the back of the classroom and into their own mudroom to create a smaller room for more intimate interactions. “Students invariably gravitate to the particular sub-space within the classroom that best suits their chosen activity, whether pursued individually or in small groups, and within each space the built-in and movable furniture allows additional adjustments to be made to better fit the activity.”¹¹ This blurring of boundaries is what Baird refers to as his last architectural condition of publicness: continuity. The ambiguous demarcation of classroom borders allows conversations and people to flow from one zone to another, from one course to course, creating opportunities for interdisciplinary education.

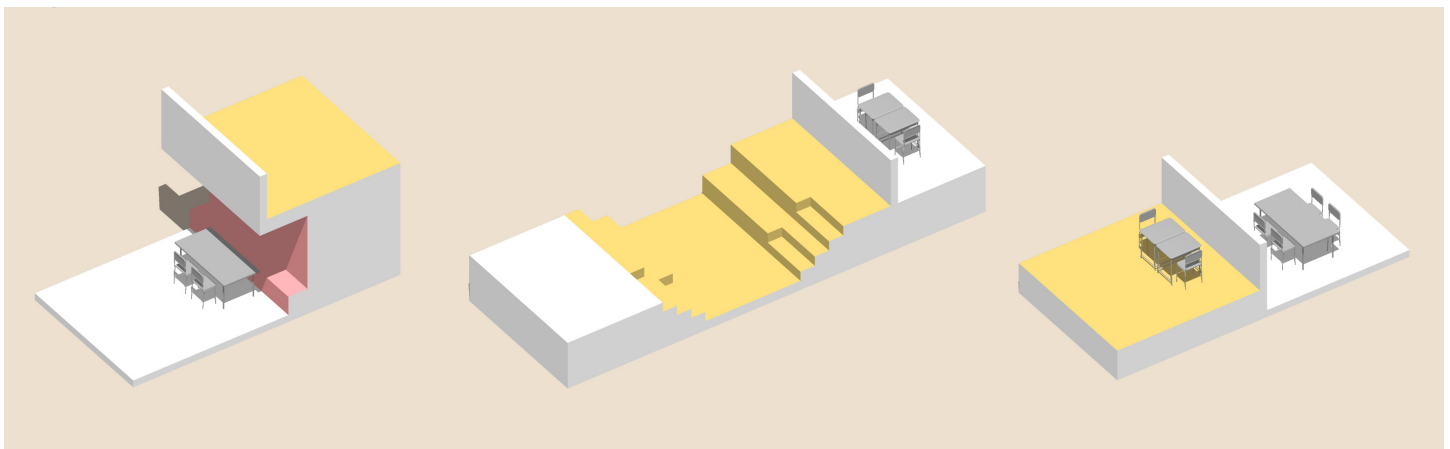
9 Herman Hertzberger, “Interview with Herman Hertzberger (2016),” interviewed by Emma Dyer, *architectureandeducation.org*, February 3, 2016. <https://architectureandeducation.org/2016/02/03/interview-with-herman-hertzberger/>

10 Herman Hertzberger, “Interview with Herman Hertzberger (2016)”.

11 Hertzberger and McCarter, *Herman Hertzberger*, 135.



^ Fig. 7 Threshold zone
(A) Hertzberger Mudroom
(B) Typical Classroom Mudroom



^ Fig. 8 Different spatial conditions through lifting and sinking floors
based on Herman Hertzberger's designs of schools

The Unbounded School



^ Fig. 9 De Evenaar School in Amsterdam (NL) 1984-1986
Amphitheatre as a town square,
Source: Archives of Herman Hertzberger

> Fig. 10 Anne Frank School in Papendrecht (NL) 1993-1994
Overlooking amphitheatre,
Source: Daria Scagliola, photographer; used with permission



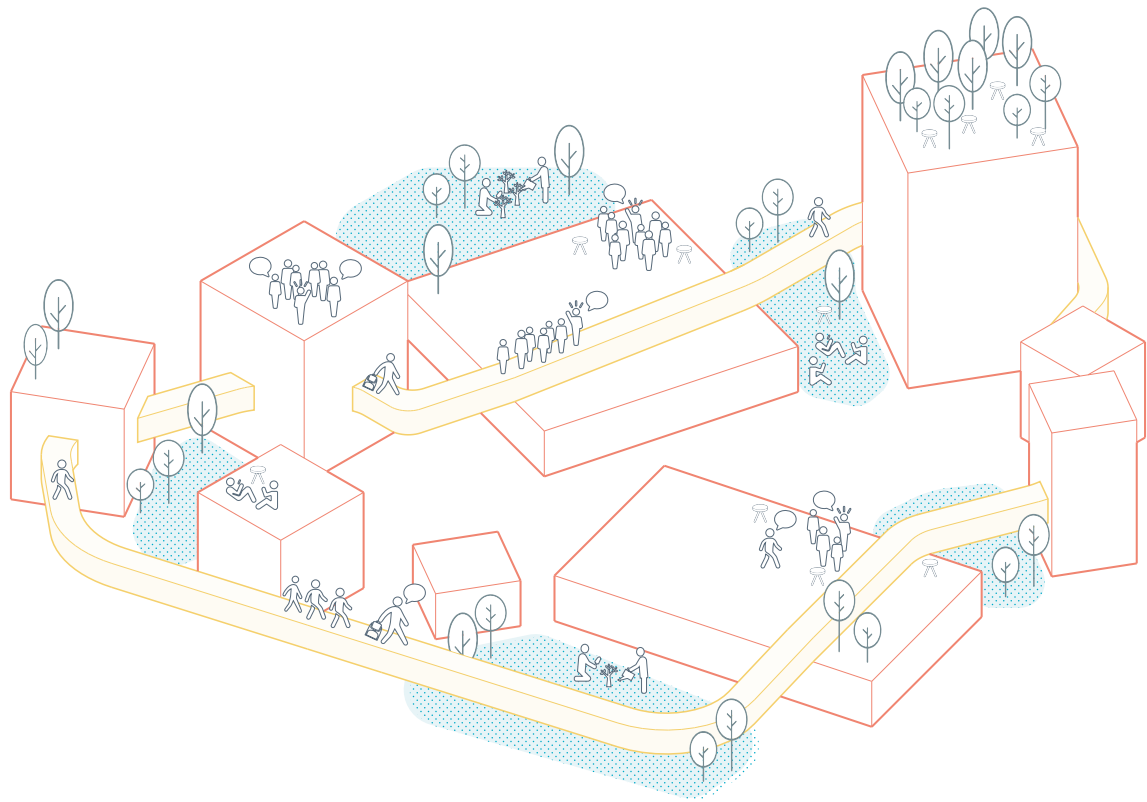







Fig. 11 Concept diagram of network typology for a school

The Unbounded School Design Proposal for the Core Unit

Project Site

The ideas put forward by Baird and seen in Hertzberger's work inform the proposal for this alternative high school in Toronto. Each of the architectural conditions of publicness are considered and applied at different scales throughout the project: at an urban scale, the scale of the building, the scale of the floor and finally, at the scale of the classroom. The site for the proposed alternative high school is nestled in a diverse urban block, occupied by residential, cultural, institutional and local establishments. The Unbounded School creates a network of educational spaces around this urban block. The scope of the proposal starts with a core unit: a home-base for students and administrative staff. In addition to the core unit building, the Unbounded School is comprised of a storefront node situated on Dundas St West, an educational pavilion in Grange Park, a series of cultural partnerships for shared facilities and a portable classroom kit for students to claim public spaces across the city as temporary study spaces. The focus of the following chapter is on the core unit while the other interventions are explored further in the chapter *the school is the city*.

The proposed urban block is adjacent to the Art Gallery of Ontario (AGO), Ontario College of Art and Design University (OCADU) and Grange Park. Currently, the property is occupied by a mixed-use building that services the Contact Alternative school on the third floor of the building. The surrounding developments are typical in their configuration for downtown Toronto: parking underground, commercial on ground floor and residential condominiums on the upper floors. One of these blocks houses the Annex building of OCADU, accessible through Village by the Grange. This typology integrates with the existing urban fabric as well as permits more fluid expansion of the University. Several of these developments are connected on the ground floor by an infill food court, Village by the Grange. Both the University and food court carve out spaces from the larger building block to provide a sheltered passageway.

-  Dedicated space for Unbounded School components
-  Partnerships of the Unbounded School network
-  Village by the Grange development (including food court)
-  Existing OCADU facilities around the urban block
-  Passageway through the network

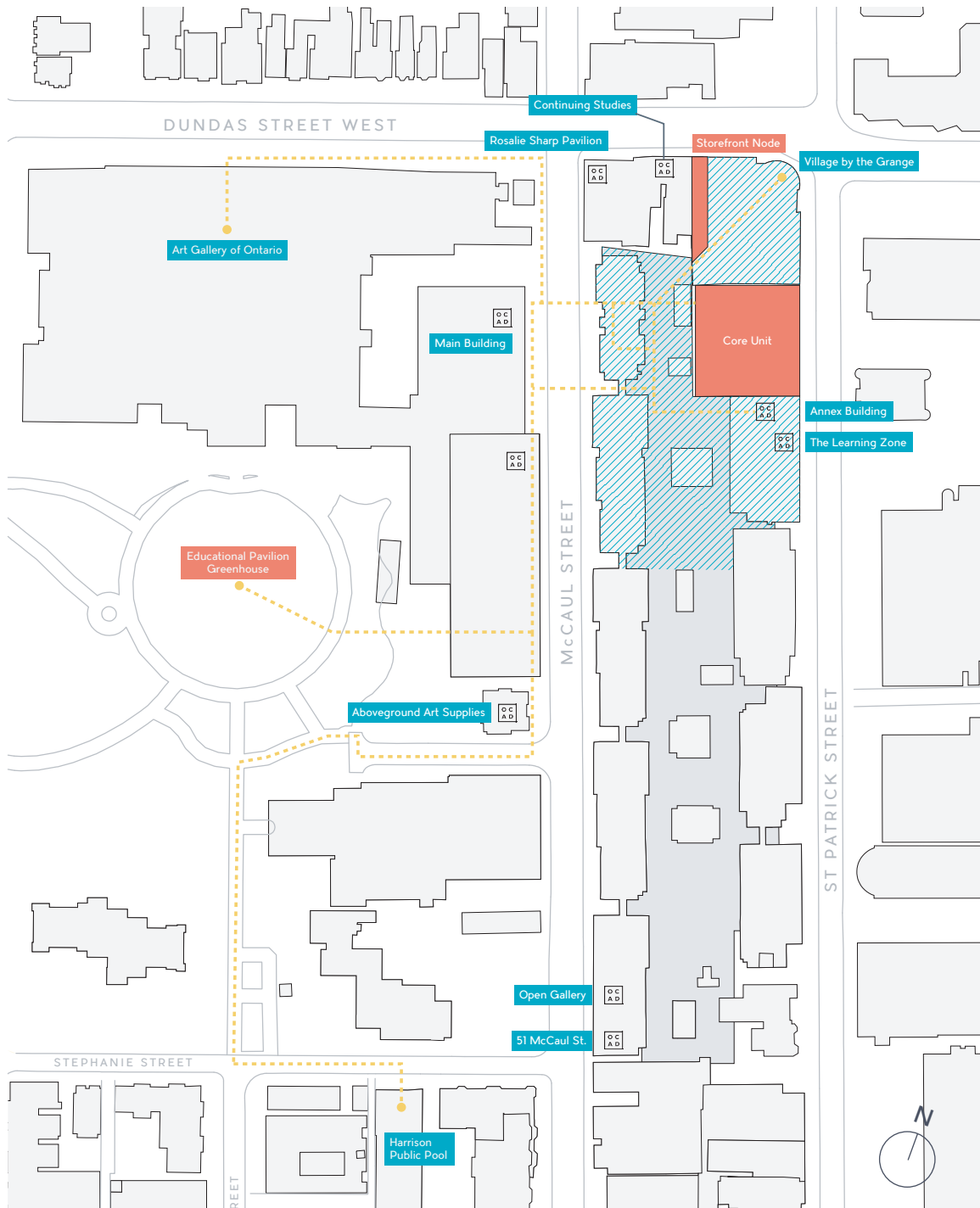


Fig. 12 Proposed site plan

The Unbounded School

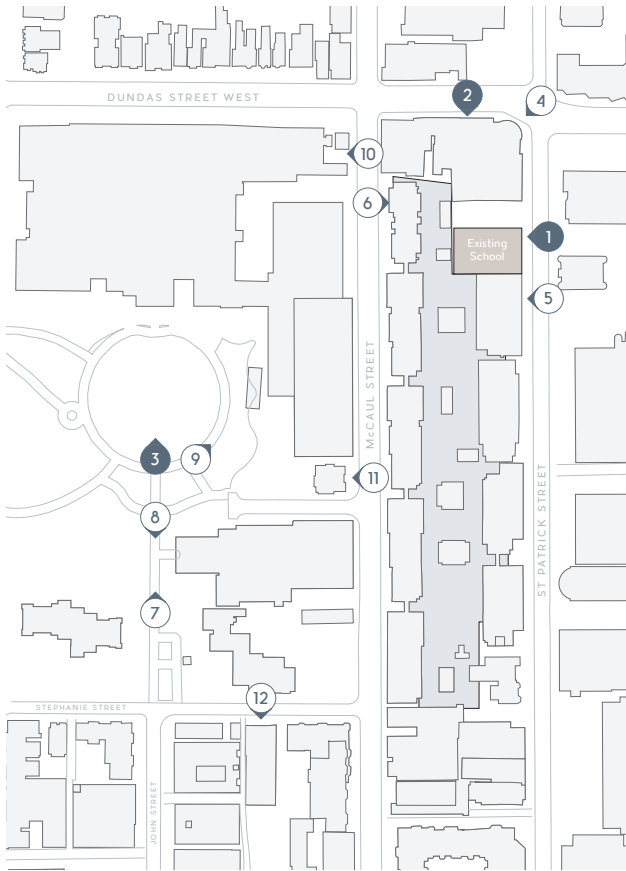


Fig. 13 Existing site plan with site photos



1 Existing school (Contact Alternative School)

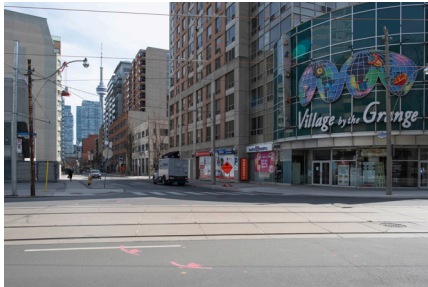


2 Existing storefront (The Library Specialty Coffee)



3 Grange Park & AGO

The School designed as the City



④ Village by the Grange entry 1



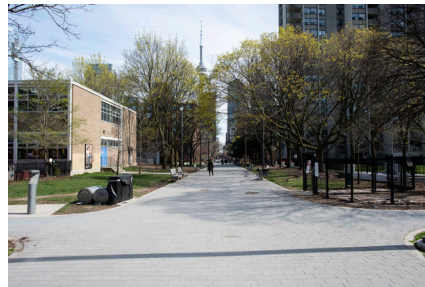
⑤ OCADU The Learning Zone
Village by the Grange entry 2



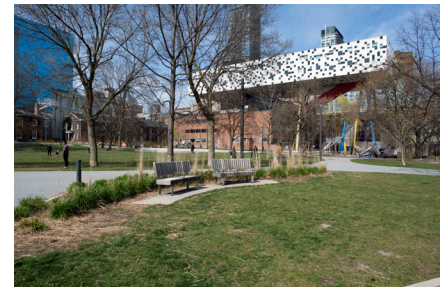
⑥ Village by the Grange entry 3



⑦ Grange Park promenade



⑧ Grange Park promenade



⑨ Grange Park & OCADU



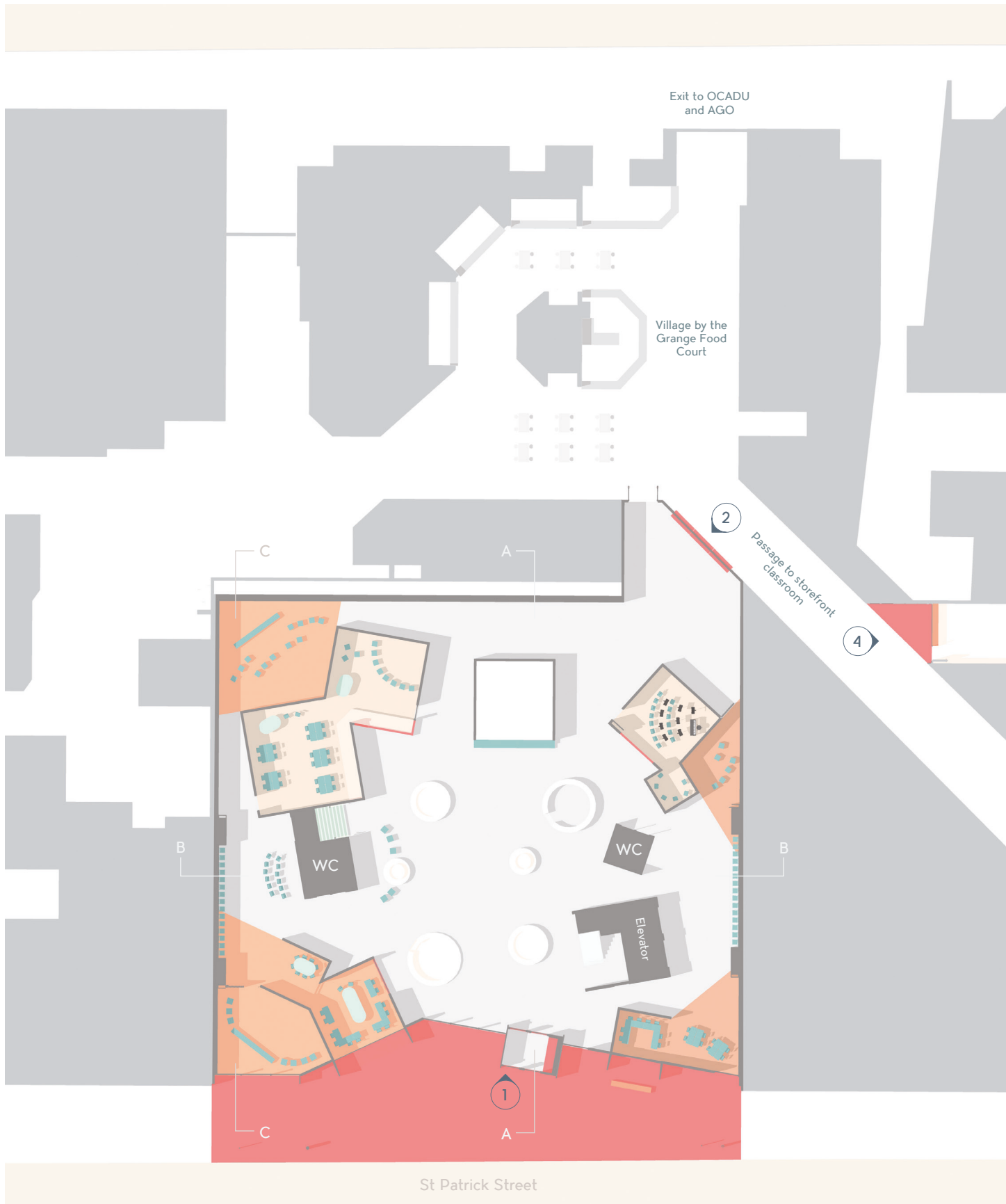
⑩ AGO

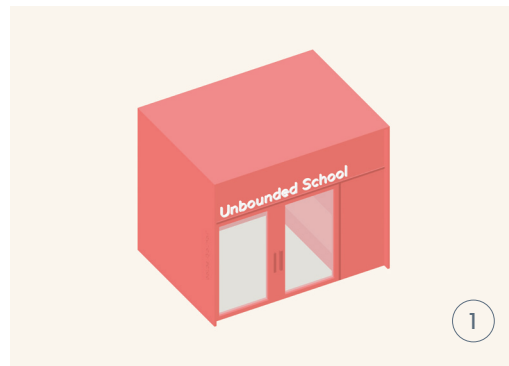
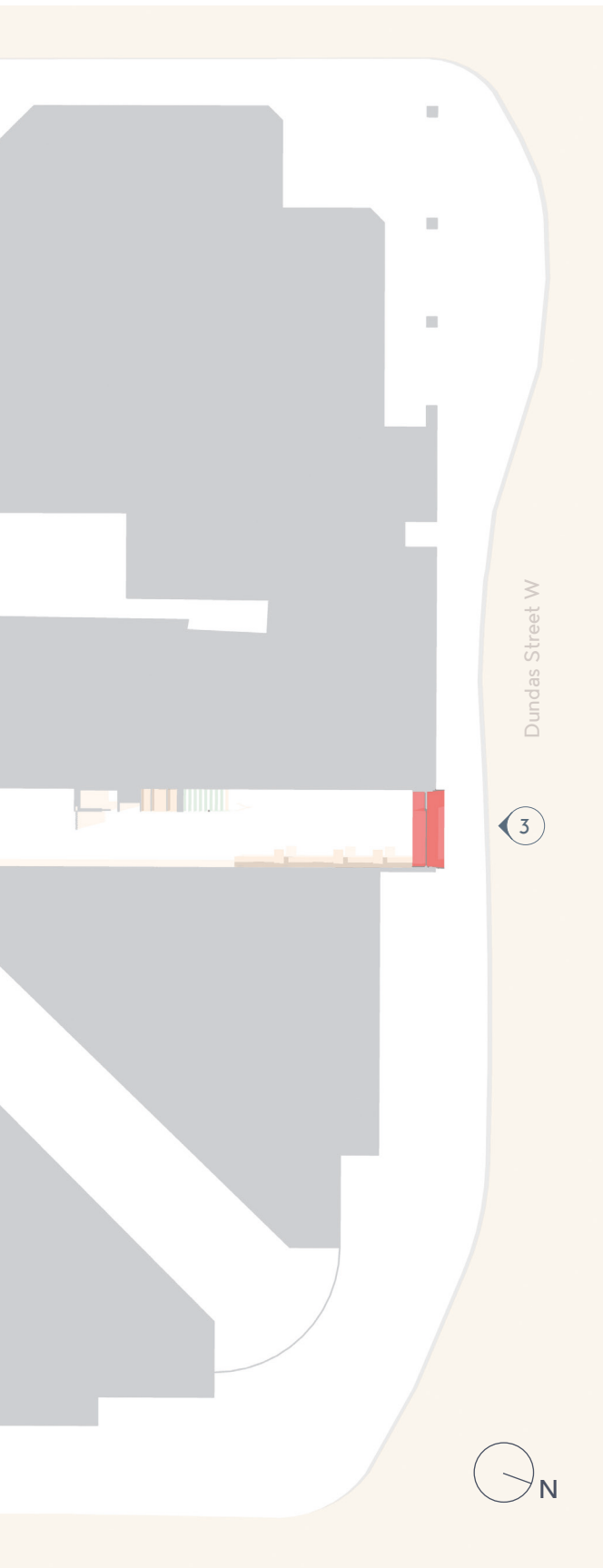


