Title: **HYPER BUILDINGS** *Urbanity / Productivity / Domesticity*
Course: ARCH 392 + ARCH 690 Design Studio Winter 2016

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BIGNESS //

"Bigness, through its very independence of context, is the one architecture than can survive, even exploit, the new-global condition of the tabula rasa: […] it gravitates opportunistically to locations of maximum infrastructural promise, it is, finally, its own raison d'etre. […] Bigness is the last bastion of architecture - a contraction […]."[1]

[Rem Koolhaas, 1995]

The tendency toward hybridization of public programs and the questioning of architecture's representative role in the evolution of city form is inseparable from Rem Koolhaas's paradigm of Bigness, which is derived from the logic of the American skyscraper. Koolhaas defined Bigness in 1995

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[1] Rem Koolhaas, *Bigness and the Problem of Large*, OMA Rem Koolhaas, and Bruce Man, S, M, L, XL, New York: Monacelli Press, 1995, p. 494-516

as an attempt to apply this logic within a European peripheral context, but his fascination with the typology of the skyscraper originates from 1979, with Delirious New York and its sublime urbaneness.[2]

Today 25 years later, and on a scale of mass-implementation, Bigness is a global phenomenon. The two principles called out by Koolhaas have been materialized; but also its limitations reached. As Koolhaas predicted, *"Bigness* [is] *incapable of establishing relationships with the classical city-at most, it coexists - but in the quantity and complexity of the facilities it offers, it is itself urban. Bigness no longer needs the city: it competes with the city; it pre-empts the city, or better still, it is the city. If urbanism generated potential and architecture exploits it, Bigness enlists the generosity of urbanism against the meanness of architecture. Bigness = urbanism vs. architecture."*

BIG URBANISM = URBANISM + BIG ARCHITECTURE
As described by Nikos Katsikis in *Geographical Urbanism*[3], contemporary urbanization shapes our planet's surface. In this context the polarity between urban areas and natural landscapes has become obsolete and been replaced with a pervasive urbanization merely differentiated by its intensity and specificity. Rapid urbanization occurring in the urban centres of megaregions such as the Greater Toronto Area as well as megacities of the developing world and their hinterlands demand urban and architectural typologies facilitating high density and fast development, while simultaneously generating relationships to their given context. This studio encourages a discussion on Big Urbanism that - in contrast to Rem Koolhaas' manifesto on Bigness – merges the demand for bigness, density, and hyper program with the need to respond to and enrich its urban context.

BOOM TOWN TORONTO 2041//
As the historic core city of the Greater Toronto Area, downtown Toronto plays a key role in absorbing economic and demographic growth in the population increase that is predicted for the next 15-25 years. Within this scenario, Toronto's population is anticipated to increase from 2.77 million to 3.64 million in 2041; a growth of 31.3% that is province-wide surpassed only by rapid growth occurring at the edge of the Toronto region[4]. While these predictions require adequate frameworks from large-scale spatial planning to mid-scale neighborhood development and small-scale architectural strategies, access to social infrastructure, employment areas, public transportation, and green space for the population growth are important objectives to secure Toronto's quality and diversity.

To accommodate the development in the next twenty years, Toronto has multiple strategies set in place to implement the requirements for growth laid out by the province. The Toronto Official Plan[5] in its latest edition allows growth to continue in 25% of the area of the city. The areas targeted for growth are in the urban core and include the old downtown and the waterfront area on Lake Ontario. Most of the intensification occurs in high density, block by block development often facilitated through condominiums and high-rise projects. According to Emporis, a construction data firm that monitors development around the world, Toronto is currently, with 130 planned high-rise building projects, the leading city in North America.

