INSIDE THE SPONGE

STUDENTS TAKE ON MIT SIMMONS HALL

Edited by Carlo Ratti and Talia Dorsey

CCA

Students@CCA | Canadian Centre for Architecture

PUBLICATION

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SIMMONS HALL

STEVEN HOLL ARCHITECTS

Simmons Hall, Massachusetts Institute of Technology (MIT)
Cambridge, Massachusetts, USA
1999–2002

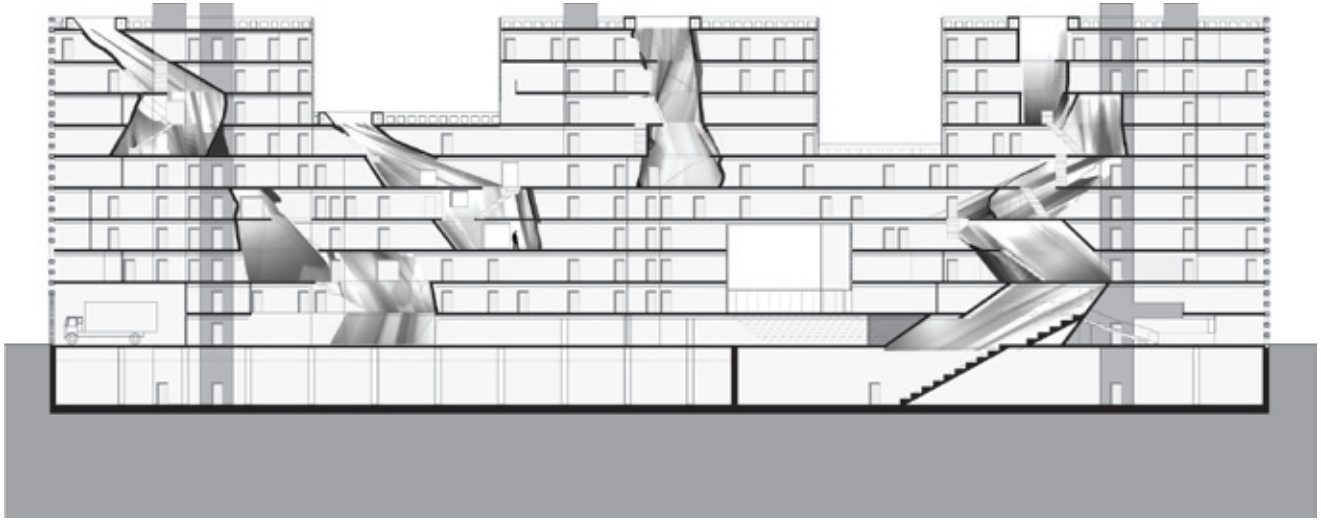
The 350 bed residence is envisioned as part of the city form and campus form with a concept of "Porosity" along Vassar Street. It is a vertical slice of a city ten stories tall and 330' long. The Urban Concept provides amenities to students within the dormitory such as a 125 seat theater, as well as a night cafe. House dining is on street level, like a street front restaurant with a special awning and outdoor tables. The corridors connecting the rooms are like streets (11' wide) which happen upon urban experiences. As in Aalto's Baker House, the hallway can be more like a public place, a lounge.

CONCEPT

The Sponge concept for the new Undergraduate Residence Hall transforms a porous building morphology via a series of programmatic and bio-technical functions. The overall building mass has five large scale openings. These roughly correspond to main entrances, view corridors, and the main outdoor activity terraces of the dormitory connected to programs such as the gymnasium. The next scale of opening creates vertical porosity in the block with a ruled surface system freely connected to sponge prints, plan to section. These large,

dynamic openings (roughly corresponding to the "houses" in the dorm) are the lungs of the building bringing natural light down and moving air up through the section.