⑪ Aboveground Art Supplies

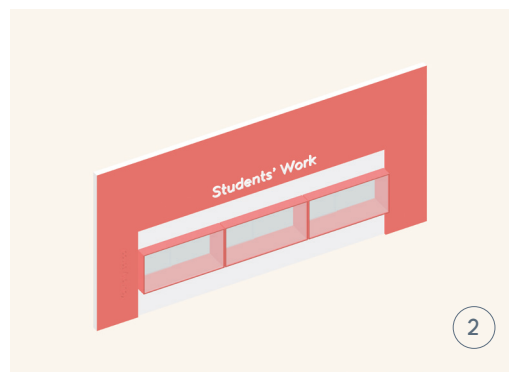


⑫ Harrison Public Pool





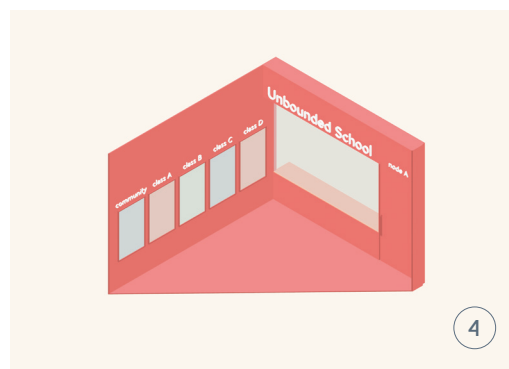
Front Vestibule



Display Case inside Village by the Grange



Storefront entrance from Dundas Street W



Storefront entrance from Village by the Grange

^ Fig. 14 Unbounded School entrances

< Fig. 15 Ground floor plan of Core Unit



Fig. 16 Core unit elevation from St. Patrick Street

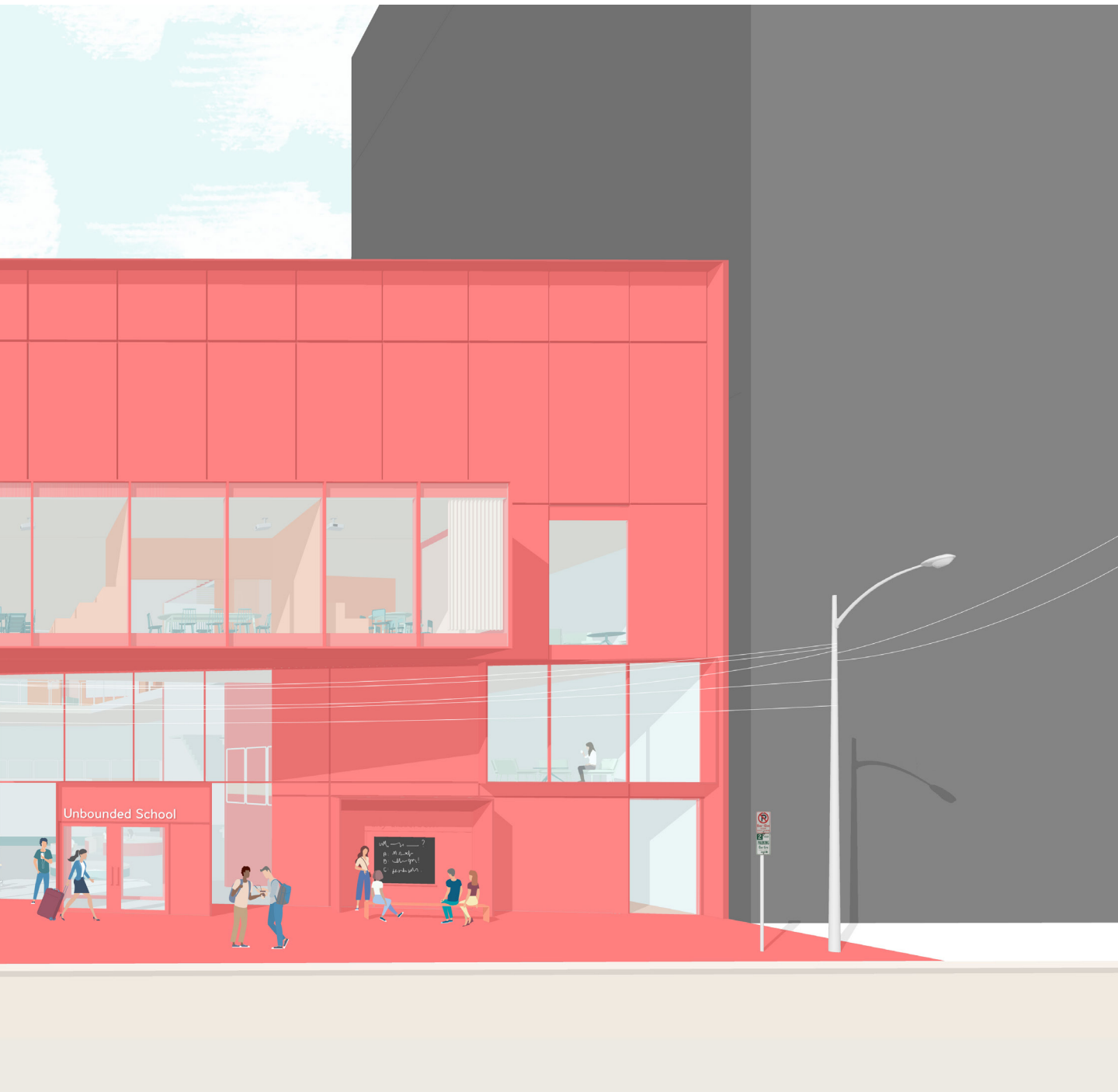




Fig. 17 Viewing frame looking into sunken classroom

Visibility

Architecture can manipulate the visibility between students and the public. On the exterior of the core unit, the façade on the ground floor drapes onto the street in a vibrant colour that draws the eye from pavement to the building. The vestibule of the building projects from the façade datum to mark the entrance. The ground floor is densely populated with multi-zoned classrooms and expandable additions. The intention is to bring the base unit of the school—the classroom in its various forms—to the street level. On the south corner, two classrooms side-by-side look onto the street. One, framed by a large aperture, allows a focused view into the classroom that is slightly sunken to create a minimal effect of overlooking. The other, glazed from floor to ceiling is a class-nook, a negative space partially partitioned by other positive



Fig. 18 A class-nook on ground floor

volumes. Though we usually refer to a framed view as a process of looking outwards from an interior position like a window with a seat, the direction of the viewing frame depends on the subject's original context, distracted space or space of contemplation. In the case of the distracted crowds walking along the sidewalk, the viewing frame allows them to see a fragment of what education in our contemporary society looks like. The dynamism of the façade at the ground level reflects the school's interior spatial diversity that supports a wide range of teaching and learning methods.



Fig. 19 Exterior classroom with pivoting door

On the north corner of the façade, a partially covered space is designed as an exterior classroom. The back wall is mounted with a blackboard and a pivoting door that gives access to the interior classroom. The pivoting wall becomes an architectural device that mediates the dialogue between students and the community.

At the scale of a school building, another important consideration brought up by Baird about the condition of visibility is the panoptic versus heterogenous vision. In an instance where the object of observation is the student body, the common condition of visibility in typical 1960s to 1980s schools are all-seeing and centralized from the perspective of adults. Straight, double loaded corridors and larger assembly rooms like cafeterias and gymnasiums are best suited for central surveillance. Safety is often used as a justification for central surveillance and restrictive access. However, in many contemporary school designs there are attempts to move away from an insular and disciplinary typology and instead move towards an increased presence of schools in communities through spatial strategies like visibility



Fig. 20 Overlooking plaza from the third floor

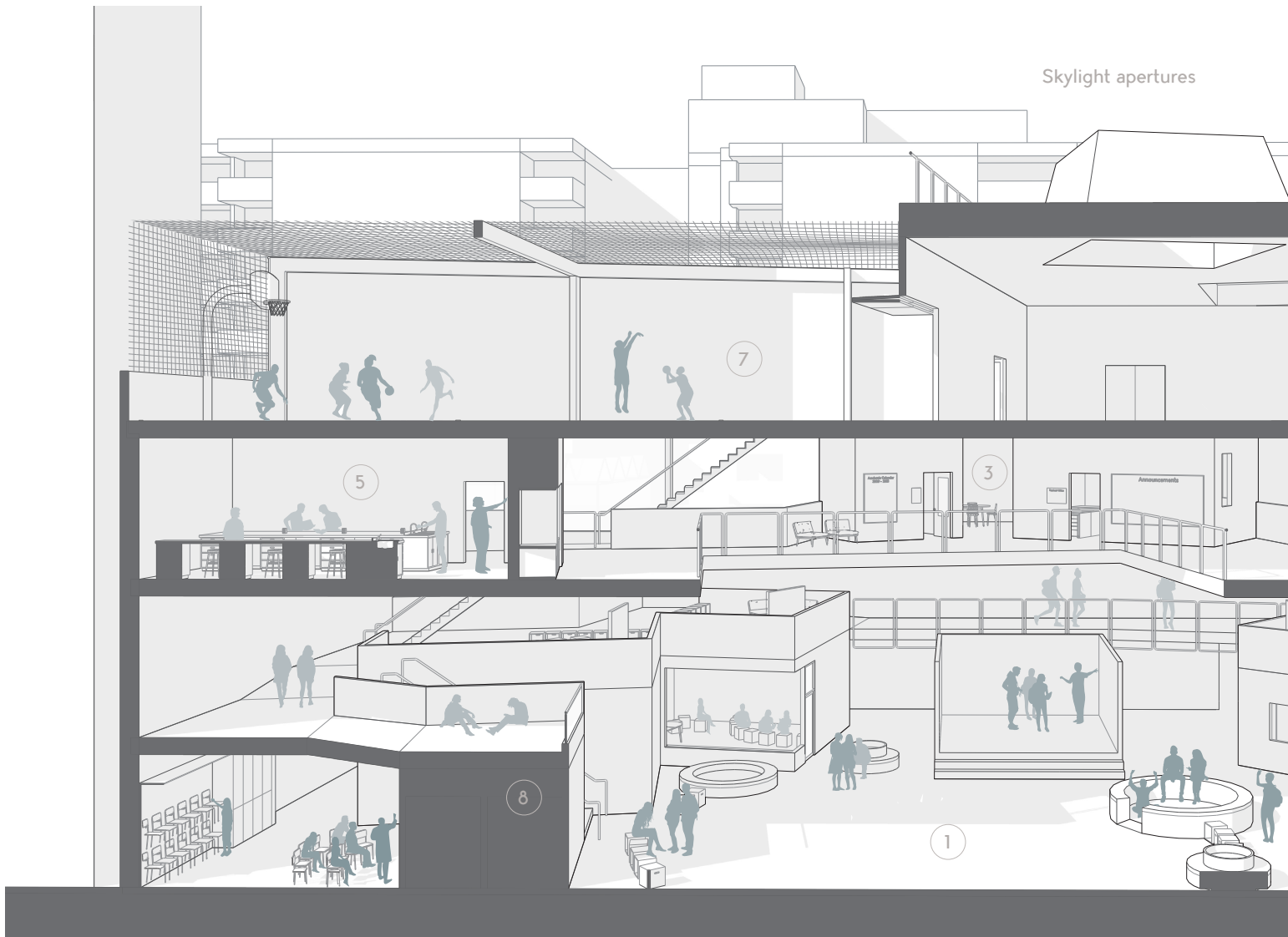
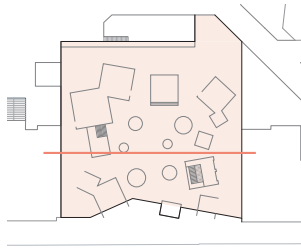
and openness. Adam Wood, a social scientist researching education and architecture explains that a common spatial strategy to achieve a sense of physical openness is the integration of a double height glass atrium to form the public entrance to the school.¹ Access to the building might still be highly regulated by school personnel. Wood argues that this attempt does not reflect ‘openness’ as suggested by architectural theorist Kevin Lynch:

“The ‘openness’ of open space is not so much a matter of how few buildings stand upon it but rather of how open it is to the freely chosen actions of its users. Openness is a product of physical character but also of access, ownership, management and of the rules and expectations that govern activity... This is a behavioural definition: a space is open if it allows people to act freely within it.”²

1 Adam Wood, ‘City Schools as Meeting Places’, *Architecture and Education* (blog), 10 June 2019, <https://architectureandeducation.org/2019/06/10/city-schools-as-meeting-places/>.

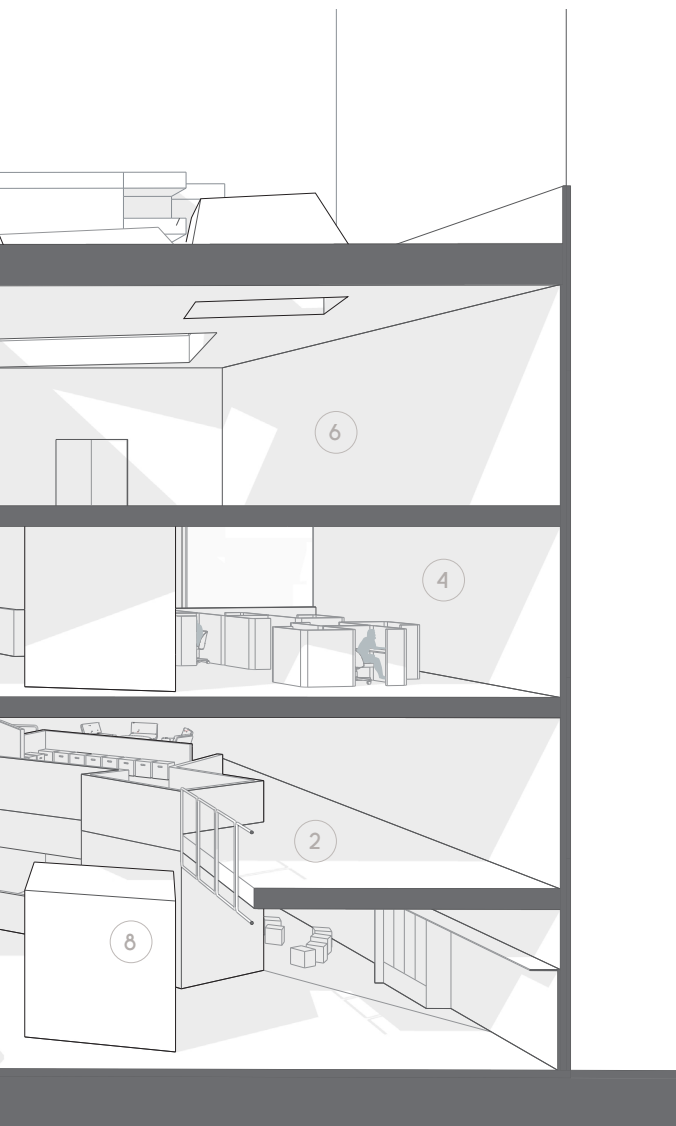
2 Kevin Lynch and Gary Hack, *Site Planning*, 3rd ed (Cambridge, Mass: MIT Press, 1984), 352–53.

The Unbounded School



- 1 - Plaza
- 2 - Learning Street
- 3 - Administrative quarter
- 4 - Individual study pods
- 5 - Laboratory
- 6 - Open plan recreation space
- 7 - Exterior play deck
- 8 - WC

Fig. 21 Section B-B: overlooking condition



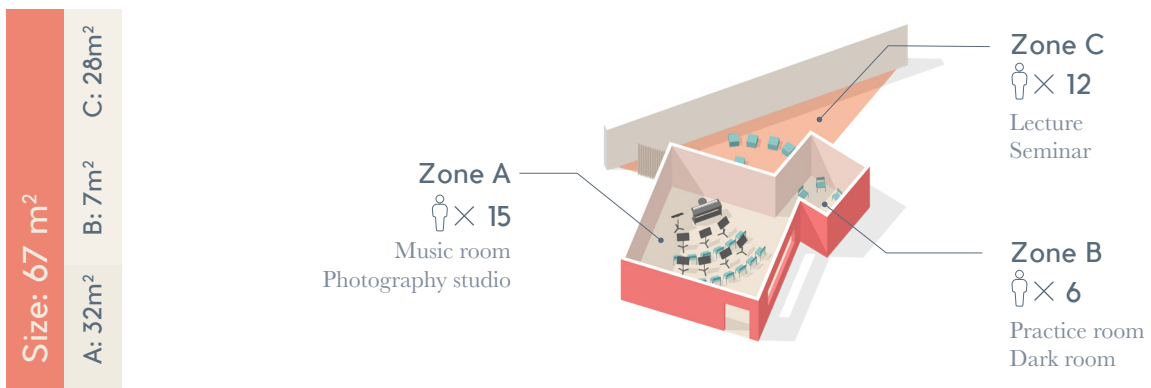
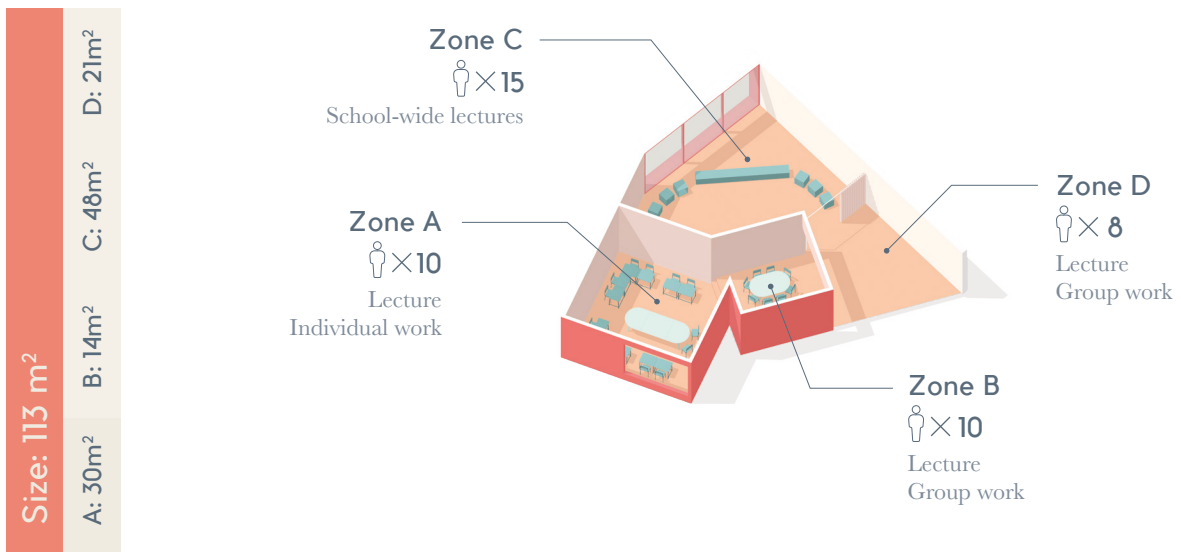
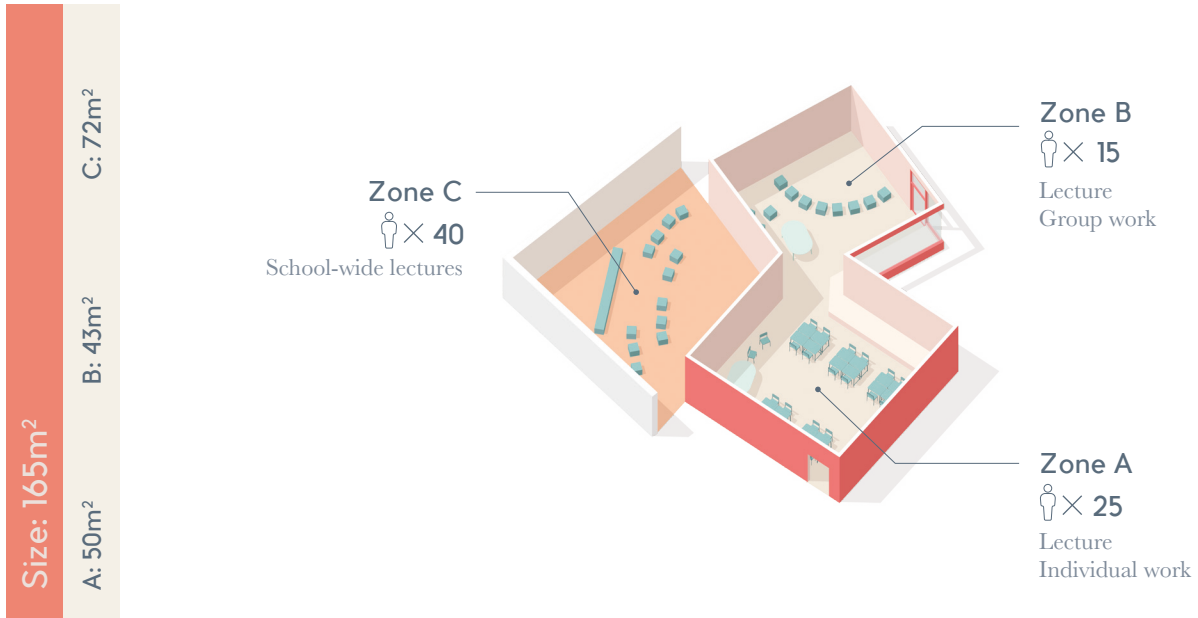
The atrium is a token to openness but “its openness is reduced by many conflicting needs and interpretations of what this school should be.”³ The need for security, control and efficiency while maintaining the appearance of openness and visibility creates tension in these spaces.⁴ A change in the degree of publicness of an urban public school requires that access and management be radically rethought and operated. How can we ensure safety in schools without resorting to mass surveillance and restricting access? Jane Jacobs, famous phrase ‘eyes on the streets’ can provide a strategy to ensure safety within the school. Encouraging teachers and students to occupy all areas of the school—rooms, circulation space, atrium—during and outside class time will increase their visibility and the general safety.