However this growth is very often executed with little consideration of urban and architectural qualities. For example Toronto currently offers an average of 12.5 m2 green space per person, and only 10.5 m2 green space per person in downtown ranking in the lowest in Canada. Once current building permits for high-rise infill are completed, this will lower to 6.5 m2. In a similar context, as residential development increases, the historic identity of downtown neighborhoods as a mixed used employment area diminishes and its important role as a place to work vanishes. Correspondingly, increased land value in

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[2] Tine Cooreman, On Bigness and the City

[3] Nikos Katsikis, *On the Geographical Organization of World Urbanization*, in Geographical Urbanism, Monu 20, April 2014

[4] Ontario Ministry of Finance, Ontario Population Projections. 2013-2041 Ontario and its Census Divisions, Fall 2014

[5] Gary Wright, "Toronto Official Plan", City of Toronto, Department of Planning, 2002 , further approved by the board in December 2010

downtown is fostering gentrification. According to Hulchanski [6] Toronto's balanced demographics from 1970 gentrified by 2005 into "three cities" within Toronto based on income. In a more recent study he even argues that projected into 2030 Toronto's three cities will collapse into two cities with a decreasing middle class, given that no measures are set in place. Reversing these trends requires investment into low- and middle-income housing, new employment areas for light and creative industries and mixed used buildings specifically in the downtown neighbourhoods.

Given this context the question remains, what are appropriate contributions generated by the discipline of architecture to support a vibrant development for its future growth? How can a building be big and dense but simultaneously contextual and urban? What are the spatial requirements for emerging work environments such as creative industries and what does it mean to live and work in downtown Toronto?

This studio endeavors to explore new architectural solutions for urban density: **HYPER BUILDINGS = Urbanity + Productivity + Domesticity**

HYPER BUILDINGS //
Within traditional urban forms, mixed uses grew organically both in neighbourhoods and in individual buildings. As zoning restrictions were implemented to separate industrial from residential functions, mixed development was "zoned out" of many urban areas. '*Recently, the smart growth movement has encouraged cities to return to mixed-use patterns as a way to foster healthy communities by placing residential units in close proximity to services, retail, offices and transit.*'[7] Another force driving change in our urban centres is that of densification. This tendency is the result of many factors but is primarily the result of urban containment aimed at reducing suburban sprawl in order to limit their negative environmental and social ramifications. In order to address the increasing population of the city core, solutions are sought that offer higher density while maintaining the capacity to provide adequate open space and public amenity, foster social complexity and allow for cultural diversity.

This studio involves the development of an entire city block within Toronto's urban core in response to these objectives and in support of increased human activity. The program involves, therefore, a mix of residential, light industry, office, retail and shared uses. The goal of the design development is to examine the limits of density while maintaining contextuality: street connectivity, generous recreational space, access to light and view and layering of the realms between public and private to offer complexity through multiple zones of inhabitation.

ST. LAWRENCE CORRIDOR //
St. Lawrence neighborhood designed in the late 1970s was and remains a radical alternative approach to the dominant Modernist-planning attitude of its time. Today we can argue that this master plan[8] serves as a predecessor of planning in the city that favours mid-scale development and mixed use neighborhoods serving a range of demographics. With the city leading the agenda, and with Jane Jacobs overseeing the process, the project set out to design a neighbourhood that, instead of deploying heavy-handed Modernist planning strategies, exercised restraint while simultaneously referring to its immediate context: downtown roads were extended, uses and demographics mixed, building forms democratized and boundaries obscured. It is this contextual assemblage of residential typologies in a post-industrial context as well as the design around a central 1 km green spine serving today as a

[6] David Hulchanski, "The Three Cities within Toronto. Income Polarization of Toronto's neighborhoods 1970-2005", University of Toronto, Centre for Urban and Community Studies, Research Bulletin 41, 2007

[7] Puget Sound Regional Council, website text 2015

[8] Proponents David Crombie, Michael Dennis and John Sewell. Architectural design: Alan Littlewood, Eberhard Zeidler FRAIC, Jerome Markson FRAIC, Ron Thom, Henno Sillaste, Irving Grossman, and later Jack Diamond FRAIC

connector between the St. Lawrence Market and the Distillery District that makes this a successful scheme for its time.[9]

Today 30 years after its implementation, the St. Lawrence neighbourhood remains a unique Toronto prototype. However the described development pressure and call for higher density in downtown neighborhoods demands a reconsideration of the mid-rise scheme from the 1970s while simultaneously paying tribute to its unique urban qualities. The studio will explore the development of 3 open blocks in this neighbourhood. Each studio section will work on one dedicated site. By implementing the architectural solutions into their urban setting, the intention of this studio is to initiate an academic discourse on Big Urbanism.