The "PerfCon" structure is a unique design, allowing for maximum flexibility and interaction. Each of the dormitory's single rooms has nine operable windows over 2' × 2' in size. The 18' depth of the wall naturally shades out the summer sun, while allowing the low angled winter sun in to help heat the building. In the deep setting of the numerous windows color is applied to the head and jamb creating identity for each of the ten "houses" within the overall building. The night light from the 9-window rooms will be magical and exciting.

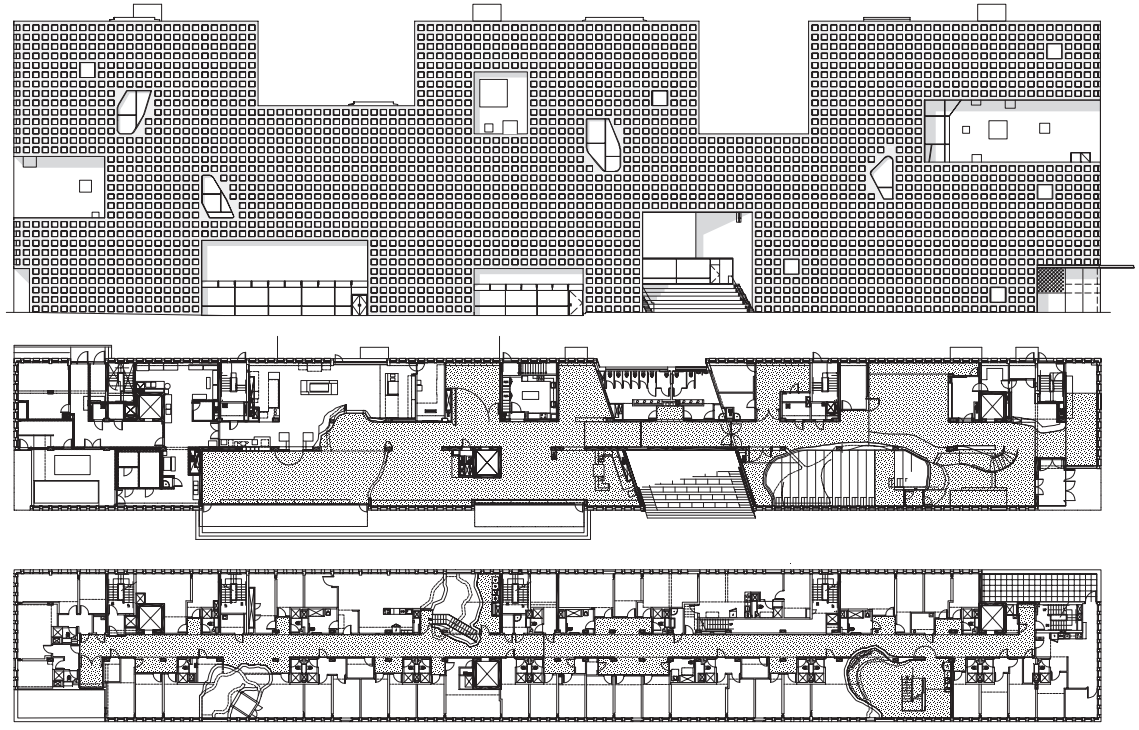


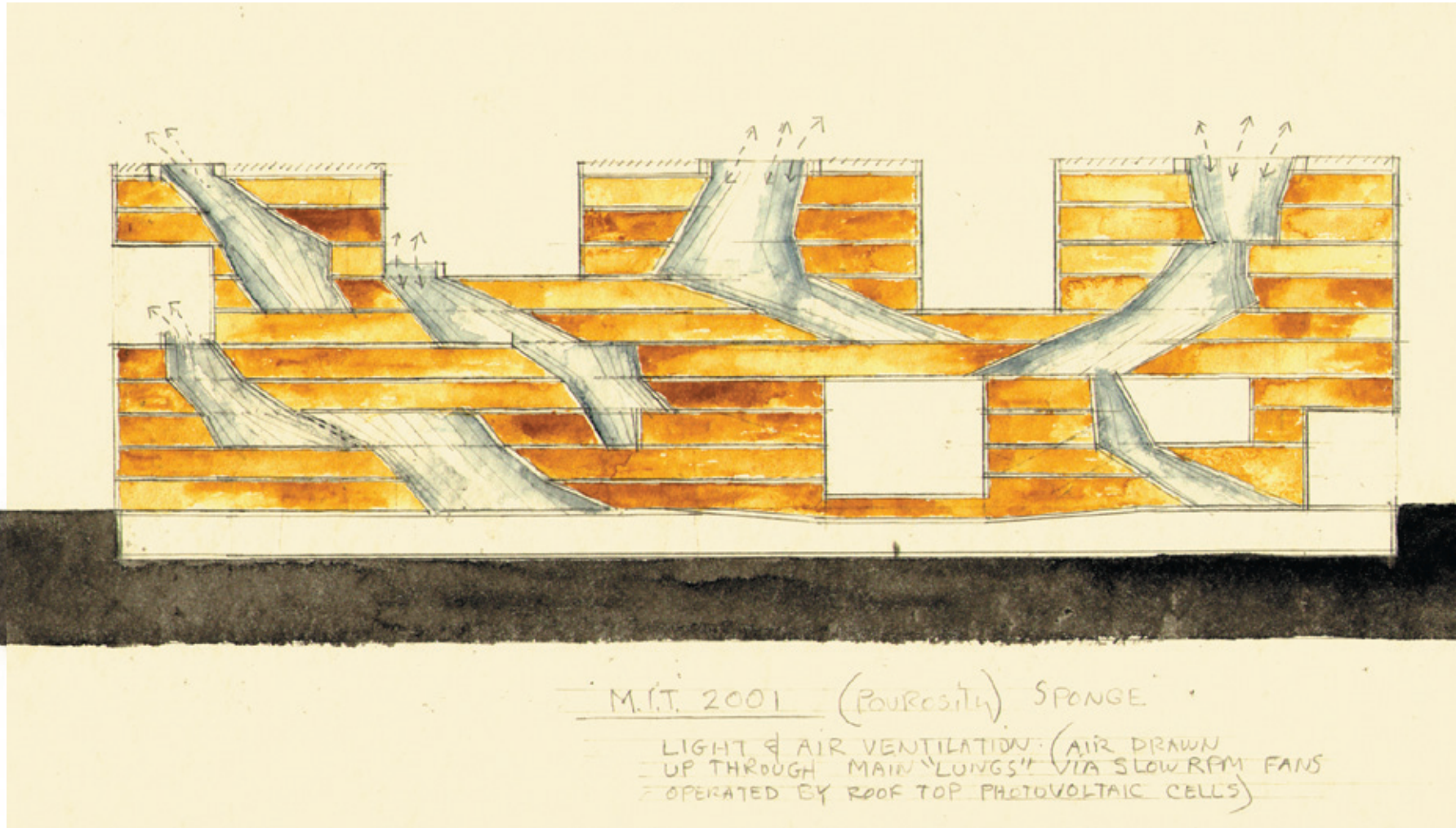
Steven Holl Architects
Longitudinal Section of Simmons Hall
Digital Rendering, 2002

Steven Holl Architects
Longitudinal Elevation of Simmons Hall
Digital Rendering, 2001

Steven Holl Architects
Floor plans
Digital Rendering, 2003

Steven Holl Architects
"Light and Air Ventilation"
Watercolour, 2001
(facing page)




M.I.T. 2001 (POROSITY) SPONGE
LIGHT & AIR VENTILATION: (AIR DRAWN
UP THROUGH MAIN "LUNGS" VIA SLOW RPM FANS
OPERATED BY ROOF TOP PHOTOVOLTAIC CELLS)

ARCHITECTURE AND LIFE

MIRKO ZARDINI

The lives of buildings can be full of surprises. Sometimes, conceived for a long life, they are granted only a short one. Or intended as merely temporary presences, they remain with us for lengthy periods. The longer a building lasts, the greater the chance that it will have to accommodate people and functions different from those for which it was originally designed. Inevitably, it will have to face adaptations and transformations. It can happen that at a certain moment in a building's life we discover its "inner values" and decide to restore it to its original condition. If its lifespan is very long we might even decide to preserve the building's entire history, restoring each of the interventions that have taken place at different periods and had an impact on its original form.