The plan configuration of the Unbounded school employs an alternative: multiple viewing points to enable a shared surveillance, like neighbours watching out for each other. This shared responsibility holds everyone, students and community visitors included, accountable to the maintenance and safety of their environment. In addition, it breaks down the distinction between students as objects to surveil and the administrative and teaching faculty as guards. The second floor mezzanine overlooks the plaza on the ground floor, the tops of the volumes, and catches an upward glimpse of the floor above. Unlike the hallway-to-classroom plan where corridors are empty for blocks of time and packed at others, the openness of the Unbounded School means that the occupation of spaces and the visibility of students in these spaces are more equality distributed throughout the day. The sectional relationship and heterogeneous vision throughout the building remind teachers, students and visitors that the school is a shared public space.

3 Wood, ‘City Schools as Meeting Places’.

4 Wood.

The Unbounded School



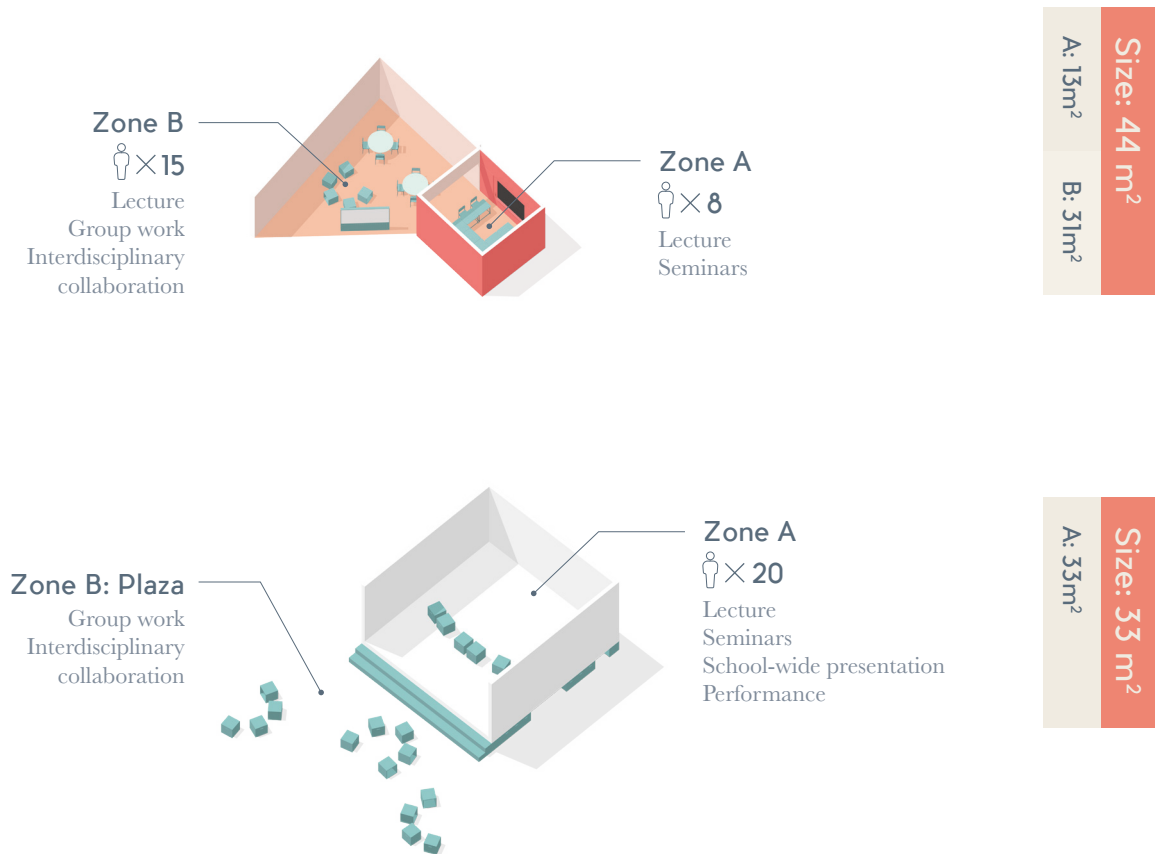


Fig. 22 Diagrams of formal and informal classroom configurations

Propinquity

On all four floors of the core unit, the scale of classroom and learning spaces vary from 4m², intimate enough for a one-on-one conversation between students, mentoring and counselling to large open spaces like the main atrium on the ground floor and the recreation space on the fourth floor. There are four clusters of volumes on the ground floor, each composed of two intersecting volumes. Together, these intersecting volumes can form one large classroom or can be zoned into two different programs. Also, through the intersection of these volumes form pockets of negative spaces called ‘class-nooks’. Most of the time these can be used as circulation and transitional spaces, and other times they can be used the extension of a classroom. Since there are no formal corridors in the building, all circulation space is programmable, occupiable space. This increases the school’s capacity to accommodate more variable class sizes. Along this fluid range of spaces—from open to more secluded conditions—different activities like all-school events, collaborative workshop and small group lectures and individual studies can find a suitable environment for their operations. A wider range of spatial



Fig. 23 Central plaza: dance rehearsal



conditions allows teachers and students to choose an appropriate setting for their educational need. This promotes spatial agency amongst students and teachers to challenge their environments and to create their own. When the design is calibrated for conditions rather than specific programs, students can temporarily occupy, appropriate or modify the spaces.

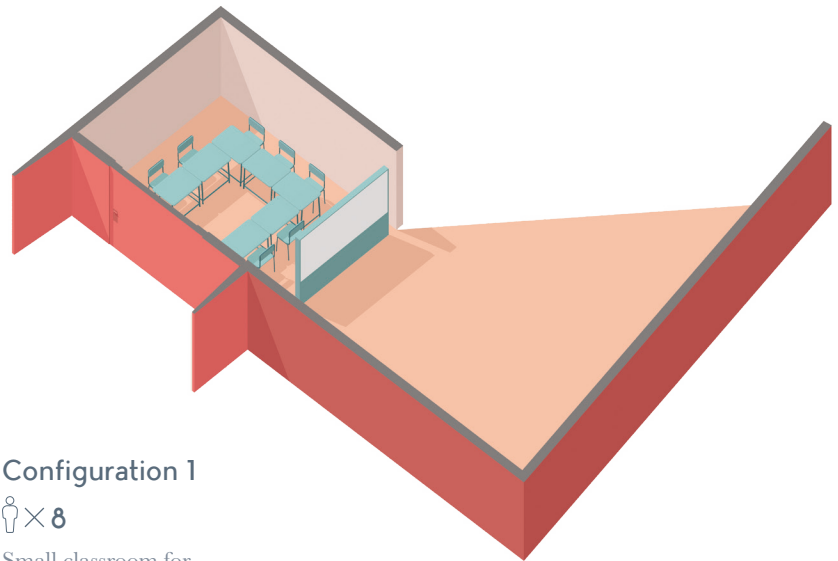
With regards to the concept of centre and periphery, the ultimate focal point in a school is not always the centre of the largest space, as it would be with other public spaces like a stage, square and assembly hall. For learning conditions, Richard Sennett's description of the threshold spaces as the in-between of public and private, 'open to scrutiny of anyone' and 'sheltered from anyone,' offers an applicable insight. The transitional period in life (puberty) and its parallel in space (expansion of social territory) is especially crucial at the level of high school education. Thus, the design of the high school needs to be in sync with that transition, it must act as a threshold. At the edge of the sheltered space, students are offered the chance to contemplate their participation and decide whether or not to move out of the threshold and into the public realm.

According to Richard Sennett, two urban infrastructures form the basis for democratic action: the town square and the theatre.⁵ On the ground floor of the core unit, a triple height space, called the 'plaza' echoes the actions of the civic square and the theatricality of an amphitheatres. The low height movable furniture accommodates a heterogenous vision throughout the space and allows people to move fluidly as individuals are able to see over and beside objects.

5 Richard Sennett, *The Spaces of Democracy* (Ann Arbor: University of Michigan, College of Architecture + Urban Planning, 1998), 15.

Continuity

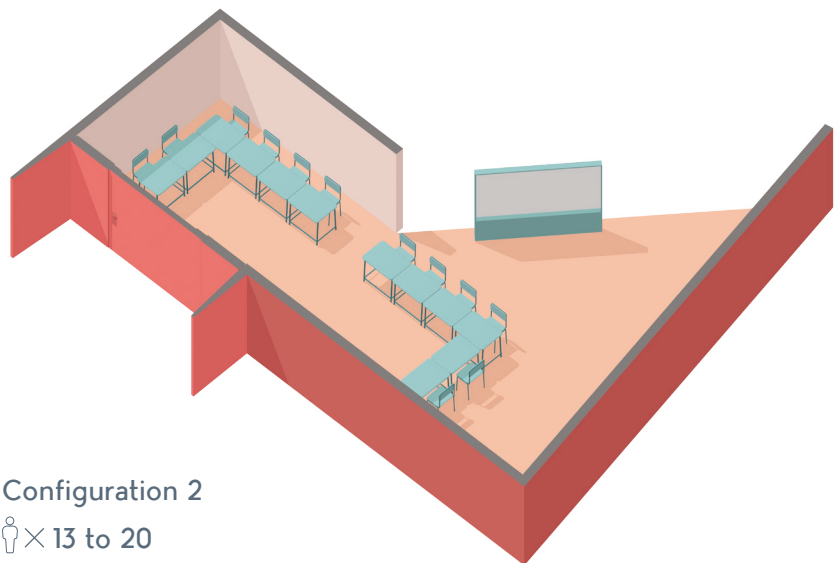
As presented throughout this thesis, in order to make education a public matter, the boundaries of education, physical and intellectual, must be broken down. The design of the school can circumvent these boundaries by blurring the spaces strictly for education with recreational spaces. Within the core unit, the vertical and horizontal surfaces are intended to expand and contract different zones to create new spatial opportunities for learning. Horizontally, the classroom area can extend beyond the wall onto the open space following a continuous flooring. The walls on many of the volumes are embedded with large felt curtains that can be pulled out to enclose a space and provide more acoustic insulation.



Configuration 1

👤 × 8

Small classroom for
- lecture
- seminars

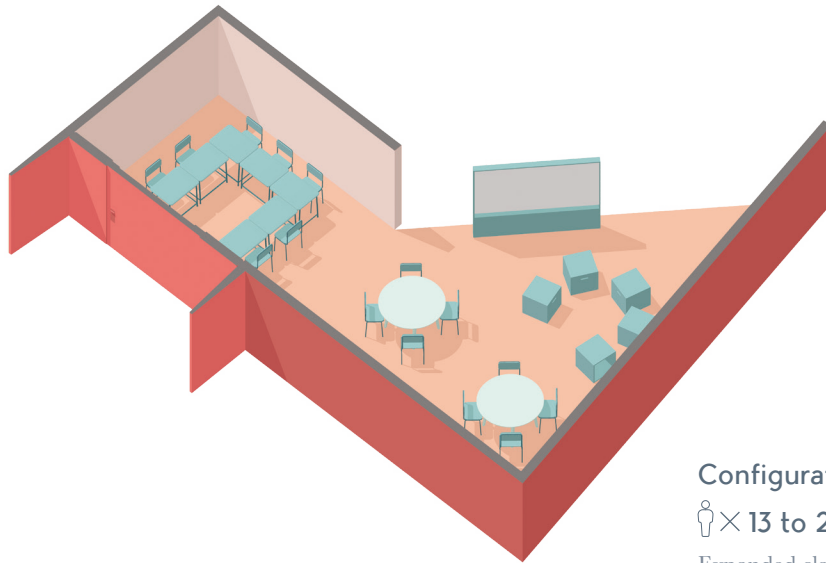


Configuration 2

👤 × 13 to 20

Expanded classroom into
one zone

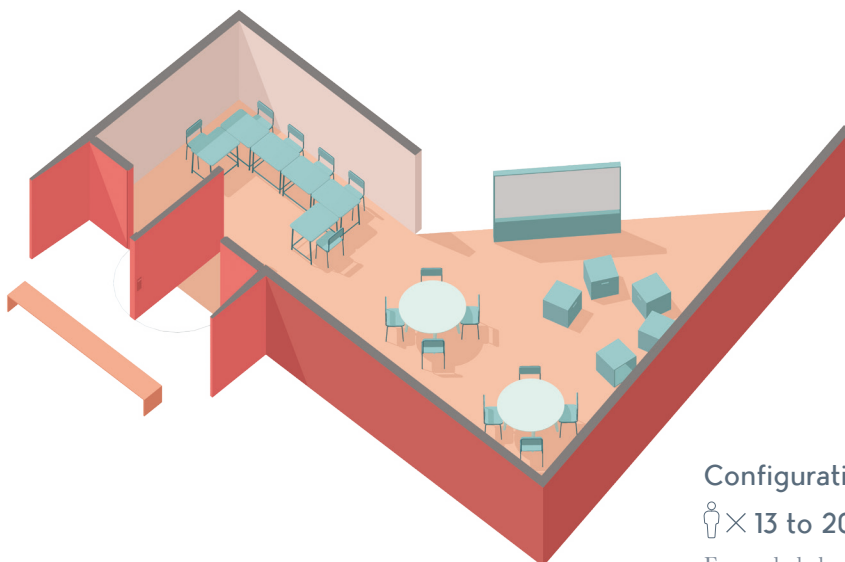
Fig. 24 Diagram of possible classroom expansion configurations



Configuration 3

👤 × 13 to 20

Expanded classroom into two zones



Configuration 4

👤 × 13 to 20

Expanded classroom into two zones with exterior classroom

The second floor mezzanine is made to be the home base of the student body, an extended student lounge. The inspiration for the mezzanine to be a kind of learning street comes from Herman Hertzberger's concept of utilizing circulation space for learning. Large corridors were once designed as circulation to accommodate large flows of students leaving their classrooms at the sound of the bell. Hertzberger says that "you don't need large corridors for that reason anymore, but you can make nooks and places for people to sit and have tables there so that you get a 'learning street', like a shopping street."⁶ On the mezzanine of the Unbounded School, the narrow floor plate expands onto sections of open study and lounge areas.

While the ground floor rooms are better suited for group focus sessions, the mezzanine level can be subdivided into smaller more intimate spaces for discussion and group work. The openness and informal configuration of the spaces are more inviting to external teaching staff and mentors to work with students in a group or a one-on-one meeting. The porosity of the floor translates the idea that the entire school belongs to the students and not just an enclosed student lounge.

6 Dyer Emma, 'Interview with Herman Hertzberger (2016)', *Architecture and Education* (blog), 3 February 2016, <https://architectureandeducation.org/2016/02/03/interview-with-herman-hertzberger/>.

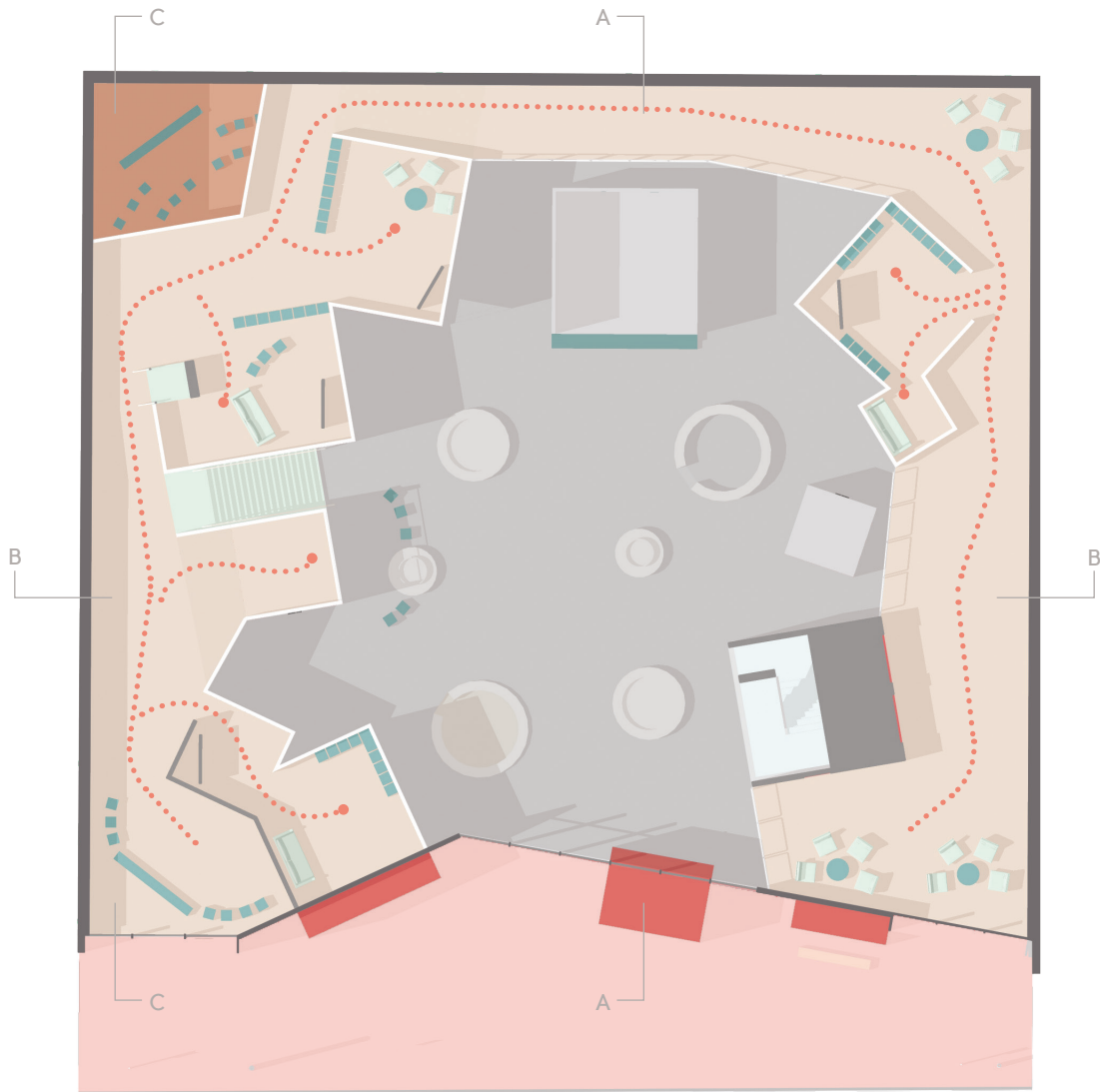
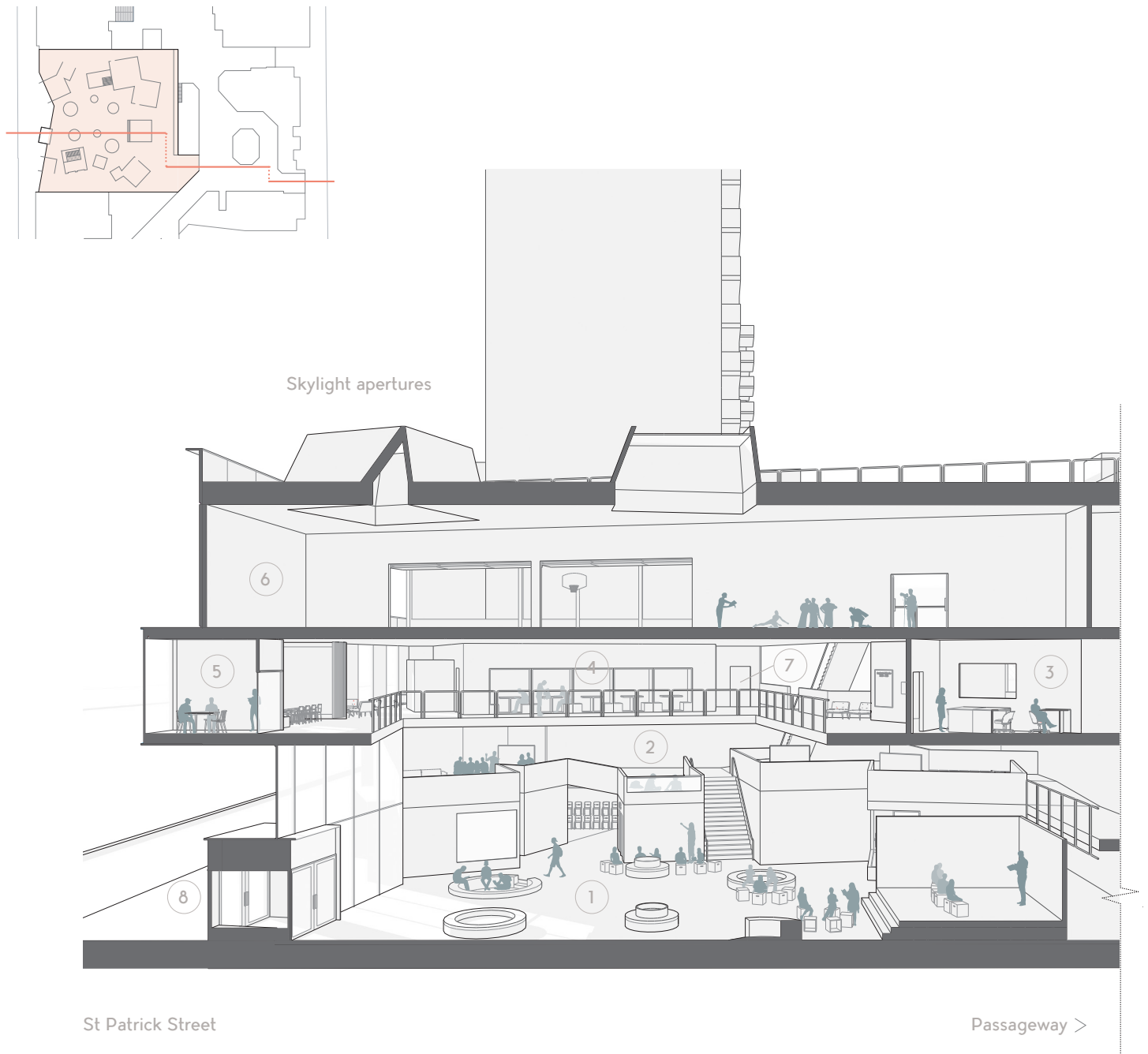