STUDIO OBJECTIVES //

Pedagogical Approaches and Objectives
This studio focuses on a large urban building with a hybrid program. The studio will emphasize a range of cultural and technical questions that support development of substantial design skills. During the term we will discuss theses dedicated to urbanity, density, hybridity, domesticity and flexibility for future change. At the urban scale you will be expected, through analysis of the potential of alternative massing strategies, to examine and address building volume in the context of the surrounding city, the iconic or architectural potential of each and their ability to support the qualities mentioned above. The residential portion of the project will address issues of unit design, circulation systems, exterior private space, light and views as well as offering shared amenities from cycling infrastructure to workshop facilities. The office component will address the design of the future of the urban workspace looking at current trends such as the makers' movement, creative industries and hub working. As the term develops we will look, in more detail, at efficient and sustainable building systems , skins and structural systems and the potential for these to inform the building design and plan development.

The successful completion of the studio term will demand that students skillfully demonstrate knowledge of and engagement with:
• The development of urban and architectural typologies facilitating high density, urbanity, domesticity, and new forms of productivity such as creative industries within an urban setting.
• The development of contextual relationships between public programs and urban spaces within an architectural project, its boundaries, planning codes, thresholds and spaces that define it.
• The environmental, contextual and regulatory constraints and opportunities of urban sites and the responsiveness of a building to these issues.
• The design, development and layout of architectural frameworks for a big mixed-use building, including technical and use-related requirements of inhabitation and building code.
• Advancement of tectonic and material consideration in the execution of an architectural project with a complex public program at both the intimate and building scale.
• The relationship of interior and exterior space and the consideration of urban landscapes and gardens in building design.
• Sustainable design and their implementation with special emphasis on proposals that impact and enhance human habitation, indoor comfort, collective interests, site conditions and the rapid changes in patterns of use and technological advance.
• Expanded awareness of perspectives in contemporary architecture and urbanism with respect to hyper programming, public buildings and the development of critical architectural propositions that respond in some way to these issues.

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[9] Joey Giaimo, St. Lawrence District, Toronto. More that 30 years on, the St. Lawrence neighbourhood remains a unique Toronto Prototype", see https://www.canadianarchitect.com/features/st-lawrence-district-toronto/

ARCH 392 I ARCH 690 DESIGN STUDIO JAN 2016

LEGEND

	Start of Assignment
	Special Event
	Hand-In
	Review Day
	Studio Day

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
JAN 1	03	04	05	06	07 **Assignment 1** / L 1 Introduction MEK	08	09
2	10	11 L 2 Big Buildings CM	12	13	14 *All School Meeting* 1:30-2:30	15	16
3	17 *Hand-in 1 digital*	18 **Assignment 2a** **Review 1**	19	20	21 **Toronto Field Trip RA**	22	23
4	24	25 L 3 Why Density? MEK Design Charette	26	27	28	29	30
FEB 5	31	01 **Hand-in 2a**	02	03	04 **Assignment 2b** **Review 2a**	05	06
6	07	08 L 4 Urban Maps MEK	09	10	11	12	13
7	14	15 Reading Week	16 Reading Week	17 Reading Week	18 Reading Week	19 Reading Week	20
8	21 **Hand-in 2b tiled**	22 **Assignment 3a** **Review 2b**	23	24	25 L 5 Structure AA	26 Co-op Postings Close	27
MAR 9	28	29 L 6 Hyper Program JH	01	02	03 **Symposium MEK, RS**	04 Toronto Co-op Interviews	05
10	06	07 L 7 Tectonics DY Cambridge Interviews	08 Cambridge Interviews	09 Cambridge Interviews	10 L 8 Public Space RA	11 Ranking Consults Co-op	12
11	13	14 **Hand-in 3a**	15	16	17 **Assignment 3b** **Mid Review Guests 1-3a**	18	19
12	20	21 L 9 Skin Systems RS	22	23	24	25 Good Friday Holiday	26 Easter
APR 13	27 Easter	28 *Easter Monday University Open*	29	30	31	01	02
14	03	04 *Lecture Ends*	05	06	07	08 **ACM Hand-in** *Exams Starts*	09 Model
15	10 Model	11 **Final Review**	12 **Final Review**	13	14	15	16

STUDIO SCHEDULE AND ASSIGNMENTS //

Semester Schedule
The semester consists of 15 weeks including reading week. The attached semester schedule contains assignment sequences, submission deadlines, reviews, lectures, workshops, and studio events like the field trip and the symposium. The schedule is subject to minor adjustments. Please refer to the schedule as established in specific assignments. Changes will be discussed during class time.