Initially, a building is the product of a range of contributions, among which those of its architects evidently play a crucial role. But buildings become much more than this. As soon as they are completed they embark on independent lives. First shaped by the architects, they subsequently shape the existence of those who inhabit them. At the same time, they register fresh events, interventions, presences. In this way, their lives become the mirror of ours.

A building can, in fact, tell many different stories—those of its architects, clients, engineers and builders,

for example. The CCA's collections constitute a repository of documents that can help us decipher and reconstruct some of these stories. They contain drawings, models and letters that can give an account of the conception of a building; the photographic collection can offer the parallel narrative of a building's image; among the artefacts are toys and souvenirs inspired by buildings; the library houses books, magazines and newspapers that throw light on the context out of which a building emerged, the ideas that helped shape it, the interpretations made of it and the effect it has had on architectural culture.

But one story is often missing—that of a building's users. Filling this gap was one of the aims of the exhibition *Inside the Sponge: Students Take On MIT Simmons Hall*, held at the CCA from 10 August to 19 November 2006, and of this accompanying book. Thanks to the enthusiastic participation of a group of MIT students, with associate curator Talia Dorsey and under the direction of curator Carlo Ratti, we have been able to present a different view of one of the most iconic buildings of recent years: Steven Holl's Simmons Hall, one of the new dormitories on the MIT campus in Cambridge. This exhibition is actually part of a larger project whose goal is to present at the CCA the results of research and investigations undertaken by students at a number of different universities. Looking at Simmons Hall from the standpoint of users, the students have offered an unconventional view, very unlike the codified vision of architectural magazines, books and other traditional forums. Such conventional representations and interpretations capture only a brief moment in the life of a building—the one between the conclusion of construction and the first occupancy. Not surprisingly, it is virtually impossible to find any human figures in most of the photos that accompany discussions of buildings in architectural magazines or in lavish publications. But by following the building through the second phase of its life, its real life, we not only encounter its users, with their conflicting expectations—we also come to realize that as soon as it intersects with human lives a building becomes more than its original project. It becomes architecture in its fullest sense, part of the unceasing flow of life.

These photographs of Simmons Hall were produced using a student-developed technique called *Time Bracketing*, where custom software seamlessly composites a series of photographs into a single image.

STUDY NO. 6

Northwest view from afternoon to night.

STUDY NO. 7

Southwest view from night to morning. *(pages 12–13)*

STUDY NO. 10

Interior view of the entrance lobby from afternoon to evening.


KETTLER

STUDY NO. 8

Interior view of the 4th floor lounge from afternoon to evening,

ARCHITECTURE AFTER ARCHITECTS

CARLO RATTI AND TALIA DORSEY

MOTIVATION

The relationship between architects and society has never been a simple one. Gustave Flaubert, in his quirky *Dictionary of Received Ideas*, famously stated: "Architects: All morons. Always forget the staircase in houses."[1]

There might be some explanation for this. As Flaubert's comment hints, architects do not have a reputation for paying much attention to users' concerns. "All great architecture leaks," Frank Lloyd Wright disarmingly conceded.[2] And such conditions did not seem to concern him too much, if one were to believe several anecdotes about his professional life. The most famous of them is probably the one about his response to his wealthy client Herbert Johnson. When the latter called to complain about a leak on the table during a Thanksgiving dinner and asked him what to do, Frank Lloyd Wright reportedly replied: "Why don't you move the table?"