Fig. 25 Learning Street: mezzanine second floor

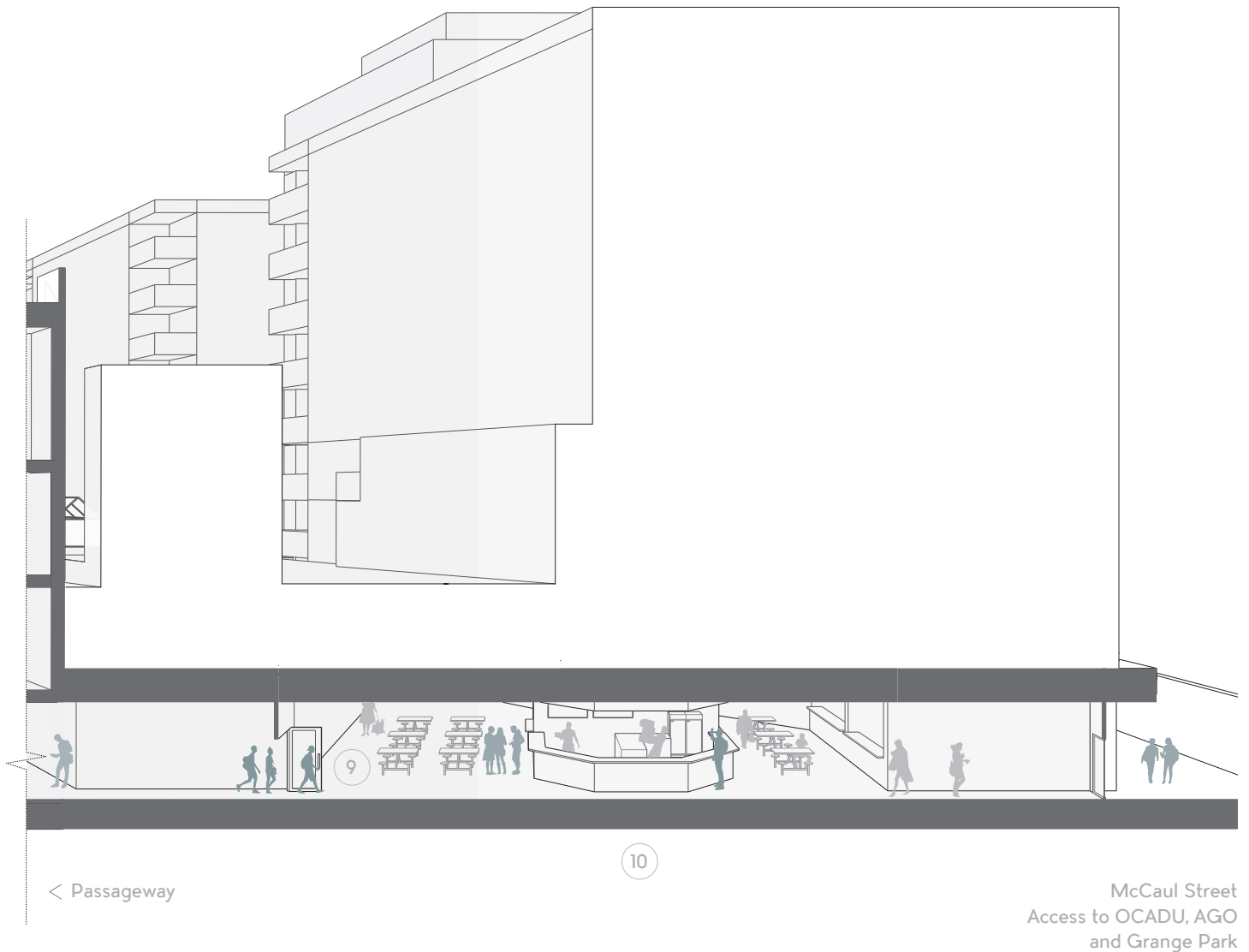


The Unbounded School



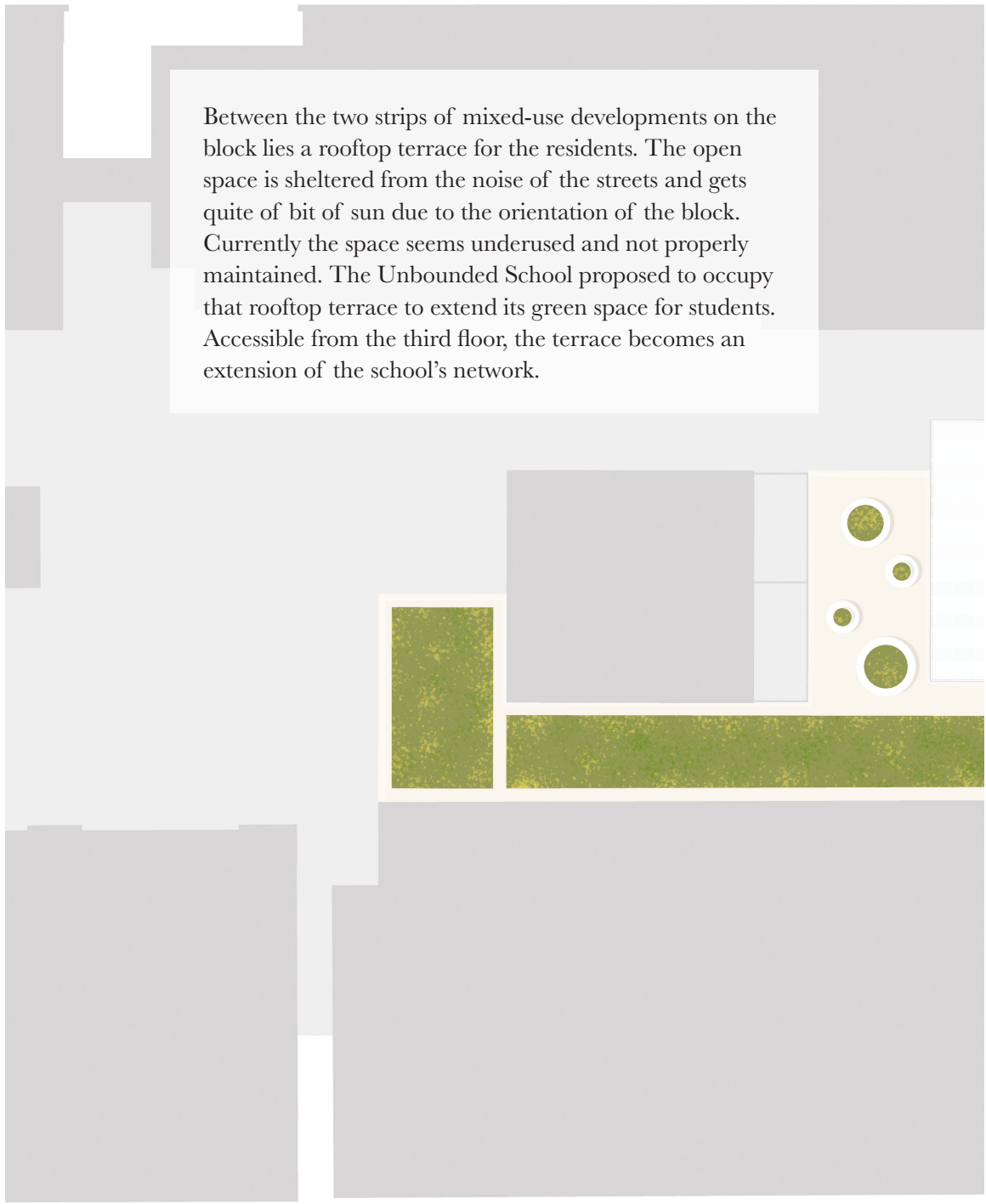
- | | | |
|---------------------------|--------------------------------|---|
| 1 - Plaza | 5 - Group and seminar rooms | 9 - Entrance from Village by the Grange |
| 2 - Learning Street | 6 - Open plan recreation space | 10 - Village by the Grange food court |
| 3 - Teachers' office | 7 - Access to exterior terrace | |
| 4 - Individual study nook | 8 - Vestibule | |

Fig. 26 Section A-A: connection from Core Unit to Village by the Grange food court

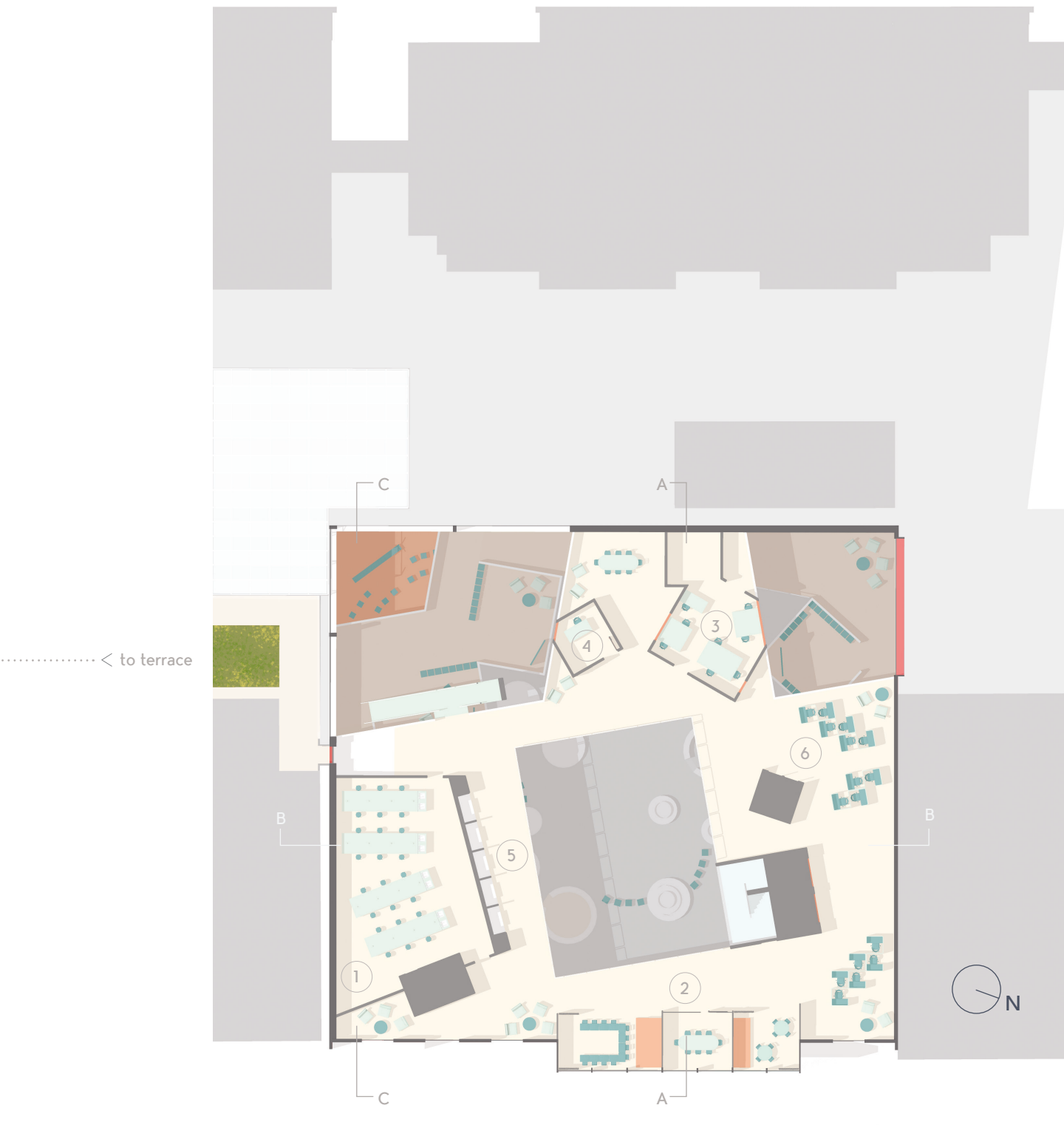


While continuity in public spaces is expressed by the gradient of sociability with no abrupt boundaries between parts of the public network, the school as an administrative precinct cannot extend its jurisdiction infinitely. However, it may borrow and use the public network as an extension and partners to seamlessly blend the learning spaces across the city. The core unit and the storefront node are connected through this public corridor, just as OCADU uses the food court to connect its main building to the Annex and the Learning Zone. The Unbounded School utilizes this highly visible interior frontage to showcase the work of student and upcoming events.

Between the two strips of mixed-use developments on the block lies a rooftop terrace for the residents. The open space is sheltered from the noise of the streets and gets quite of bit of sun due to the orientation of the block. Currently the space seems underused and not properly maintained. The Unbounded School proposed to occupy that rooftop terrace to extend its green space for students. Accessible from the third floor, the terrace becomes an extension of the school's network.



to school >



- | | | |
|-----------------------------|------------------------|---------------------------|
| 1 - Laboratory | 3 - Teachers' office | 5 - Individual study nook |
| 2 - Group and seminar rooms | 4 - Principal's office | 6 - Individual study pods |

Fig. 27 Third floor with roof terrace connection



Fig. 28 Administrative quarter

The core unit achieves spatial cohesion through interconnected volumes, open floors and repetition of unit blocks. For example, the administrative quarter on the third floor is designed in the same configuration and geometry as the classrooms on the ground floor to echo the equality between students and teaching faculty.

To further enable students' sense of ownership of the school, visible cues of wayfinding are important to maintain continuity. Even when distracted and wandering around the school, students' locality is always referenced by the architecture's sectional relationship, like how wandering in the city is always referenced by the open sky and a familiar street structure.

Continuity also signifies that the process of learning and knowledge sharing continues beyond the classroom, onto the streets and in the city outside of school hours. By changing the type and location of spaces



Fig. 29 View out onto terrace from teacher's lounge

students can occupy, school hours become any hour of the day. When learning can spill out of the classroom and onto the streets, where does the school end and the city begin?

Continuous learning is facilitated by the architecture's ability to adapt and change enables the school to respond quickly to changes in curriculum brought up by students or teachers. It also allows teachers the freedom to engage with architecture and experiment with their teaching environment. The core unit provides plenty of open floor area to accommodate workstations outside the 'classrooms' where students can work independently or in groups during class hours.

Mobility of the classroom setting is accommodated by foldable chairs and tables hung on the walls and available for students and teachers to set up class anywhere. Flexibility of space and movable furniture can increase student's agency over their environment and therefore a sense of ownership. Once symbols of discipline, the chair and desk are not confined to a row arrangement in a classroom. They are now free to be moved and manipulated by the students.

As designers, we should advocate for innovation and sustainable designs that can anticipate the shifting parameters of educational needs and trends. One way of dealing with increase enrollment without increasing class sizes is to rethink how classrooms are programmatically distributed within the school. Are all spaces in the school functioning at full capacity all day long? What additions need to be made to a space for it to be transformed into a suitable classroom? A more fundamental question would be: what constitutes an appropriate classroom? Can those elements be broken down and rearranged for more efficient distribution of students in the school at one time? For a lesson to be successful, do all 25-30 students need to be in the same room for the entire duration of the class?

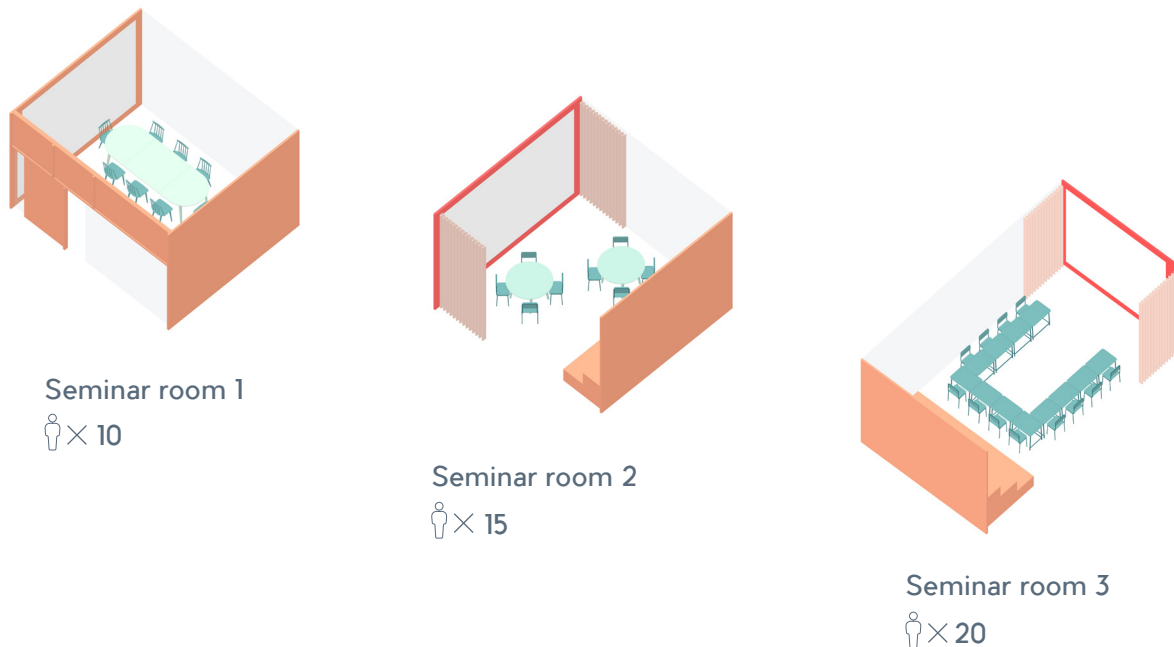


Fig. 30 Diagram of seminar rooms on the third floor

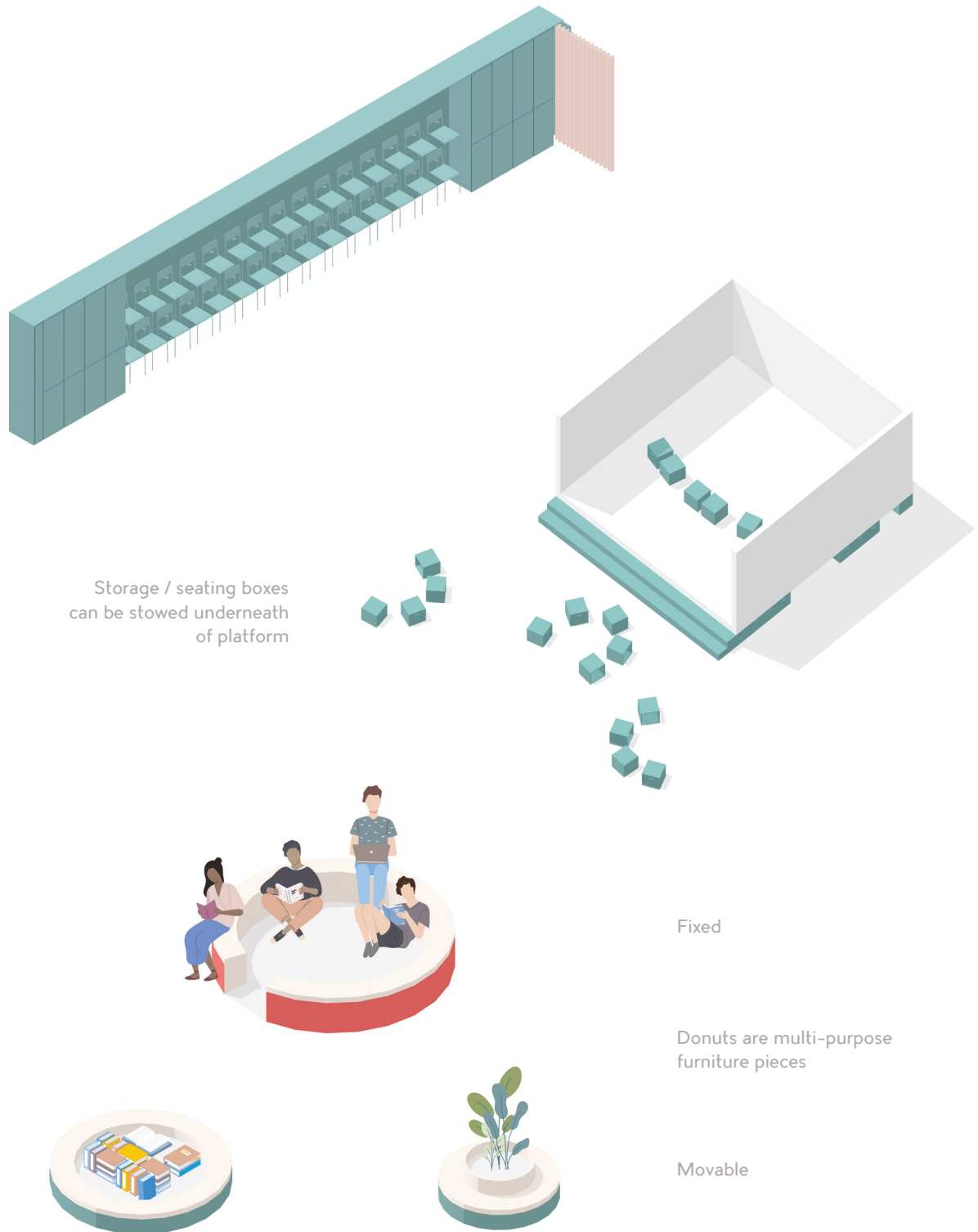


Fig. 31 Diagram of flexible and movable furniture

The large 700m² open plan recreational space on the fourth floor is an example of a space that can be adapted to suit a variety of programs requested by the school or the students. The blank walls on all sides allow for mounting of bars and mirrors for a dance studio, or of canvas for an art exhibit. The room remains brightly lit from the large skylight apertures. The wide bi-folding doors on the south wall open the space out onto the exterior sport and play deck with a half basketball court. For smaller urban sites, the play deck is an alternative solution to the conventional gymnasium. The students can play and train along Toronto's skyline.