Studio Assignments
Throughout the semester, students will be exposed to 3 assignments that will help to develop a big building within an urban context in Toronto.

Assignment A1: Precedents
A1 will be organized as a group assignment. Students will work on a precedent analysis of a big building. The results will be presented in a 10-minute video presentation and a book template featuring analytical drawings. The compiled precedent book featuring a diverse series of big buildings will be available for the whole class.

Evaluation: 15%
Assigned: January 7th
Due: January 17th
Review: January 18th

Assignment A2a and A2b: Urban Typologies and Site Strategies
Assignment 2 is divided into two components. A2a will be dedicated to the iteration and exploration of urban typologies. This assignment will start with a Design Charette on January 25th and will ask students to develop a genealogy of types evaluated and analyzed according to introduced objectives. This assignment will dedicate time to physical and digital model making. In A2b the final massing strategy will be analyzed within its urban setting. Assignment A2b will introduce urban mapping as a tool to understand and accommodate the urban context.

Evaluation: 25% [2a and 2b]
Assigned: 2a January 18th I 2b February 4th
Due: 2a February 01st I 2b February 21st
Review: 2a February 4th I 2b February 22nd

Assignment A3a and A3b: Architectural Design Project
Assignment A3 consists of two 3-week assignments. In assignment A3a the project will move from a schematic design to an architectural project incorporating structural systems, circulation systems, programmatic requirements and public space, articulated in diagrams, renderings and exemplary sections and plans. This assignment will be presented in the mid review scheduled for March 17th asking students to present A3a and a synthesis of assignment A1 and A2. Assignment A3b will be dedicated to the full development of an integrated design project incorporating skin and façade systems. For the final review the project will be represented through developed plans, sections, elevations, section perspective, renderings, diagrams, site plan, and physical models.

Evaluation: 55% [3a and 3b]
Assigned: 3a February 22nd I 3b March 17th
Due: 3a March 14th I 3b April 8th
Review: 3a March 17th Mid Review I 3b April 11th + 12th Final Review

STUDIO ACTIVITIES //

Field Trip
On January 21st the studio will visit Toronto leaving Cambridge early in the morning and returning during the later evening. The required field trip will include a visit of the St. Lawrence corridor for assignment 2 and assignment 3. The trip will include return bus transportation from the School of Architecture in Cambridge to Toronto. There is a required fee for transportation paid at the beginning of the semester.

Hyper City Toronto Symposium
This studio will hold a symposium, entitled "**Hyper City Toronto 2030**", scheduled for March 3rd 2016. The symposium will support knowledge development in architectural and urban design addressing Toronto's rapid urban growth. As a part of the long-standing curriculum at the School of Architecture, students in this level will be introduced to urban sites and big building developments. One of the most important challenges for future architects within urban development will be planning for significant population increases and new emerging economies. The symposium will be held as a one-day event and will host 6-10 experts from the disciplines of Architecture, Urban Design, Landscape Architecture and Planning to discuss Toronto's growth management and questions addressing the city's urban intensification strategies. Each expert will present a paper relevant to the topic and will participate in a round table discussion.

STUDIO COMMUNICATION AND LEARN//

Learn
This studio will use LEARN for the general communication with students, digital submissions, and shared documentation including lectures, readings, and other resources. Please check at the beginning of the term, to ensure that you are receiving messages communicated through LEARN.

Communication with Studio Instructors
During the course of the term, faculty may need to send communications to their students. Students are required to regularly monitor their @uwaterloo.ca email for studio notices. Any correspondence regarding studio matters can be addressed to melkhafif@uwaterloo.ca [ARCH 392] and reandrig@uwaterloo.ca [ARCH 690].