Similar stories are attributed to Le Corbusier and many others. The architect Philip Johnson even proposed a possible ranking of buildings: "You can judge the greatness of a work of architecture by the number of buckets you have to put out in a rainstorm. Fallingwater is a seven bucket building, and therefore a great masterpiece—and it is also the most appropriately named building."[3]

1 Gustave Flaubert, *Bouvard and Péuchet* (Champaign, IL: Dalkey Archive Press, 2005), 285.

2 In fact, it is unclear if Frank Lloyd Wright really said this. He reportedly said: "If the roof doesn't leak, the architect hasn't been creative enough." For similar anecdotes, see Judith Donohue, "Fixing Fallingwater's Flaws," *Architecture* (November 1989): 99–101.

3 Quoted by Robert Campbell, personal communication with Carlo Ratti, 24 October 2006.

Many authors have examined the contrast between architects and their clients or the users of their buildings, siding for one or the other. Ayn Rand's novel *The Fountainhead* famously stood on the side of the former, celebrating the architect's vigorous creativity and independence in opposition to the philistine and bourgeois requirements that often come from the client. The main character, Howard Roark (played by Gary Cooper in the movie directed by King Vidor), struggles in obscurity and rejects lucrative design commissions in order not to compromise his architectural principles and concede to his clients' bad taste.

The idea that clients should be "educated" by architects without being too involved in the design process recurs in modern architecture. It goes so far as to view architecture as a means to reform society instead of as an expression of it. Remember Buckminster Fuller's scream: "Reform the environment, stop trying to reform the people. They will reform themselves if the environment is right."[4]

However, partisans of the client's stance abound. Adolf Loos, a master of modern architecture, made fun of the willingness of architects to intrude into their clients' lives and teach them how to behave with a *Gesamtkunstwerk* approach:

> *Once he had his birthday. His wife and children had showered him with presents, things that gave him heartfelt pleasure, things that he really liked. Not long after, the architect arrived to make sure that everything was all right and to give his ruling in certain tricky questions. He came into the room. The rich man was pleased to see him, for there were many things he wanted to ask. But the architect did not see the look of pleasure on his face, he had noticed something else. "What are those slippers you are wearing?" he gasped. The rich man looked down at his embroidered slippers. And gave a sigh of relief. This time he was sure of his innocence. They had been made to the architect's own design. "Have you forgotten already?" he asked teasingly. "You designed them yourself!" "I certainly did," thundered the architect. "For the bedroom! Those two impossible spots of color ruin the whole ensemble. Can't you see that?"*[5]

4 Joachim Krausse and Claude Lichtenstein, eds., *Your Private Sky: R. Buckminster Fuller the Art of Design Science* (Baden: Lars Müller, 1999). Fuller's idea is in truth older than the twentieth century and can be traced back to eighteenth-century reformist architecture, such as that of Claude Nicholas Ledoux.

5 Adolf Loos, "The story of the Poor Little Rich Man" (1900). In *Adolf Loos, On Architecture, Selected and Introduced by Adolf and Daniel Opel*, (Riverside, CA: Ariadne Press, 2002), 50.

In his celebrated book *From Bauhaus to our House*, Tom Wolfe states: "I find the relation of the architect to the client in America today wonderfully eccentric, bordering on the perverse."[6] His text is a review of the architect's progressive detachment from the demands of society in general and clients in particular, following a segregation attitude that Wolfe humorously links to the European arts compounds of the early twentieth century such as the Bauhaus.

Notwithstanding such contrasts, great benefits could emerge from deeper interaction during the design process between clients (who under normal conditions are also future users) and architects. First, during the design phase, some degree of user participation helps better define the brief of a building and provide a constant reference point against which to measure evolving designs. Such an approach is indeed present, at least partially, in most design processes and has given birth to the theory and practice of participatory design, which gained great attention in the 1970s.[7]

More importantly, however, feedback from users would be beneficial after construction is completed. At that point, one can finally test to what extent a building has or has not met different criteria. From the detailed monitoring of lived-in architecture it is possible to gain invaluable insights into the extent to which architectural intentions match users' desires and in so doing begin a virtuous circle of feedback. In fact, design is often considered not as a one-off process but as a circular one. Herbert Simon, in *The Sciences of the Artificial*, describes it as involving "first the generation of alternatives and then testing of these alternatives against a whole array of requirements and constraints. There need not be merely a single generate-test circle, but there can be a whole nested series of such circles".[8] What test could be better than the one coming from the analysis of a lived-in building,[9] from the comparison between the architect's initial intentions and the reactions of the user?