In sum, the variety of spatial opportunities afforded in the core unit provides students an experimental ground on which they can learn to take charge of their education. As the mediator between realities, the school blurs the boundaries in space to promote the practice of freedom, allowing students to take part in the gradual education reform. Such an environment will foster an attitude of collective responsibility amongst its students, an attitude that they will transpose onto the city as active citizens.

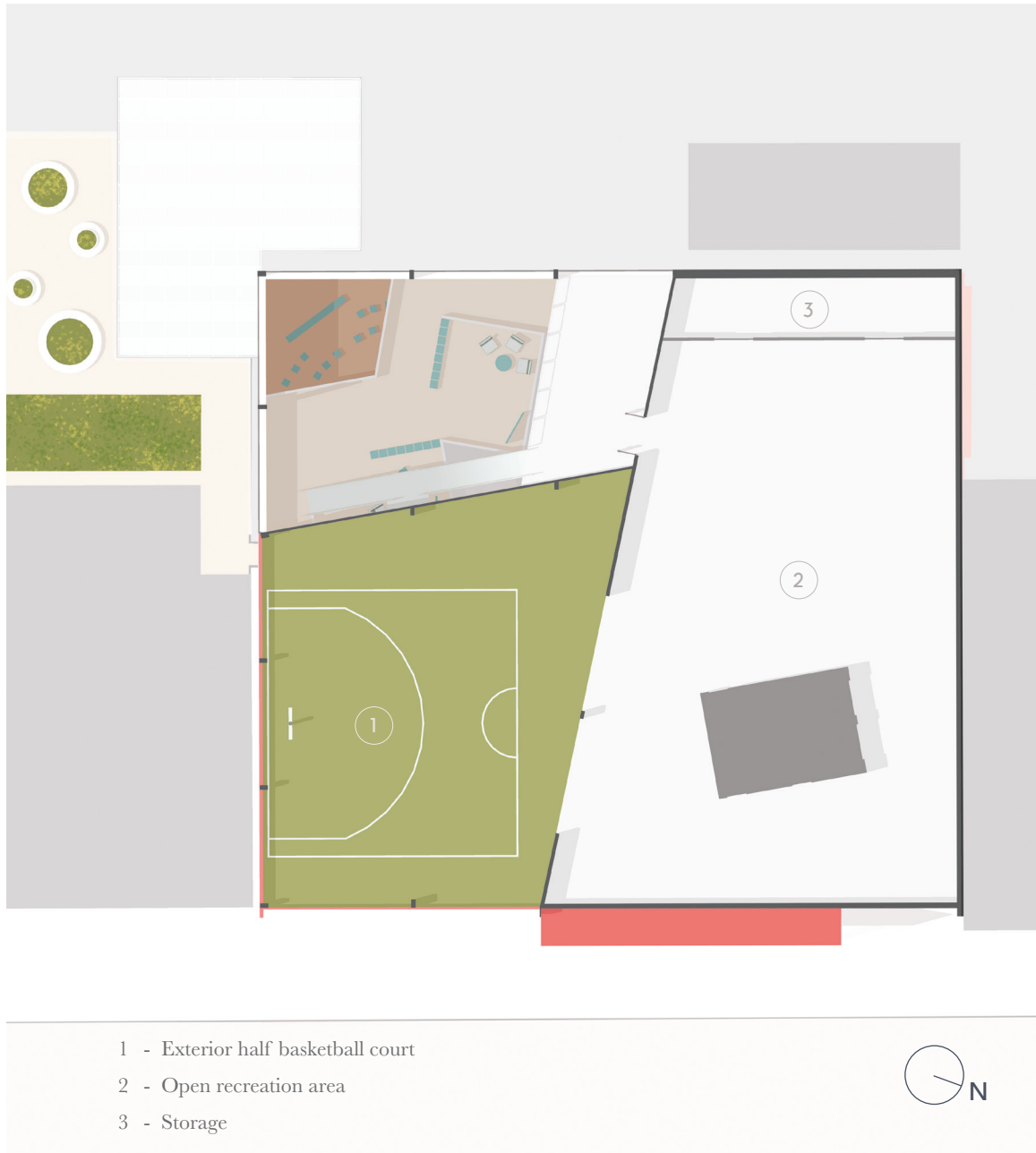
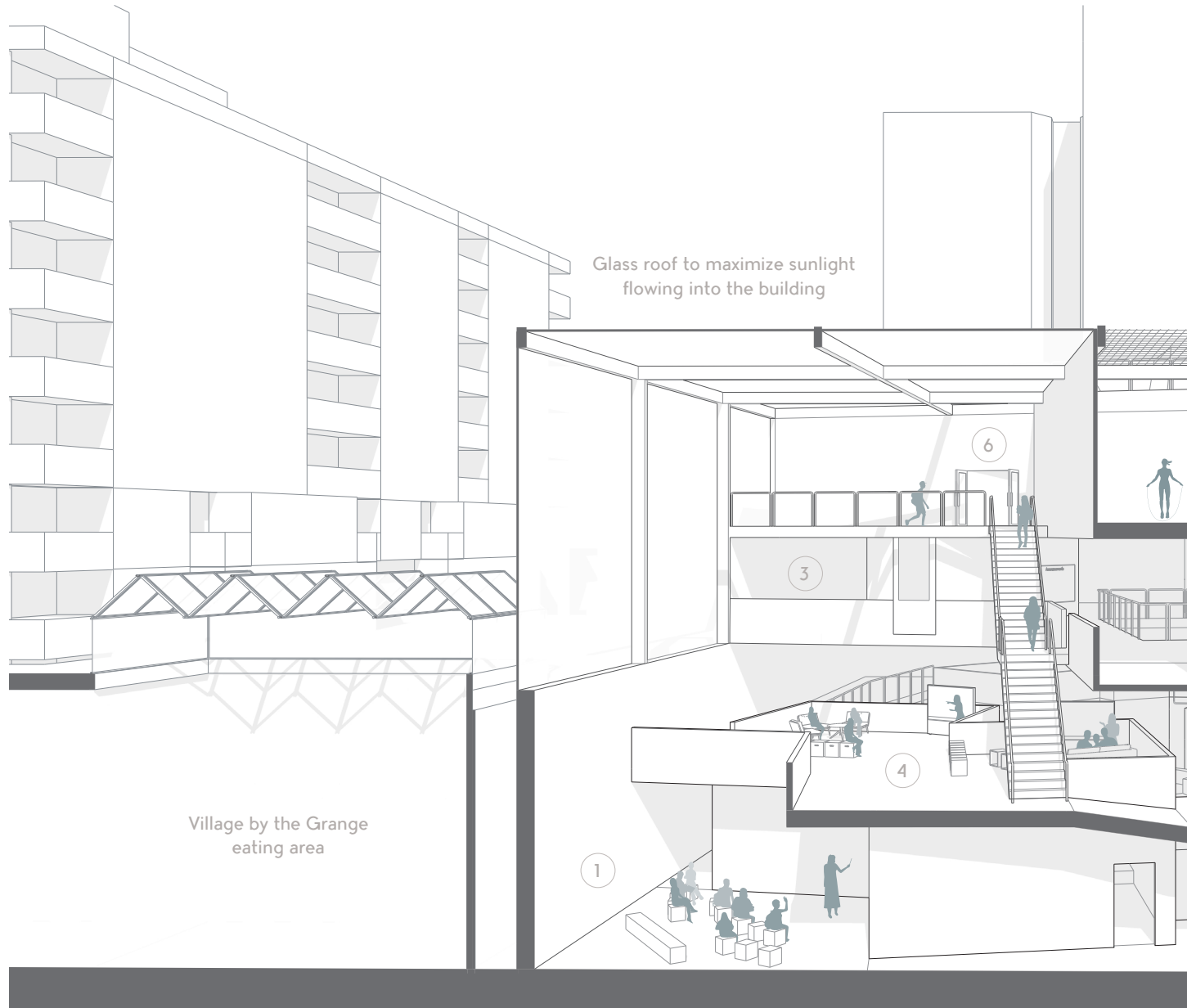


Fig. 32 Fourth floor with recreation spaces

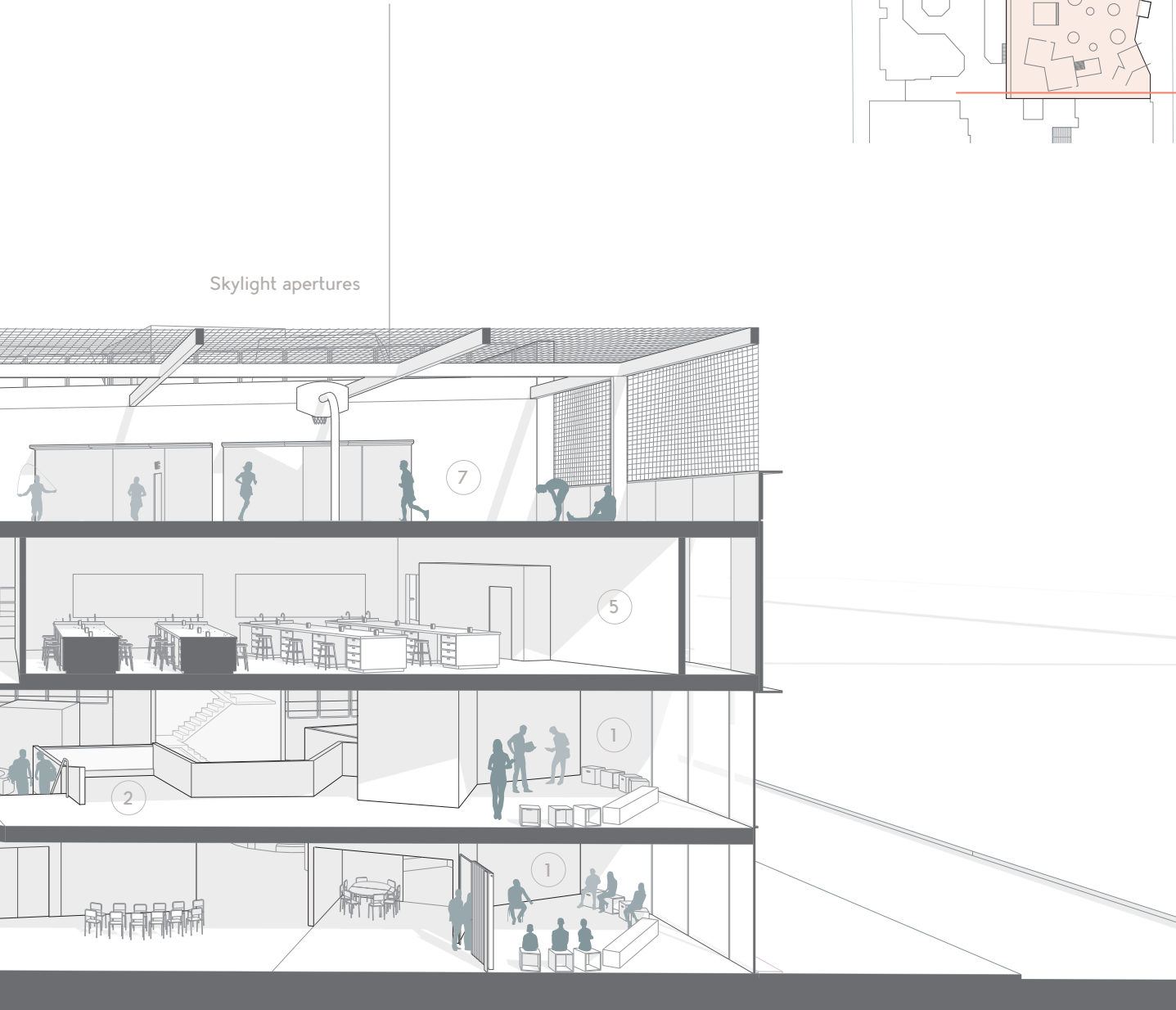
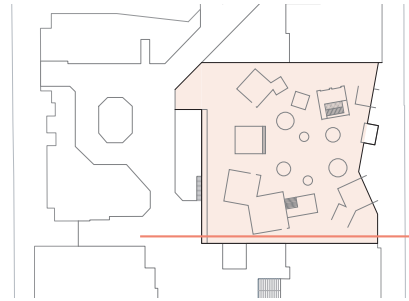
The Unbounded School



- 1 - Class-nook
- 2 - Learning Street
- 3 - Administrative quarter
- 4 - Open study and lounge area
- 5 - Laboratory
- 6 - Entrance to recreation space
- 7 - Play deck

Fig. 33 Section C-C

The School designed as the City



St Patrick Street



Roof terrace

1

Core Unit

St Patrick Street

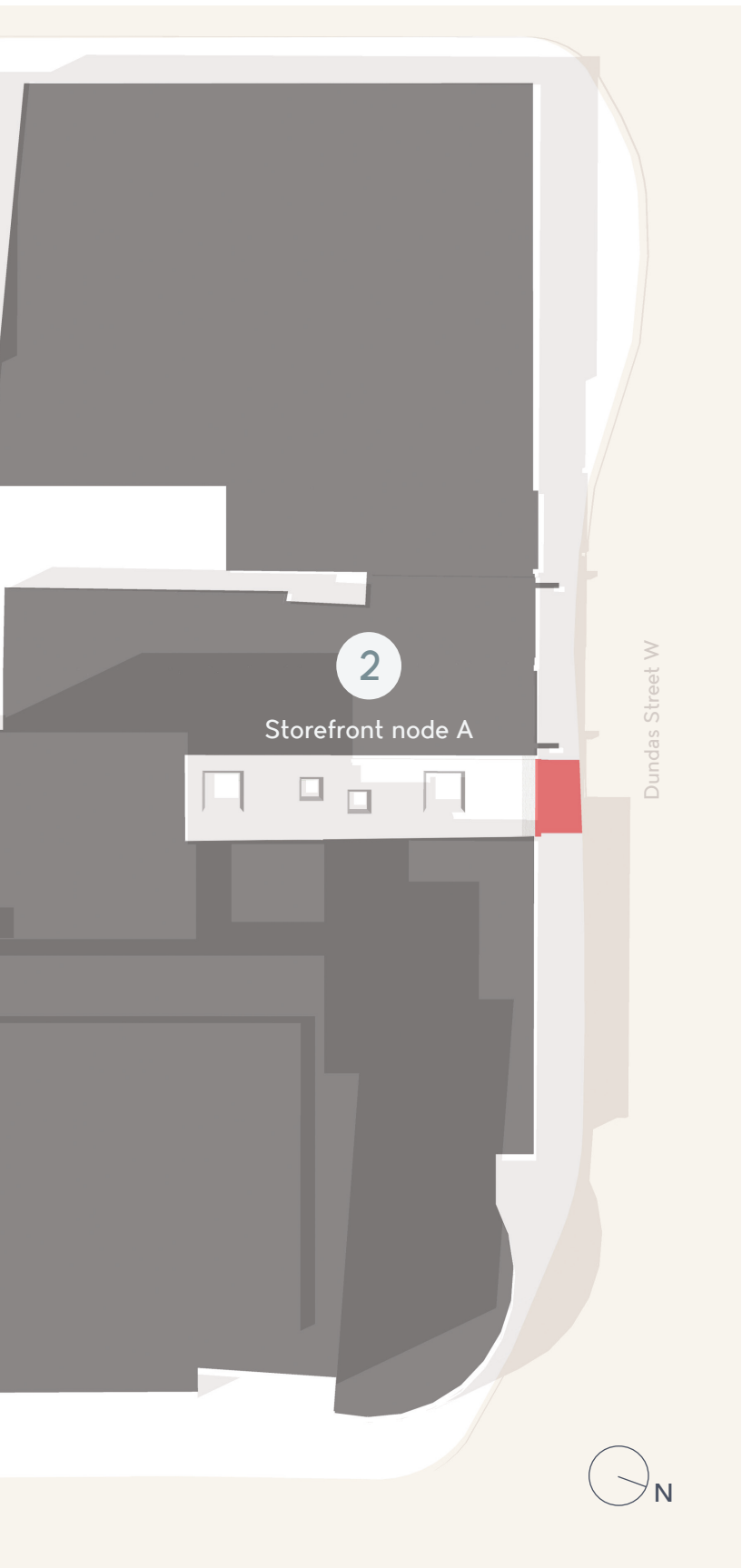
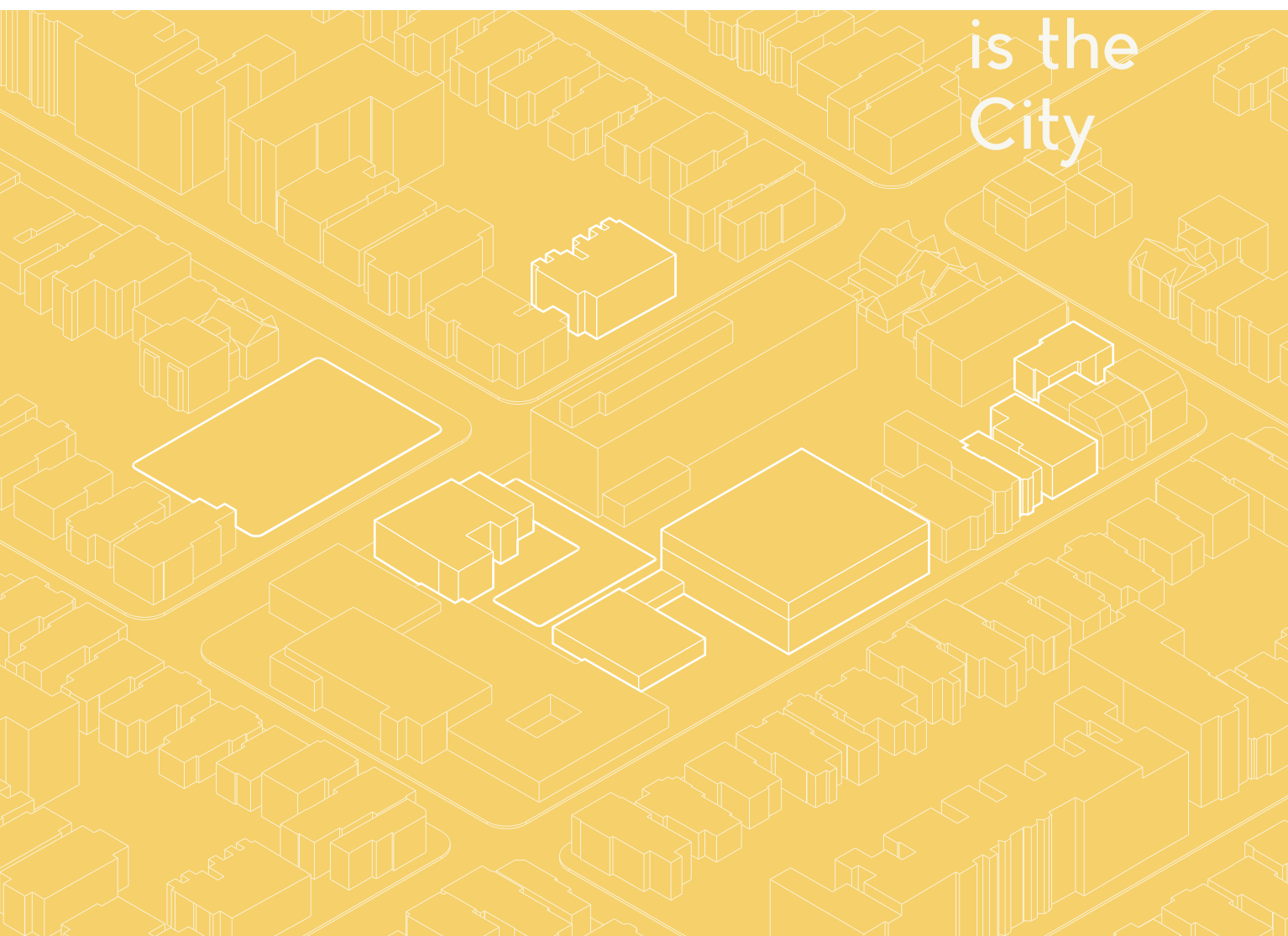


Fig. 34 Rooftop plan of Core Unit and Storefront node A

The School is the City



This last examination of the mutualistic relationship between school and city returns to Paul Goodman’s proposal to use the city as the primary educator and explores the spatial ramifications of turning the city into pockets of learning spaces. The purpose of this chapter is to highlight the takeaways from this radical movement in pedagogy to reimagine its application in our contemporary city. The school is the city frames a solution to the intellectual and physical boundaries set out in chapter one as a design extension to the core unit of the Unbounded School.