Studio Fees
There is a required $25.00 studio fee for this course. This fee must be paid in the front office within the first week of classes. Failure to pay this fee will result in the withholding of grades.

GOVERNING DETAILS//

Class Agenda
Welcome to ARCH 392 and ARCH 690 this winter semester. Please read the syllabus and the information below carefully. The school policy tries to prepare students for their professional life. Commitment to your work, collaboration among the group, self-motivation, participation and attendance in time will be critical. If you run into problems during the semester or if you are concerned about your progress, please contact the studio coordinator at any time via email or request a meeting during class.

Class Meetings
Lectures and class meetings will be held at various times throughout the term at the beginning of studio days and at the end. Be prepared to meet every studio day promptly at 9:30 a.m. Please be punctual. Specific dates will be established as the term evolves, responding to class progress. Check your email late evening on the day before or early morning on studio days for updates on meeting times and locations.

Grading

Students will be graded on the work performed during the course. Grading will be based on the degree to which submitted work satisfies the requirements and objectives of each assignment. The weighting of the projects throughout the term is as follows:

Assignment 1 – Precedents [group work]	15%
Assignment 2 – Typology study and Site Strategy	25%
Assignment 3 – Design Project	55%
Participation	5%*
Total:	**100%**

* For ARCH 690 students the 5% participation grade will be replaced with the requirement for 5 short critical writing assignments at key points during the term.

The participation grade will take into account your presence in studio, in-class assignments, attendance at reviews, lectures, submission completeness as well as commitment, effort and improvement over the 13 weeks of the course. Students must complete all projects to an acceptable level and obtain a passing average in order to receive credit for this course. You must receive a passing grade in Assignment 3 in order to pass this course. The specific basis for the evaluation of each project will be identified in individual project handouts. Grades will be posted on LEARN.

Reviews

Reviews are not evaluations but rather the opportunity for a public discussion of your work. Evaluation will take place in confidential sessions by the studio faculty working as a group, in which all critical aspects of each project will be considered. It is important for each student to not only present their own work in the reviews, but to attend the presentation of fellow students. Participation in class reviews and seminars is mandatory.

Attendance

You are required to be in studio all day on studio days. Absence from studio for 3 or more desk-crits, reviews or lectures without a satisfactory explanation and documentation will result in a 0 in your participation grade and will provide grounds to request withdrawal. Should you miss or be late for a class please contact the studio coordinator in time [before class starts]. The studio sessions will include lectures, individual desk-critiques, pin-ups and formal reviews. Class attendance and participation play a key part in the course and will be noted and evaluated by instructors. Detailed descriptions will introduce each project. Lectures and other presentations will be given in conjunction with each introduction.

Hand-Ins and Digital Submissions

All work must be uploaded to the appropriate submission folder on LEARN by the designated deadline for each assignment. Students must verify that their submissions have been properly uploaded at the time of each deadline. All work in this course must be presented in hard copy format for all pin-ups and formal reviews. Last minute printing problems, lost, corrupt or improperly uploaded files will not be accepted as an excuse for late project submissions.

Completeness of Work

All required deliverables for each assignment must be completed. All students are required to upload their work to the appropriate LEARN submission folder on or before the posted deadline, regardless of the level of completion at that time. Grades will be based on each students LEARN submission at the time of the deadline. Late submissions must be accompanied by formal transmittal indicating reason for lateness.

Late Work
The project deadlines can be extended only in cases of illness or incapacity, or special circumstances. Requests for such extensions must be made before the project deadline to the studio coordinator, using the "Request For Extension" form available from the front office, and be accompanied by a medical certificate when appropriate. Work submitted after assignment deadlines without a confirmed extension will not be considered in the grading of each assignment.

Accommodation for Illness
If you need to apply for accommodation of lateness or absence due for illness, make a formal application by using 'Verification of Illness' [VIF] forms or counseling letters, filed with the Architecture Office. Student travel plans are not considered acceptable grounds for granting alternative reviews and submission times. https://uwaterloo.ca/registrar/current-students/accommodation-due-to-illness
Student travel plans are not considered acceptable grounds for granting an alternative examination time.