A few successful exercises of this kind have indeed been carried out. Philippe Boudon was a pioneer with his seminal 1969 work Pessac de Le Corbusier. He looked at the iconic Quartiers Fruges development outside Bordeaux, where conflict had emerged between the initial modernist architecture and its appropriation by users along the lines of French Midi-kitsch. The pure Corbusier "duck" buildings were slowly mutating into something closer to Venturi's "decorated duck," including pitched

6 Tom Wolfe, *From Bauhaus to Our House* (South Yarmouth, MA: John Curley & Associates, 1981), 4.

7 See for example Dan Bernfeld, Marja Mayerl and Roland Mayerl, *Architecture et Urbanisme Participatifs: Expériences Françaises dans le Contexte Européen* (Paris: Centre Pompidou, 1979).

8 Herbert Simon, *The Sciences of the Artificial* (Cambridge: MIT, 1969), 128.

9 Thus would apply both when the analysis is carried out by users themselves and when it is done by sociologists observing them.

roofs, traditional wooden windows and heavy decorations. Even Le Corbusier conceded: "You know, it is always life that is right and the architect who is wrong..."[10] A passionate debate followed the publication of Boudon's book.

Several other studies were undertaken in the 1970s, with promising results. Boudon, in broader terms, argued for the development of a new field of research called architecturology, analogous with epistemology. An analysis of lived-in architecture, which often went under the boring heading "post-occupancy studies," took the stage for a number of years. However, most were swept away by the post-modern drift of the 1980s and are forgotten today, while the architectural debate still seems to be more concerned with form instead of process.

The "Inside the Sponge" project for the Simmons Hall dormitory on the MIT campus aims to build on that original line of research and present a building from the point of view of its users. With its sponge-like structure, unique concrete skeleton, over 5,500 windows and the signature of award-winning New York architect Steven Holl, it seems an ideal case study for such an experiment. Furthermore, it is home to more than 300 MIT undergraduate and graduate students who seemed eager to embark on such an experiment. Carlo Ratti recalls the origin of the project:

> *"You are an architect, right?" It was with these words that Ellen Essigman, housemaster of Simmons Hall, approached me in late 2004. I had been living in the building for almost a year by that time and I knew the oblique meaning that such a question might carry. The semantics of the word "architect" had gone wrong. I remembered the day when a big sign appeared on our glazed entrance: "Architects beware: burnination," supposedly to scare away the hordes of architecture adepts who were regularly trying to enter the building. Having been on the dorm's mailing list, Sponge Talk, I knew that architects were not one of the most beloved professional categories among a 300+ community of MIT undergraduates who felt as if they were taking part into a living architectural experiment.*
> *"You're an architect, right?" insisted Ellen. The second part of the sentence was more*

10 Philippe Boudon, *Lived-in Architecture* (Cambridge, MA: MIT Press, 1972), 2.

reassuring: "I'm asking because we would like to make some changes to the building and we thought that you might be interested in designing them." Thus I learnt that there were two design issues. The first one dealt with a large terrace in the middle of the building. It was a wonderful space overlooking, on one side, MIT's playing fields, the Charles River and Boston's distant skyscrapers, and on the other side Cambridge's industrial wasteland, progressively being transformed into lofts and high-tech labs, and Harvard's white towers over the horizon. While primary real estate inside the dorm, the terraces could not be used by more than 49 people at the same time because of the underdimensioning of fire escapes. The second design challenge was less defined: in a building full of perforated elements[11] it was difficult to find places for bulletin boards, which are essential elements in a university dorm. How to get around this problem?