The Network and the Movement

From a collection of pedagogical insights by Paul Goodman, three key arguments are useful for a reconception of the physical and intellectual boundaries of the school environment:

1. “Dispense with the school building for a few classes; provide teachers and use the city itself as the school — its streets, cafeterias, stores, movies, museums, parks and factories. Such a class should probably not exceed ten children for one pedagogue.”
2. “Along the same lines, but both outside and inside the school building, use appropriate unlicensed adults of the community — the druggist, the storekeeper, and the mechanic — as the proper educators of the young into the grown-up world.”
3. “Decentralize an urban school (or do not build a new big building) into small units, twenty to fifty, in available storefronts or clubhouses. These tiny schools, equipped with record-player and pin-ball machine, could combine play, serializing, discussion and formal teaching. For special events, the small units can be brought together into a common auditorium or gymnasium, so as to give the sense of the greater community.”¹

1 Paul Goodman, *Compulsory Mis-Education, and The Community of Scholars*, 2nd ed. (New York: Vintage Books, 1964), 32–33.

Three selected arguments from an initial proposition of six.

Goodman believed that these measures would overcome the separation of the youth from the adult world, and equalize the power dynamic between teachers and students. The engagement of non-licensed teachers and adults become a fulfilling learning experience as they contribute to the school.²

Colin Ward was a prominent writer, educator and architect who further some of Goodman's ideas in his career as educational officer for the Town and Country Planning Association (TCPA) in London, UK. For Ward, environmental education was more than just the object of the study, rather environmental education was the medium of the study: to educate for the mastery of the environment. This paradigmatic shift in understanding how we learn is a crucial stage of moving from a formal democracy to a participatory democracy in education but also in society. Ward and TCPA contributor Anthony Fryson believed that “marginal in-between spaces in social life, [...] creative flourishing was more likely to occur than in the sanctioned institution central spaces reflecting and representing state authority.”³ Catherine Burke, professor of History of Education at the University of Cambridge explains that Ward and Fryson “envisaged children and young people as positive resources of and for their communities, which were understood to be richly ever-changing, dynamic forums of interactions between people, places and things.”⁴

This pedagogical framework that centres around a student as a marker of their environment subsequently changes how and where subjects in school are being taught. Burke also attributes Ward's practical and theoretical approach to environmental education to the growing interest in place-based education and participatory design,⁵ a pedagogical trend headlining a lot of the discussion around school designs in the last decade. Burke notes that place-based education “encourages the questioning of place, recognizing it not so much as a fixed adobe but rather as always subject to negotiation and change.”⁶

2 Goodman, 33.

3 Catherine Burke, “Fleeting Pockets of Anarchy”: *Streetwork*. The Exploding School’, *Paedagogica Historica* 50, no. 4 (4 July 2014): 440, <https://doi.org/10.1080/00309230.2014.899376>.

4 Burke, 434.

5 Burke, 434.

6 Burke, 439.

If we understand environmental education as fluid and adaptable, learning from and in the city may be a solution to our crisis in education. Environmental education reattributes education as a collective responsibility and the school as a site of collaboration between students and the city. “The city is in itself an environmental education, and can be used to provide one, whether we are thinking of learning through the city, learning about the city, learning to use the city, to control the city or to change the city.”⁷ For Ward, the built environment encodes power dynamics in visible form. True social change starts with questioning and reframing to actively implement changes to these power dynamics. The space for this practice, for Ward and Goodman, happens in the city and a participatory education involving the community.

In the 1970s, public schools in major American cities were overcrowded. The District School of Philadelphia tested a ‘school without walls’⁸ model funded by local school boards that set out to use the whole of the city as the campus. The Philadelphia Parkway Program had many innovative ideas for an urban school: non-hierarchical class structure, student input on school policies, classes held in public and rented private spaces. The selection of applicants by a lottery draw intended to give an equal opportunity to every student regardless of their academic or socio-economic background. The selection process was a public event held along the Benjamin Franklin parkway, the civic and cultural boulevard of the city. Philadelphia’s skyline became the backdrop of many other milestone moments at the school. Parkway’s second graduation ceremony took place on the steps of the Philadelphia’s Museum of Art.

These displays of publicness reflected the school’s civic engagement towards its community and students, and exemplified a concrete expression of the democratization of education—an aspiration for many of the educators mentioned in this thesis. Such an emancipatory education program became evidently clear in an interview with John Bremer, director of the Parkway Program and WFMT radio in Chicago when the director said “you got to submit to the social structure, on the other hand you must never accept it as the final thing but learn how to change it—the curriculum is to help students to achieve power and the

7 Colin Ward, *The Child in the City* (London: Architectural Press, 1978), 176.

8 A term used by Colin Ward in his publication *Streetworks: The exploding school*.

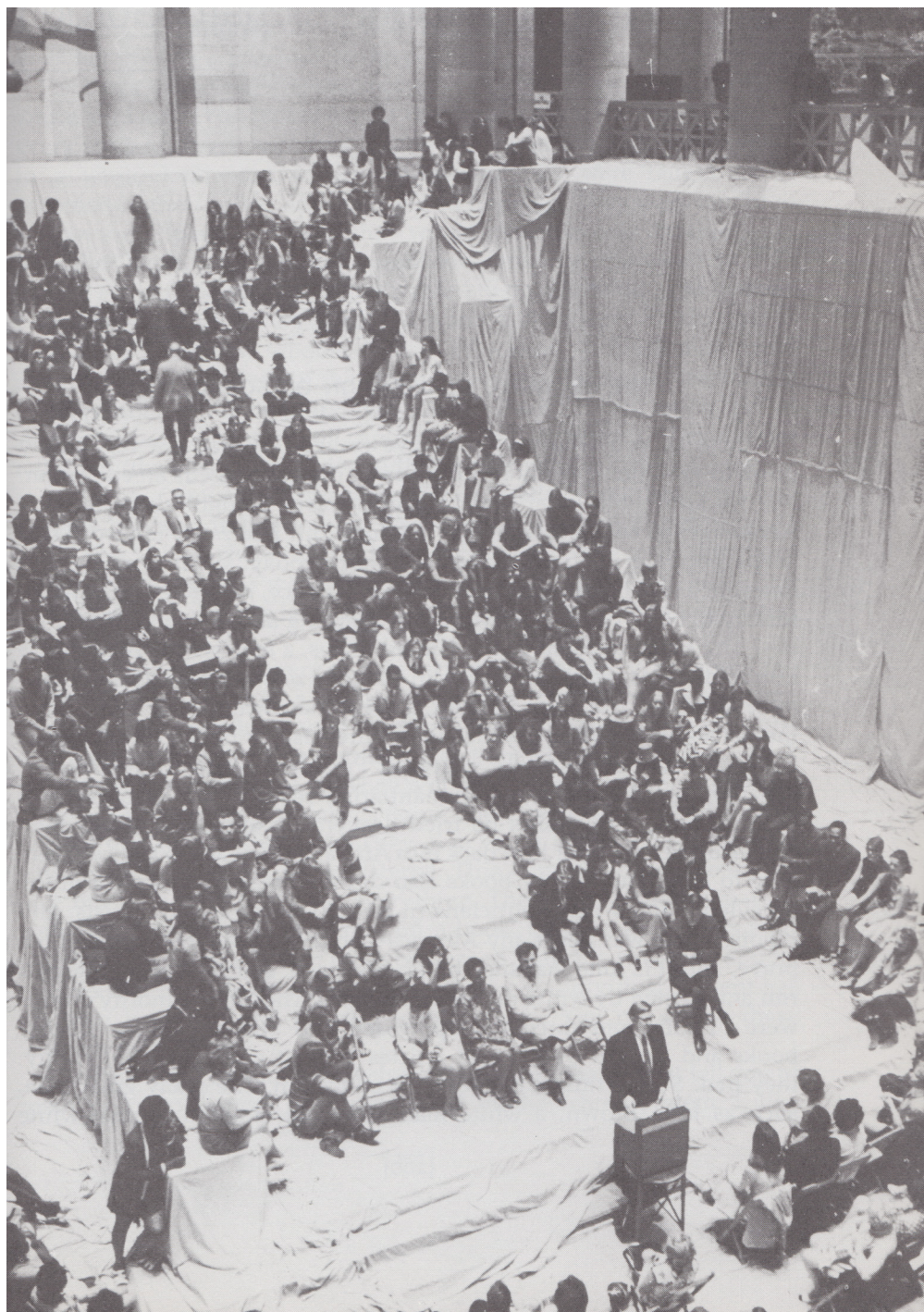


Fig. 35 Parkway Program's graduation on the steps of the Philadelphia Museum of Art

skills by which they can improve the city, beautify it and make it more just.”⁹ The underlying lesson at Parkway is about learning through skill and sabotage.

The pedagogy advocated by Ward to Goodman along with the experiment of the Parkway Program demonstrate how the school and its extension can become sites for social change. From defining spaces for learning to the makeup of their curriculum, the Parkway Program aimed to give a voice to the disenfranchised youth who had been long removed from the urban environment. By virtue of being a network of fluctuating spaces aggregated from the city, the Parkway school supported its students in their claim to their school and their city. To answer Judith Suissa’s question, “by whom the matter is being taught?” the city becomes part of the answer.

In this mutualistic relationship between school and city, the latter becomes a support to the enrichment of the former. Similar projects to the Parkway program happened in Chicago and Montreal.¹⁰ The enthusiasm came from a citywide change in mobility. Both projects took advantage of a new public transit system and the large stretches of public spaces that accompanied it to increase the reach of the school. How would the ideas of ‘schools without walls’ apply to a contemporary city like Toronto and what are the advantages of this typology over the large public-private partnership development projects? In the context of a growing trend of shared models of land and property occupation, schools can participate in this cultural shift and become part of the network.

The Network and a Changing City

As modern cities conglomerate and subdivide, planners and designers are tasked to come up with solutions to accommodate for the expansion and contractions of their populace. Land consolidation for multi-residential buildings or new subdivision developments are tied to the growth and

9 WFMT Radio Network, “John Bremer discusses educational innovation, The School Without Walls: Philadelphia’s Parkway Program,” aired January 25, 1971 (Chicago: WFMT Radio Network, 1971), Radio Broadcast.

10 Colin Ward and Anthony Fyson, *Streetwork: The Exploding School* (London: Routledge & Kegan Paul, 1973), 6–7.

sprawl of the city. The demographics of these neighborhoods are changing quickly as a new generation moves back to the city centre. The corresponding urban densification brings about a new opportunity for schools to establish themselves as community-based resources. If schools are the nuclei of communities, school typologies should vary as the urban morphology of the neighbourhood changes. The network system engages in the planning and decision-making of its urban context. As the Ministry of Education and the school boards continue to find new creative ways to accommodate for rapid growth in enrollments, this typology allows for a more adaptable and fluid expansion of high schools, contrary to the popular alternative solution—portables—that are used as temporary solutions to a seemingly permanent problem.

As part of their Long-Term Program and Accommodation Strategies for 2018-2027, the Toronto District School Board has acknowledged its challenge to respond to a rapidly changing demographic, from high growth areas to aging neighbourhoods with declining enrollment and school closures.¹¹ For example, in denser urban centres, the typology of the school building should change to be able to adapt in a vertical and mixed-use environment. Considering the capital renewal backlog of the school board and scarcity of affordable property for conventional school typologies, the TDSB expressed a willingness to partner with mixed-use building developments as a way to acquire space in urban centres as well as to generate tax revenue to fund capital requirements.¹²

11 Toronto District School Board, 'Long-Term Program and Accommodation Strategy 2019-2028', Appendix A, 12 December 2019, 1–9, https://www.tdsb.on.ca/portals/_default/ARC_helpful_info_docs/LTPAS2019_v3.1_Full_Version.pdf.

12 Toronto District School Board, 1–9.

The Unbounded School

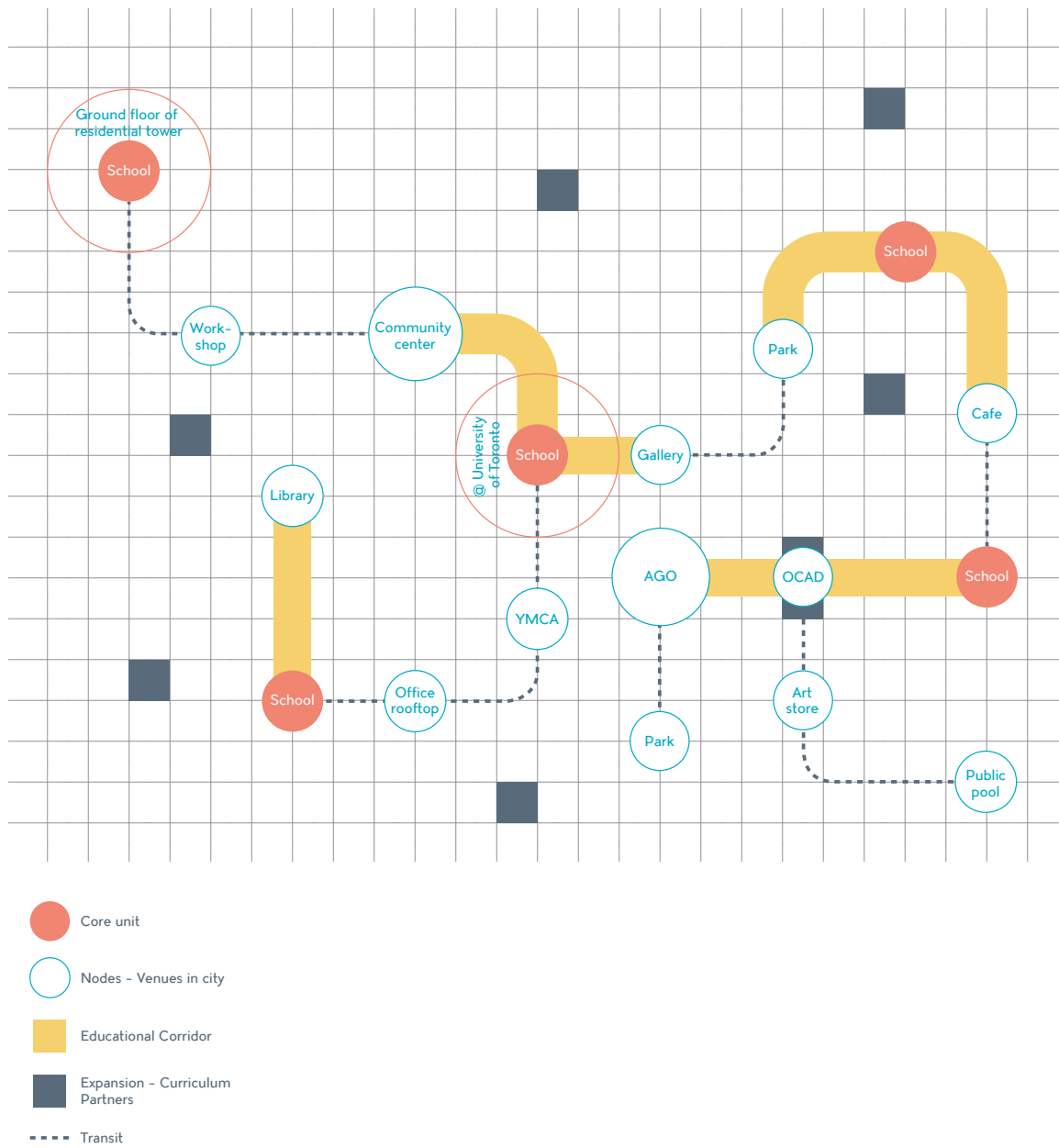
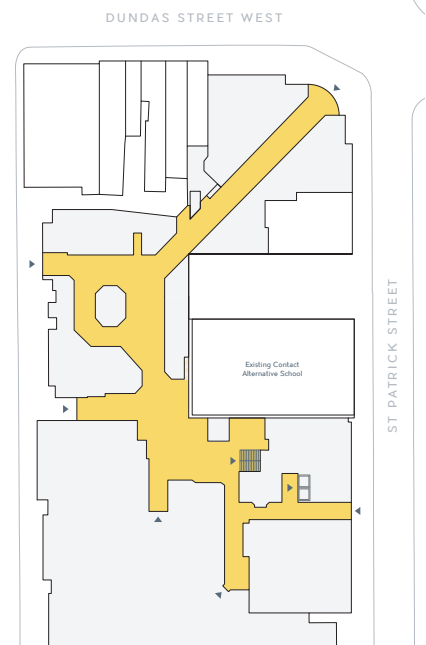
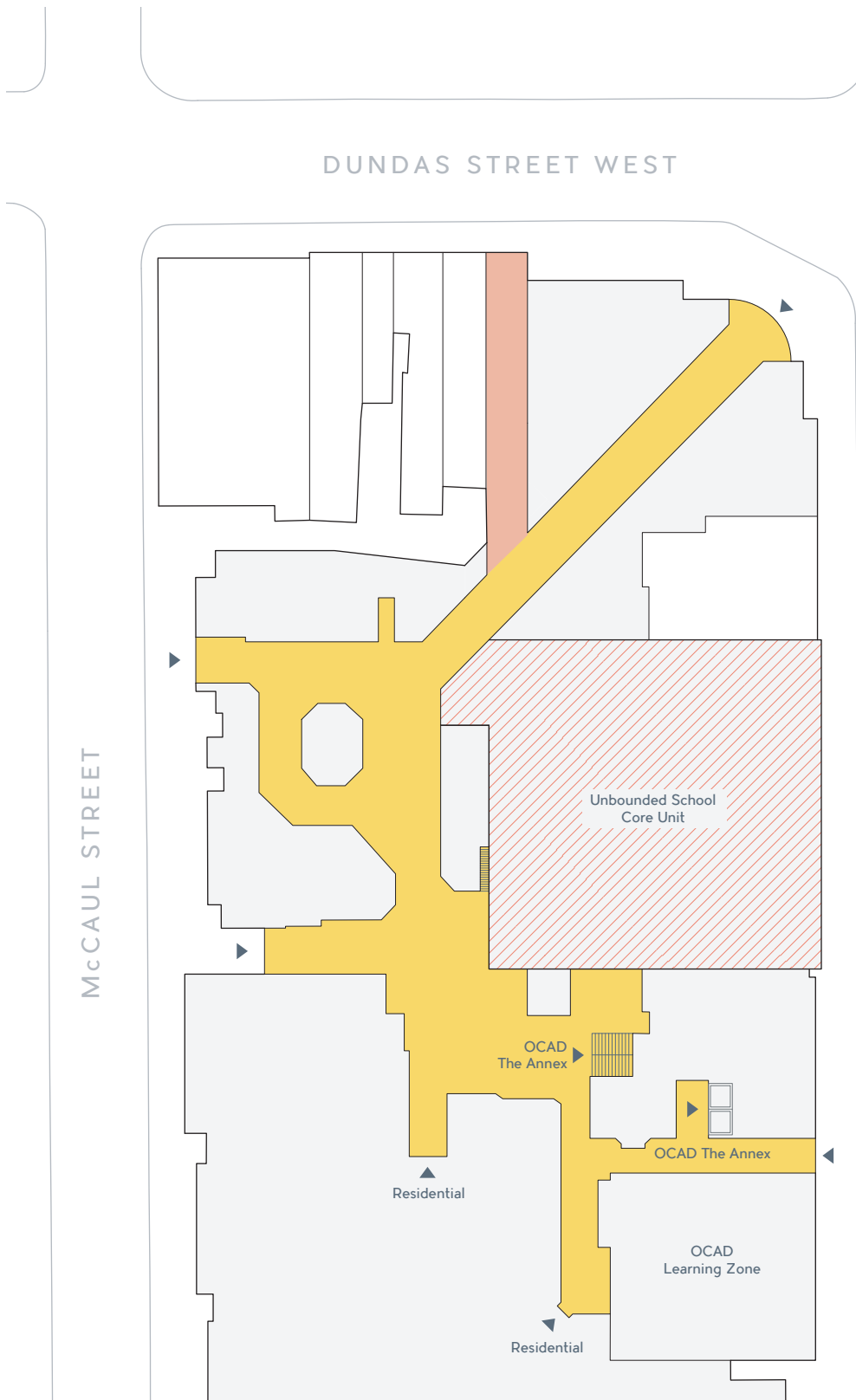


Fig. 36 Diagram of citywide education network

The Unbounded School Design Proposal for the Network

In light of so many challenges to building educational facilities in the city—from a hegemonic, overly bureaucratized education system, a typology failing to adapt to a changing demographic and a return to civic values in education—can we turn to environmental education as a solution? Using the city as an educator was theorized by radical pedagogues, promoted in urban planning by Colin Ward and adapted into a real-life high school by the Parkway Program. Scattered around the city, the spaces of these schools were sites for radical social change. It starts by recognizing that students have the ability—and should be encouraged to further develop that ability—to contribute to and create their own network of learning spaces. Then the architecture adapts and supports.

There is an opportunity for a public high school to contribute to the richness of resources on the urban block, making education and the school as a shared common. Existing public networks in the city's infrastructure such as transportation links, university campus, art galleries, community centres, libraries and athletic centres, can be useful for drawing parallels in school design. We can imagine schools taking on a network typology that connects nodes and resources across the existing urban fabric. The core unit of the Unbounded School detailed in the previous chapter acts as a terminal station in the larger educational network. The school's physical connectivity to the city mirrors the social and cultural connectivity in the society. From a pragmatic point of view, the extension project outlines how the opportunistic occupation of site context can supplement the daily operations of a high school. Furthermore, community participation in programming and maintenance of the site can allow for these spaces to be open for longer hours. On a more fundamental level, the network proposal of the school onto public spaces will increase their visibility in the public eye, thus reconnecting education to society. Beyond the core unit, the network proposal has four further components: the storefront, the classroom kit, the park pavilion and the cultural partnerships.