Academic Integrity
In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences [e.g., plagiarism, cheating] or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Director. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline'. For typical penalties check Guidelines for the Assessment of Penalties."

Discipline
Students are expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about 'rules' for group work/collaboration should seek guidance from the course instructor, academic advisor, or the Associate Dean of Science for Undergraduate Studies. For information on categories of offenses and types of penalties, students should refer to Policy #71, Student Discipline. For information on typical penalties, students should check Guidelines for the Assessment of Penalties.

References
www.uwaterloo.ca/academicintegrity/
www.adm.uwaterloo.ca/infosec/Policies/policy71.htm.
www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm.

Grievance
Students, who believe that a decision affecting some aspect of their university life has been unfair or unreasonable, may have grounds for initiating a grievance. Students should read Policy #70, Student Petitions and Grievances, Section 4. When in doubt, students must contact the department's/school's administrative assistant who will provide further assistance.

Appeals
A decision or penalty imposed under Policy 33 (Ethical Behavior), Policy #70 (Student Petitions and Grievances) or Policy #71 (Student Discipline) may be appealed, if there is a ground. Students, who believe they have a ground for an appeal, should refer to Policy #72 (Student Appeals).
www.adm.uwaterloo.ca/infosec/Policies/policy72.htm.

Students with Disabilities
The Office for Persons with Disabilities [OPD], located in Needles Hall, Room 1132, collaborates with academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term. AccessAbility Services, located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If students require academic accommodations they should register with AccessAbility Services at the beginning of each academic term.

Studio Hours
Mondays	9:30 am - 12:30 pm & 1:30 pm – 5:30 pm
	[Extended hours on review days expected]
Thursdays	9:30 am - 12:30 pm & 1:30 pm – 5:30 pm
	[Extended hours on review days expected]

Office Hours
Mona El Khafif	Monday 12:30-1:30 and per request
Rick Andrighetti	Monday 12:30-1:30 and per request

RECOMMENDED READINGS//

Attached is a bibliography of books and websites that touch upon many of the issues we will be discussing this term. In addition, a list of more specific readings and references will be distributed with each project handout. Reference material will be held on reserve in the Musagetes Library for use by the class, or will be provided in pdf form and posted on LEARN. We encourage all students to actively use the Musagetes Library collection and the recommended readings

• KM3, Excursions on Capacities, Winny Maas, Berlage, MVRDV, Actar Publisher 1999

• FARMAX *Excursions on Density*, Maas, Winy, Rijs, Jacob van, Koek, Richard, 010 Publisher, 2006

• MVRDV, *MetaCity DataTown*, Winny Maas, 101 Publishers, 1999

• Density I-IV Series a+t Publisher http://aplust.net/tienda/revistas/Serie%20Densidad/Densidad%20IV/

• Hybrids I-III Series, a+t Publisher http://aplust.net/tienda/revistas/

• Work Force Series I-II. A Better Place to Work, a+t Publisher,
http://aplust.net/tienda/revistas/Serie%20WORKFORCE/A%20Better%20Place%20to%20Work%202/

• Grand Urban Rules, Lehnerer, Alex, Rotterdam: 010 Publishers 2009

• D Book: Density, Diagrams, Dwelling, Data, a+t Publisher

• Housing Design: A Manual, Leupen, Bernard. Mooij, Harald, Uytenhaak, Rudy,
Rotterdam: NAi Publishers; New York, 2011

• Delirious New York: A Retroactive Manifesto for Manhattan. Koolhaas, Rem, Monacelli Press, 1994.