△ Fig. 37 Existing interior plan of Village by the Grange food court

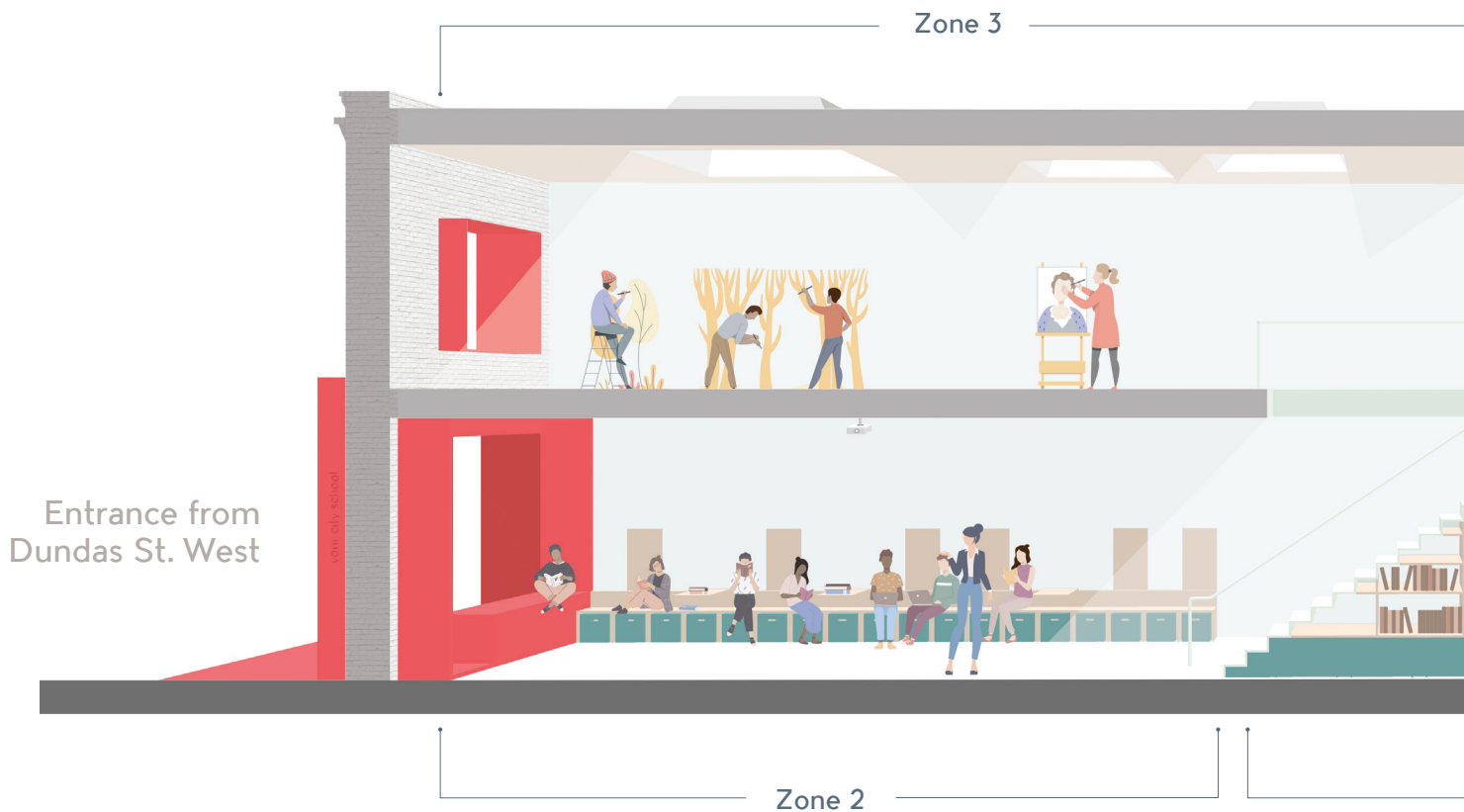
< Fig. 38 Proposed interior plan Connection from Core Unit to Storefront node A and to adjacent block

ST PATRICK STREET



- Publicly accessible interior street
- Zone accessible through interior street
- Connected ground floor of school to interior street
- Node A - storefront extension of school

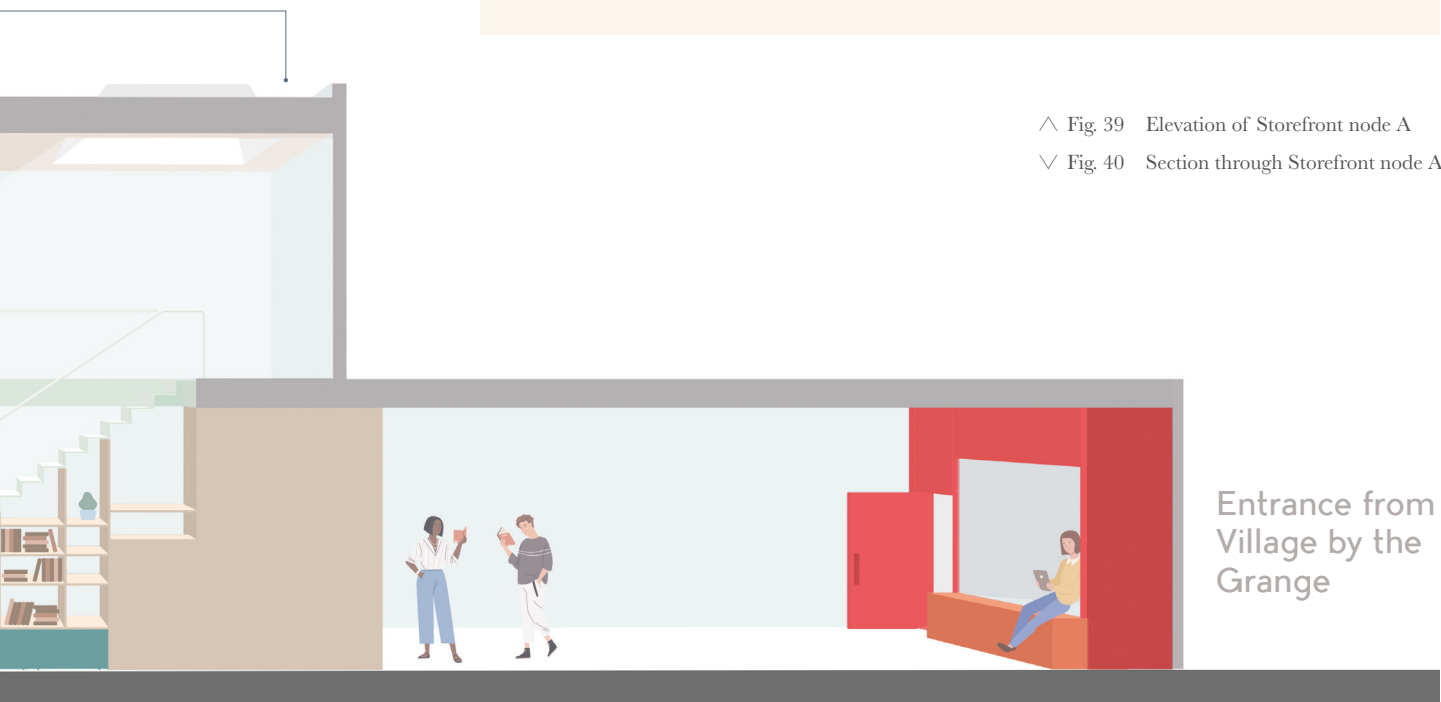
The first component is a classroom storefront on Dundas Street. Retail storefronts, common along Toronto streets, can be retrofitted into suitable learning spaces. Often, these retail properties have a minimum of two floors, sometimes with a back stair or a separate entrance from the sidewalk. Their narrow footprint requires that the room be divided into two areas: a back of house and front of house. But this quality can be leveraged to provide three separate learning zones with a spectrum of spatial qualities. A median is placed in between for shared utilities (WCs, closet) and to create a multi-zoned room. The storefront typology puts education at the same level of visibility as public buildings and commercial retail by occupying the same typology. Students walking in and around the urban block activates the streets. By renting or purchasing retail space along commercial avenues, the school can incrementally expand its footprint.





^ Fig. 39 Elevation of Storefront node A

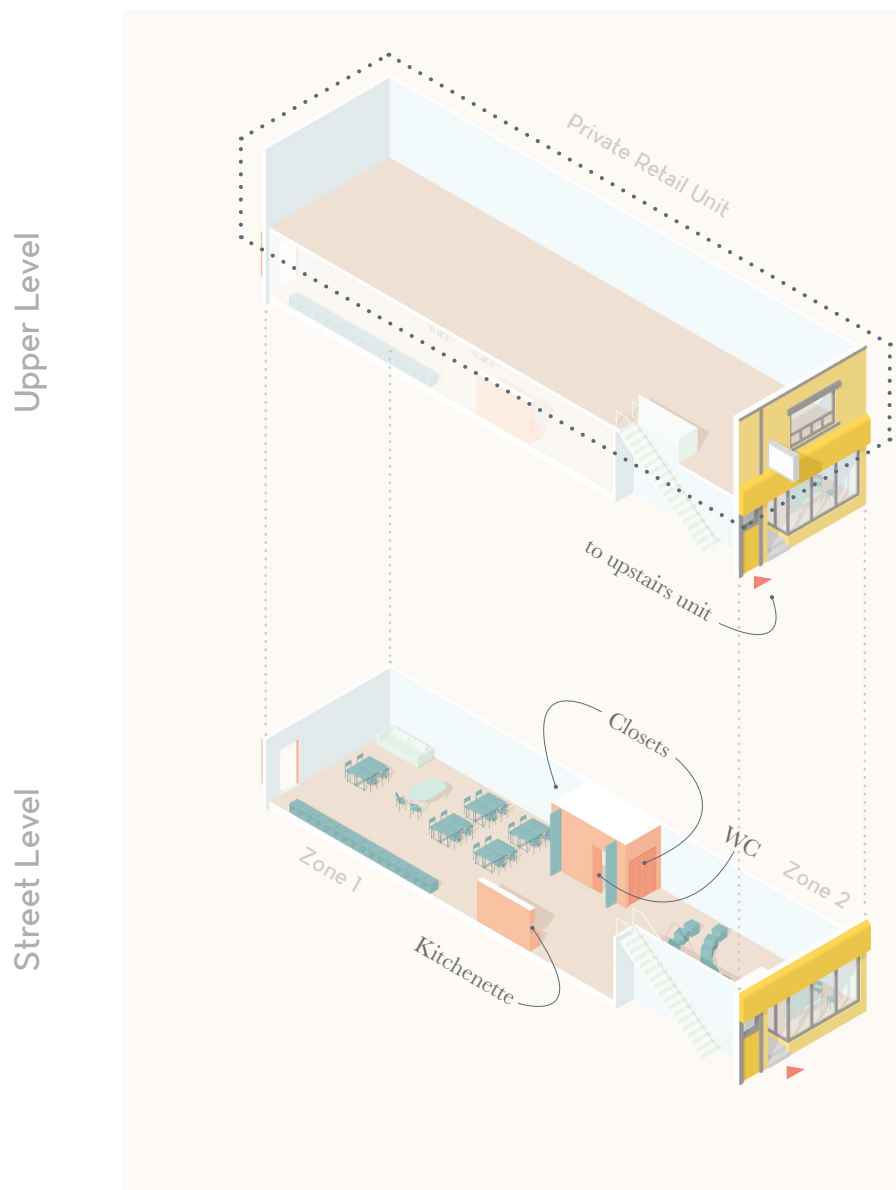
v Fig. 40 Section through Storefront node A



Median

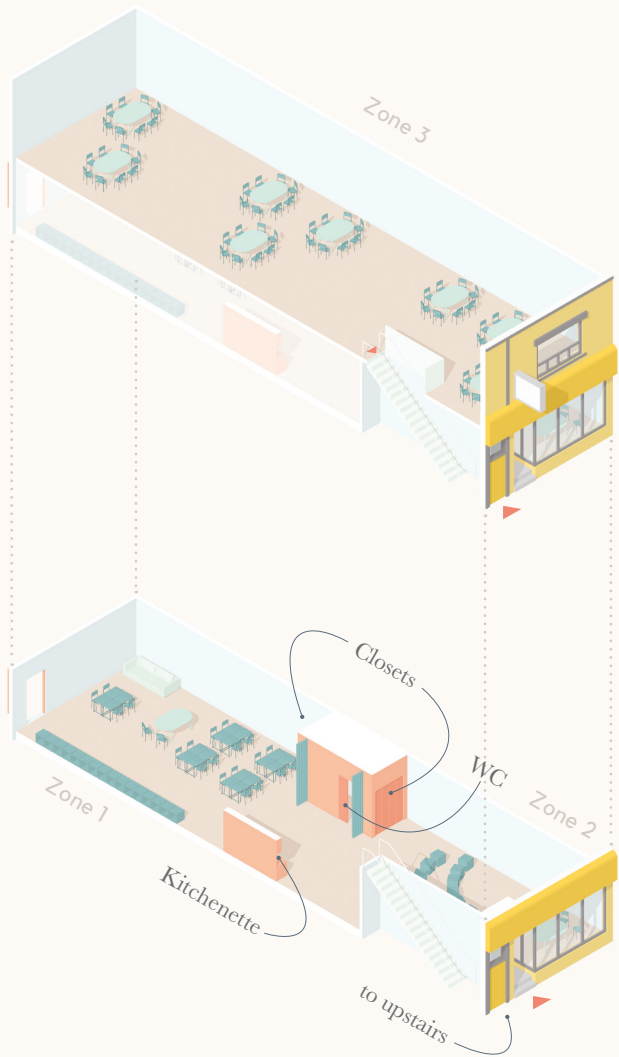
Zone 1

From retail units to classrooms

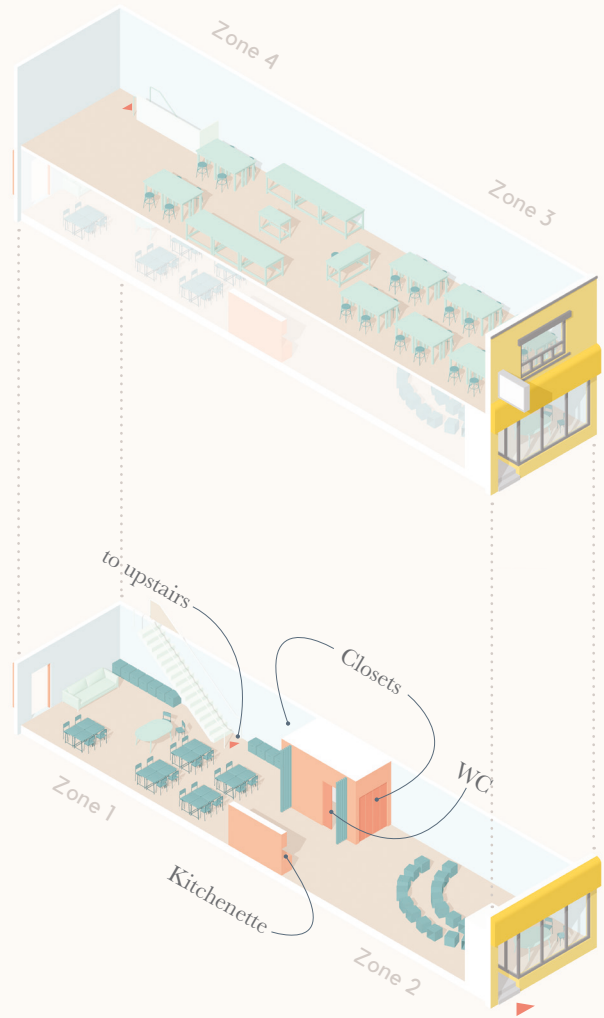


Single unit

Fig. 41 Diagram of possible configurations for retrofitting a storefront into classrooms



Double unit



Double unit

The second component is a simple assortment of items that allows teachers to take their students into the city for field research: the classroom kit. It is comprised of a foldable chair, an expandable rigid surface and a tarp. The kit is more so a symbolic reminder of education's role in society: 'this is our world'. It gives students a sense of 'right to action' like an access pass to wherever they are in the city. As discussed earlier in this thesis, teenager's occupation of public spaces is often deemed illegitimate. This classroom kit legitimizes teenager's presence in the city through the simple act of place-making, hoping "to educate society to accept children [sic] on a participating basis."¹³

Grange Park is an ideal place for the classroom kit to be utilized. But further than that, we could imagine an educational pavilion serving students and the community. Currently, there are some active programs on the park: a dog off leash area, a sculpture garden and a children's playground. Off Stephanie street, along the north-south axis is the scenic Grange Park promenade that leads to the seemingly unprogrammed central area of the park. The backdrop of this central area is the AGO. Though this thesis does not include a design proposal for this pavilion, an imagined next step for the Unbounded School would to utilize this space for inter-disciplinary design and construction courses. Students could collaborate with professional and cultural partners to build a structure as an extension to their school. Community engagement activities as well as educational workshops can be held on this shared site all-year round.

The last component is not a building proposal, but a repertoire of community and cultural partnerships to enrich the education curriculum and further encourage mutual benefits for the city and the school. An agreement between the AGO, OCADU, Ryerson and the school would allow teaching faculty and high school students to use their facilities. Besides these educational institutions, the Unbounded School network would include community businesses like local garage shops, restaurants and municipal offices as partners. By extending the opportunities for mentorship and internships, the school addresses the divide between vocational and academic learning. This arrangement would be made under the consideration that education at any level should serve to fulfill the curiosities of its students and be flexible enough to fulfill that for any student.

13 Ward, *The Child in the City*, 87.

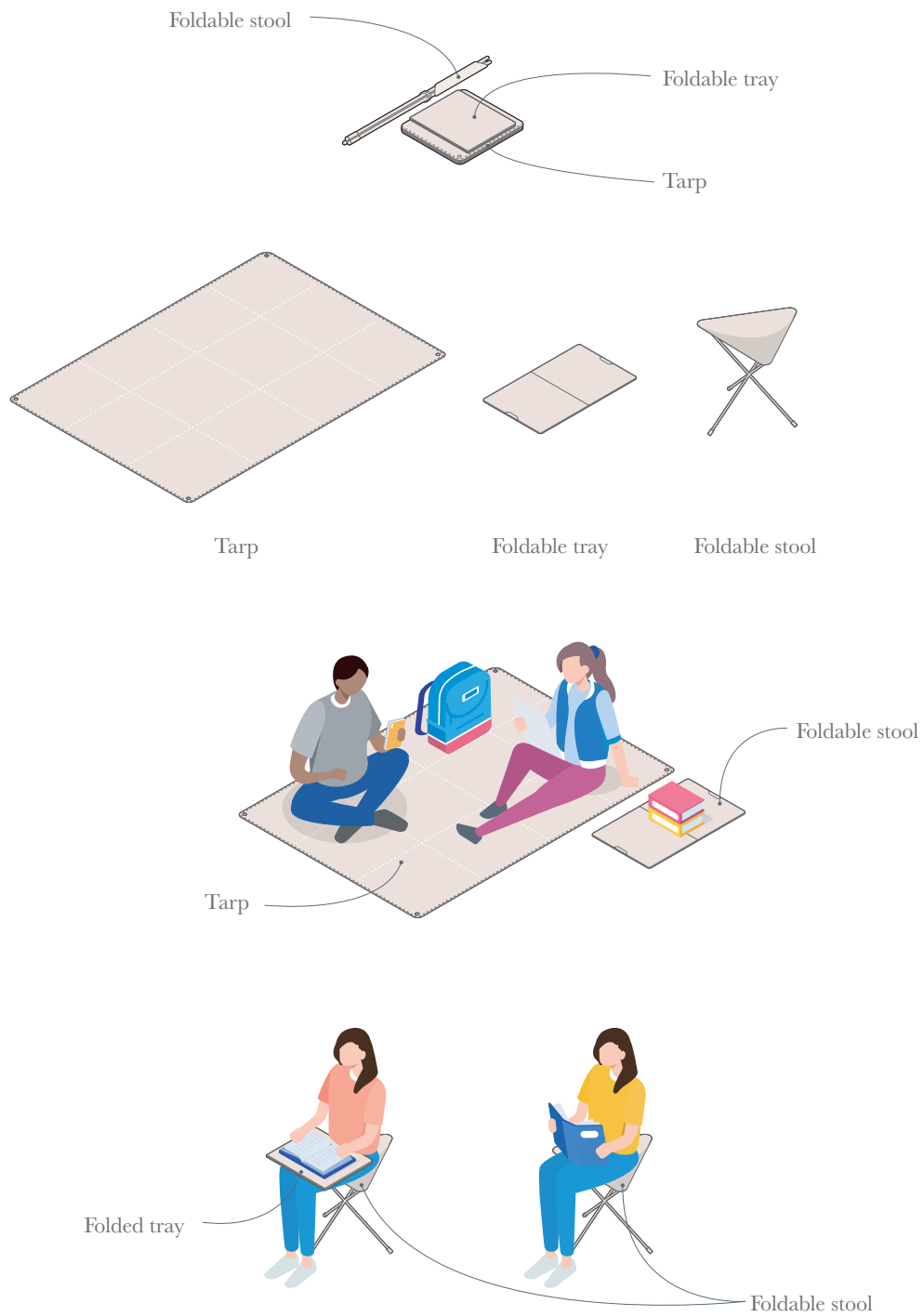


Fig. 42 Components of 'classroom kit'

Herb Childress notes in his essay that as adults tighten restrictions against ‘loitering’ in spaces around the city, the youth turns to the virtual space for a new form of social life.¹⁴ The digitization of social life is occurring for learning as well. In the age of digital learning, everyone can be an autodidact. Online platforms—from startup ventures to esoteric forums—provide an unprecedented resource for knowledge sharing. Schools, built as institutions for learning, are consequently reduced to institutions for certification. Part of the problem, as discussed throughout this thesis is the rigidity of the school typology and how most attempts at engaging the school with its environment remains an iteration of a single-function building.