• Superdutch : new architecture in the Netherlands, Ist ed., Lootsma, Bart, New York : Princeton Architectural Press 2000

• Small, medium, large, extra-large: Office for Metropolitan Architecture, Rem Koolhaas, and Bruce Mau, 2nd ed., Koolhaas, Rem.; Mau, Bruce.; Sigler, Jennifer.; Werlemann, Hans.; Office for Metropolitan Architecture., New York, N.Y. : Monacelli Press 1998

• Urban Intensities: contemporary housing types and territories
Rowe, Peter G., author. Kan, Har Ye., Birkhäuser, 2014

• The good life: new public spaces for recreation, Ryan, Zoë. Borden, Iain, New York : Van Alen Institute c2006

• This is hybrid: [an analysis of mixed-use buildings by a+t, Fernández Per, Aurora Mozas, Javier.; Arpa, Javier.; a+t architecture publishers, 2011

• HoCo : density housing construction & costs, Fernández Per, Aurora, Mozas, Javier, author.; Arpa, Javier, Trobaugh, a+t architecture publishers, 2009

• Urban Megaprojects: a worldwide view, Online resource http://primo.tug-libraries.on.ca/WATERLOO:vtug4574146, Guelph Book stacks HT151 .U733 2013

• typology+, Innovative Residential Architecture, Peter Ebner, Eva Herrmann, Roman Höllbacher, Markus Kuntscher, Ulrike Wietzorrek, Birkhaeuser, 2009

• Tower and Office, Abalos, Inaki & Herreros, Juan, Cambridge, MA: The MIT Press, 2003

• Apartment Buildings: Plan Atlas, Chueca, Pilar. George, William, 2009

• Floor Plan Manual Housing, Friederike Schneider, Oliver Heckmann, Birkhaeuser, 2011

• Live-work planning and design: zero-commute housing, Dolan, Thomas, 1949-
Hoboken, N.J. : John Wiley & Sons c2012

• No matter: theories and practices of the ephemeral in architecture, Anastasia Karandinou, 2013, [chapter # 4 titled "Beyond the Physical]

• Hybrid Space: New forms in digital Architecture, Peter Zellner, 2000

• Flexible : architecture that responds to change, David Kronenburg, 2007

• Latin American modern architectures: ambiguous territories, Del Real, Patricio, Gyger, Helen, New York : Routledge, 2013

• The architecture of Carl Nyrén, Coates, Gary, Stockholm: Arkitektur 2007

• Dominique Perrault Architecture: meta-buildings, Ruby, Ilka.; Ruby, Andreas.; AZW Wien., König c2006

• Megastructure Schiphol: design in spectacular simplicity, Berkers, Marieke, Bosma, Koos, Burgers, Iris, Davids, C. A., El Makhloufi, Abdel, Mare, Heidi de, Nikolaeva, Anna, Wijn, Jan Willem de, Nai010, 2013

Note: The literature list is an ongoing resource. During the semester critical sources will be added to the class' bookshelf
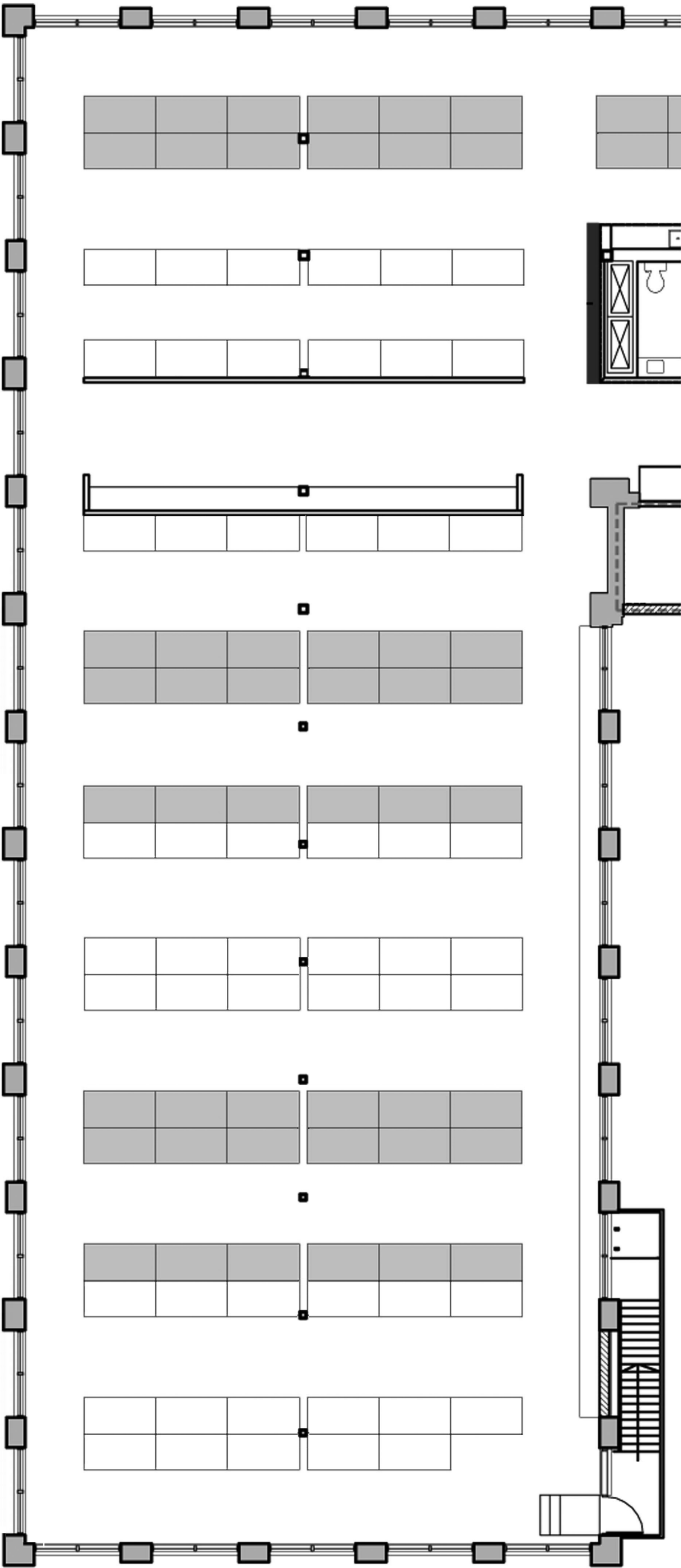
unit 6

unit 5

unit 4

unit 3

unit 2

unit 1

ARCH 392/690 units

Unit 1

Alnabelseya	Safaa
Castonguay	Robin
Chu	Tiffany
Dingley	Michelle
Kwan	Sharon
Li	Tony
Liu	Isela
Mingopoulos	Calli
Noussis	Thomas
Ryu	Louie
Stanev	Antonia
Taylor	Meghan
Tremblay	Joel
Volentic	Jakub
Wang	Ivee

Unit 2

Bojic	Veronika
Chen	Brian
Colford	Bronwyn
Hacala	Chris
Husic	Sinan
Jenei	Irena
Khokhar	Shabaan
Li	Alex
Manbodh	Jade
Nugent	Michael
Sermol	Ali
Song	Alan
Van Dam	Mac
Wei	Danny
Xing	George

Unit 3

Bennett	Jon
Brownlie	Kate
Chorobik	Gabriela
Jazwiec -Podsi	Nicole
Kenny	Andrew
Kim	Sally
Kogan	Tony
Lacy	Brendan
Lo	Melanie
Malek	Mahsa
Priehodova	Brona
Rooyakkers	Sarah
Stines	Shanne
Tse	Helena
Varriano	Christina

Unit 4

Cho	Elly
Coleman	James
Fischer	Audrey
Frayne	Nicholas
Ghazanfari	Amir
Glaude	Zakarie
Gupta	Sugandh
Hunjan	Karam
Lin	Michelle
Nakanishi	Julia
Ogbu	Chi Chi
Rak	Nicole
Spasov	Hannah
Tan	Catherine
Tan	Tan

Unit 5

Choi	Bryan
Di Fiore	Laura
Ibrahim Abed	Sara
Kim	Charles
McLeod	Eden
McNeil	Alison
Merchant	Suzanne
Naser	Elias
Park	Jinsu
Reid	Brenda
Ropel-Morski	Zach
Silverstein	Elliot
Su	Dio
Yan	Wayne
Yang	Felix

Unit 6

Abuhasan	Ala
Behzad Jazi	Negar
Cote	Aaron
Donaldson	Sarah Robyn
Ferwati	Omar
Jamshidi	Golnaz
Lee	Jason Joon
Nicoletto	Elisa
Ottawa	Carolyne
Pitoglou	Fotini
Rahman	Anika Sibat
Selvaraj	Tara
Semenova	Natalia