This thesis begins to explore the possibility of a school beyond the walls, a school that is a network of shared spaces in the city anchored by a core unit that is adapted by, used by students and that ultimately belongs to the students. It argues that the essence of education is a public matter and a collective task that engages with all levels of society. It posits that the architecture of a school can connect and aid in rebuilding forms of social relationship between students, members of society and their city.

The spaces we design as architects can be part of the solution in rendering education a ‘practice of freedom’ where students can critically and creatively participate in the transformation of their world. The architecture of a school can become an educator in spatial agency, teaching students their rights and responsibilities towards their environment and community. “We are concerned here with the education of active *citizens*, and where can this be undertaken if not in the city?”¹⁵

14 Herb Childress, ‘Teenagers, Territory and the Appropriation of Space’, *Childhood* 11, no. 2 (May 2004): 203, <https://doi.org/10.1177/0907568204043056>.

15 Colin Ward and Anthony Fyson, *Streetwork: The Exploding School* (London: Routledge & Kegan Paul, 1973), 3.

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Appendix A

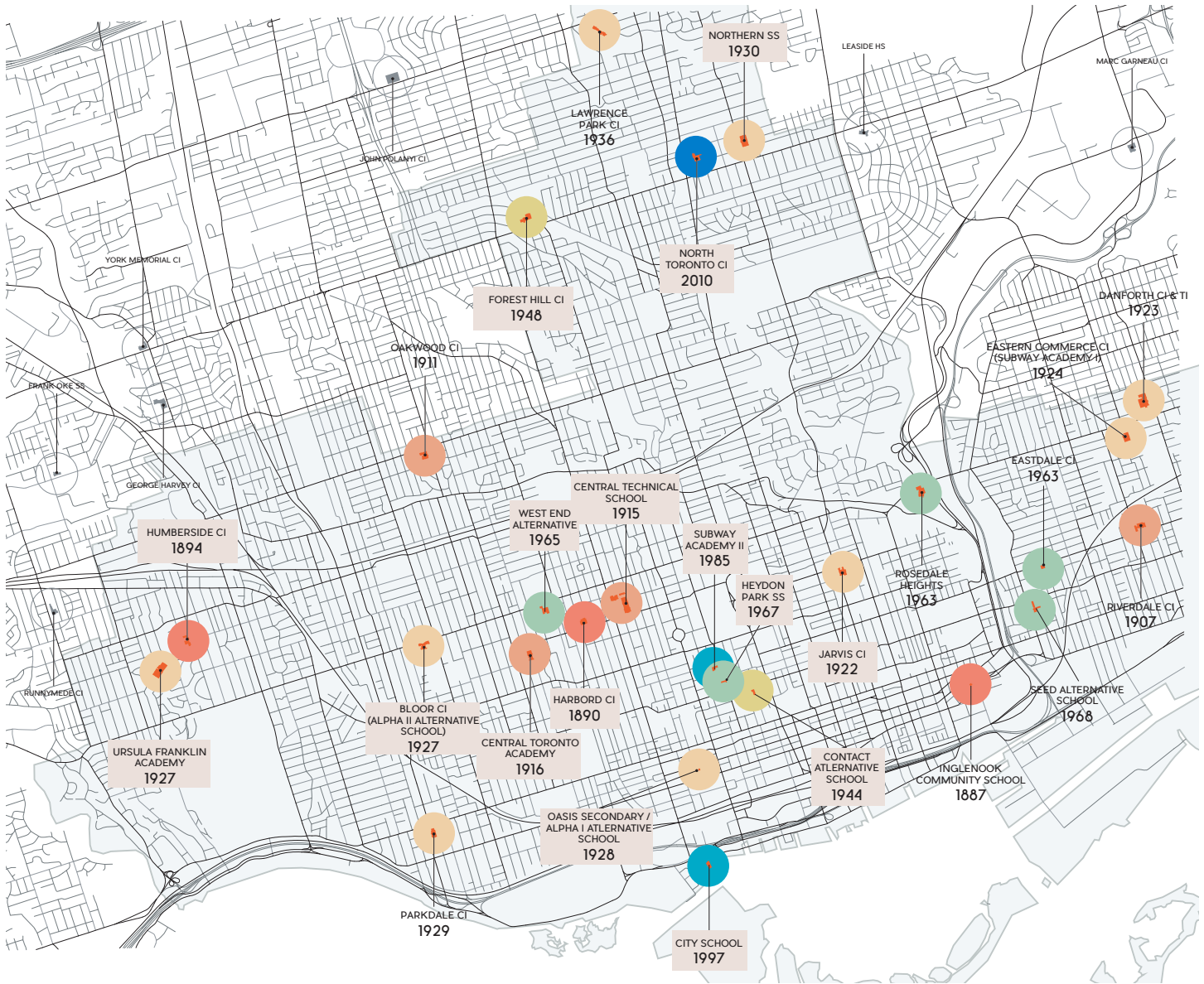
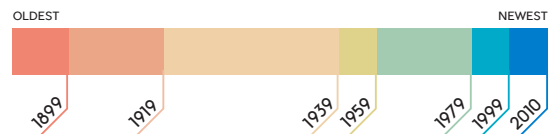


Fig. 43 Map of TDSB secondary schools within the inner city (former boundary of the city of Toronto)
The map indicates the construction date of the school



Survey of Secondary Schools in the Toronto District School Board

Highlighted in pink are the schools that
were documented in person



1890

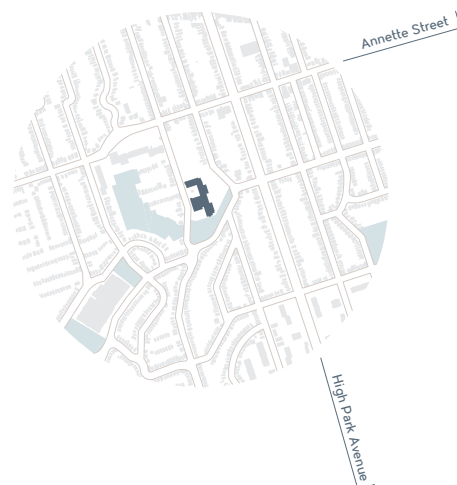
Fig. 44 Harbord Collegiate Institute





1894

Fig. 45 Humberside Collegiate Institute





1915

Fig. 46 Central Technical School

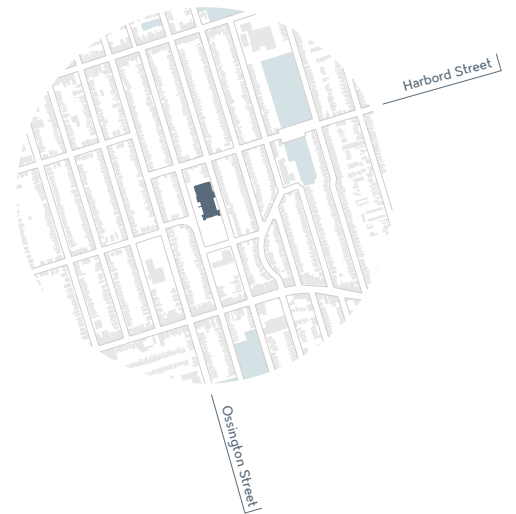
New Art Centre was added to the site in 1962.





1916

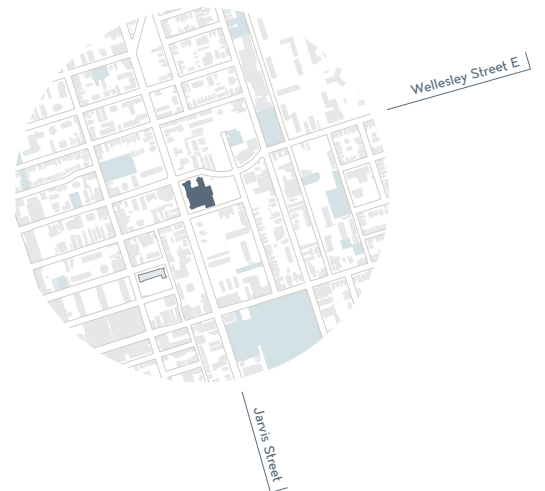
Fig. 47 Central Toronto Academy





1922

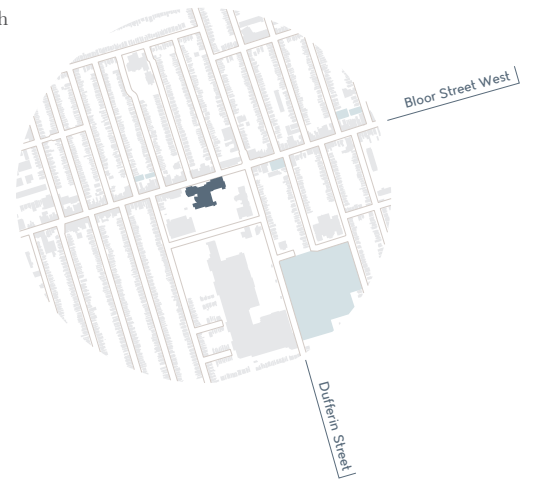
Fig. 48 Jarvis Collegiate Institute





1927

Fig. 49 Bloor Collegiate Institute shared with Alpha II Alternative School

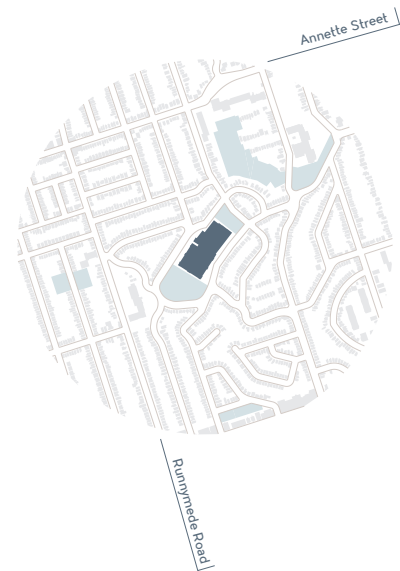




1927

Fig. 50 Ursula Franklin Academy shared with Western Technical-Commercial School and THESTUDENTSCHOOL (alternative)

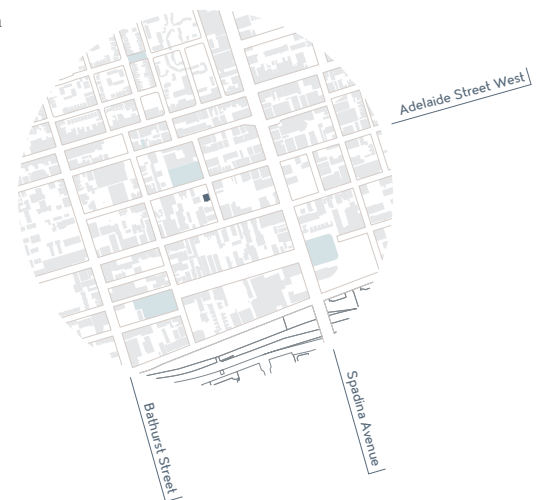
This building is an example of an amalgamation of different schools under the same facility. The Western Technical-Commercial school joined in 1978 and THESTUDENTSCHOOL addition was constructed in 1970.

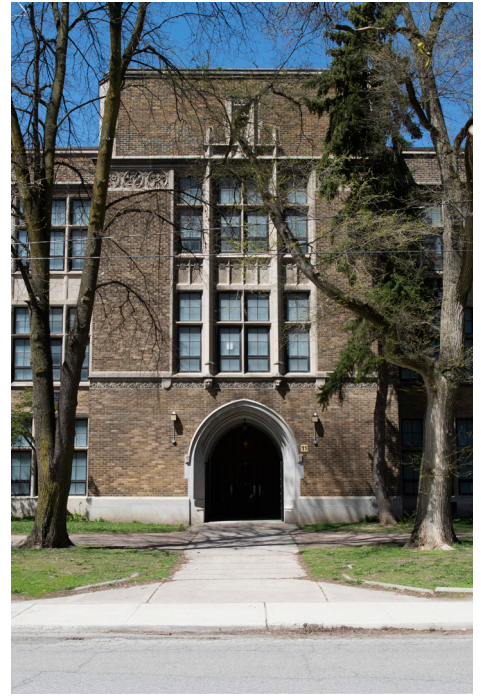




1928

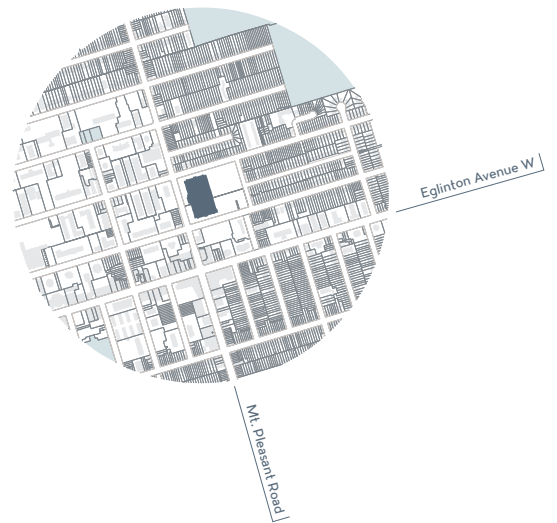
Fig. 51 Oasis Secondary School shared with Alpha I Alternative Junior School





1930

Fig. 52 Northern Secondary School

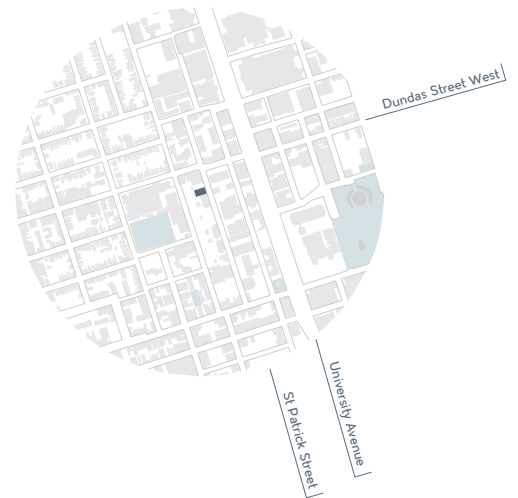




1944

Fig. 53 Contact Alternative School

This alternative school is situated on the third floor of a mixed-use building.

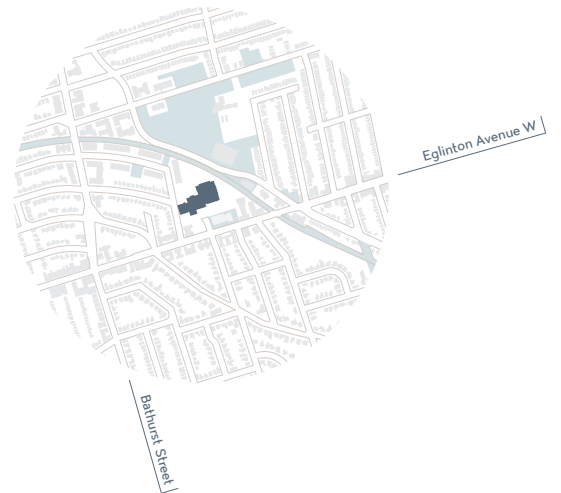




1948

Fig. 54 Forest Hill Collegiate Institute

The Toronto Public Library Forest Hill branch is directly beside the school.

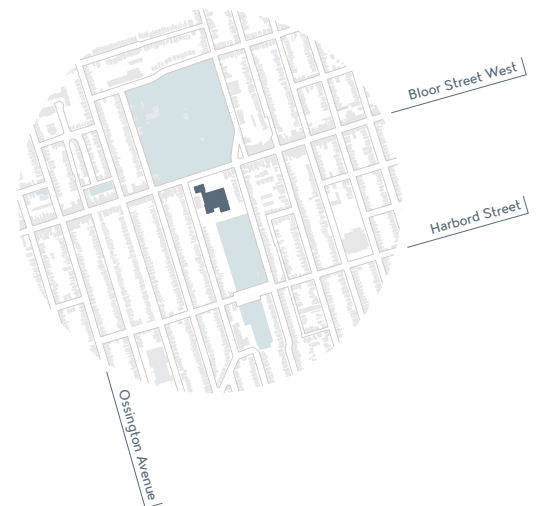


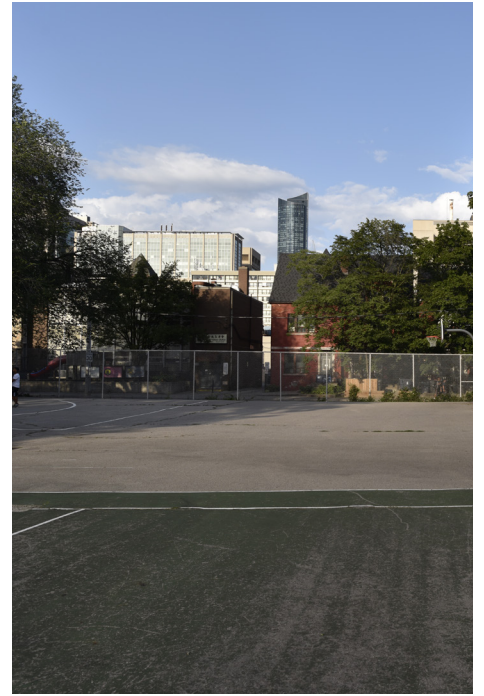


1965

Fig. 55 West End Alternative School

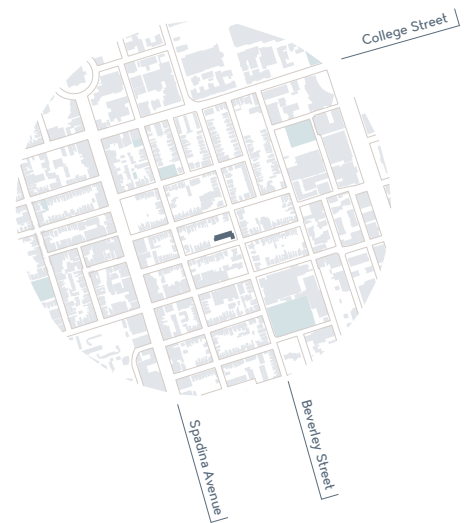
The school is located within the Bickford Centre. The school is elevated above a public passageway that physically connects Bickford Park to Christie Pits Park.





1967

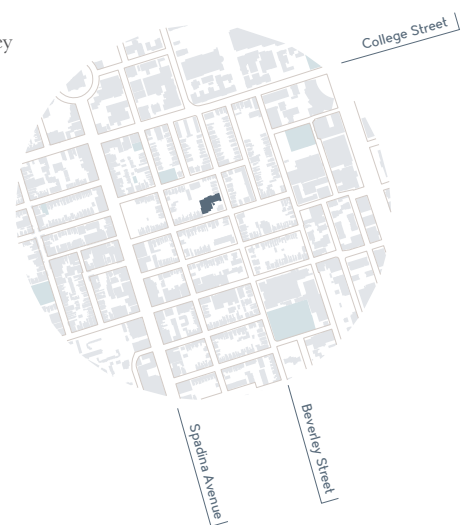
Fig. 56 Heydon Secondary School





1985

Fig. 57 Subway Academy II shared with Beverley Junior School

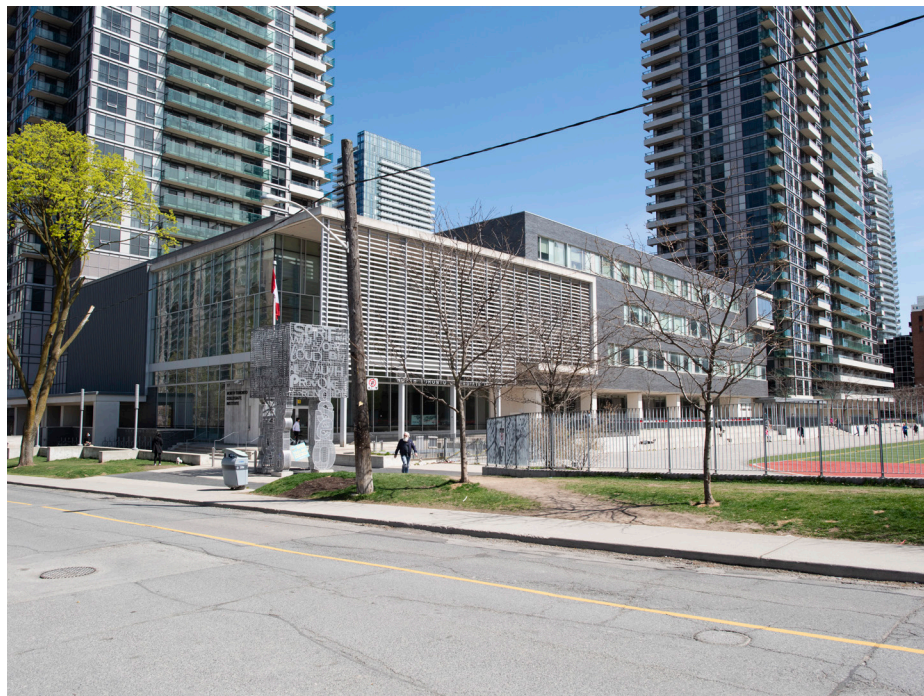




1997

Fig. 58 City School with the Waterfront School (primary)





2010

Fig. 59 North Toronto Collegiate Institute

The original building was constructed in 1910. The new building was a partnership project with Tridel real estate development.