I would have been ready to answer to Ellen in the affirmative, as the two tasks seemed straightforward enough. But—maybe the fear of being identified as an "architect" in the eyes of the dorm played a role?—I replied instead with a counter-proposal: "why don't we organize a student design competition and let the residents propose changes to the building?"[12]

With the enthusiastic support of Ellen and John Essigmann, Simmons Hall housemasters, a competition was organized in March 2005. Students from all disciplines were invited to participate in it, provided that they included on their team at least one resident of the dorm. The brief *(page 66)* asked for proposals related to the two issues above: improving the use of the terraces and creating a system for communication inside the dorm. It allowed for other ideas the students might like to propose.

A jury was nominated. It was chaired by Robert Campbell, the Pulitzer Prize-winning architecture critic for the *Boston Globe*, and it included several representatives of the MIT student body, faculty and administration. Steven Holl, who at the time started developing his ambivalent attitude towards the project—consisting of apparent excitement and encouragement but also doubts that possible criticism might emerge in the student proposals—decided not to sit on the jury himself but proposed instead

11 During the competition some students went on to suggest that a negative Simmons Hall might have been built using the leftovers from all the digital cutting that was done during construction.

12 See *http://senseable.mit.edu*

his project architect Tim Bade, with Michael Waters from associate architects Perry Dean Rogers. Mirko Zardini, from the Canadian Centre for Architecture in Montréal, completed the panel.

There was a lot of excitement on campus. The student competition was mentioned in the *Boston Globe* and was granted a "spotlight" on the main MIT website.[13] Several dozen students attended the site visit and ten teams of various sizes—from lone individuals to five people—entered the competition and submitted their designs.

The results were very interesting *(pages 67–71)*. Several groups not only elegantly solved the required issues but went further to propose broader visions, not lacking in irony. One team took a radical 1970s Superstudio-esque approach and suggested that another Simmons Hall be cloned simply to accommodate architects on pilgrimage. A management student, who claimed to have entered the competition only to impress an architecture student, presented a design developed entirely in Microsoft Excel, which he defended as the software best suited to dealing with such a gridded building. Another team suggested a kind of digital nervous system to display and let emerge the self-organizing patterns of the student community.

Beyond the competition prizes that were awarded, everyone thought that the results were very interesting. Mirko Zardini went further: "Why not use this material as the basis for an exhibition at the Canadian Centre for Architecture in Montréal?"

A UNIQUE CASE STUDY

The exhibition idea, as it began to be circulated at MIT, prompted considerable interest. Adele Santos, Dean of the School of Architecture and Planning, was eager to provide seed funding for a research effort that would look at Simmons Hall from the point of view of its users. Similar positive responses came from the MIT Council for the Arts and the Dean for Student Life.

13 See *http://www.mit.edu*

Everybody felt that it was the right moment to perform this study. The Institute was just completing several large building projects which, after decades of architectural dullness, had brought some leading contemporary architects to MIT.[14] Simmons Hall had been the first building to open in 2002, followed by Kevin Roche's Zesiger Sports and Fitness Center, Frank Gehry's Stata Center for Computer, Information and Intelligence Sciences and Charles Correa's Brain and Cognitive Sciences Complex. This unprecedented architectural feast also included the refurbishment of Alvar Aalto's iconic Baker House and I.M. Pei's Dreyfus Chemistry Building.

Such an ambitious construction program, prompted in part by MIT's 1998 *Report on Student Life and Learning*,[15] was fuelled by President Charles Vest's vision: the new buildings should be "as diverse, forward-thinking, and audacious as the community they serve: They should stand as a metaphor for the ingenuity at work inside them."[16] As one can imagine, such a statement was not going to be accepted without question by an academic community that had granted heritage site status to Building 20, a barracks hastily constructed during World War II and which had witnessed many important technological innovations, including radar.[17] This very barracks was going to be demolished to make space for Frank Gehry's flamboyant Stata Center. The building's design was loved by many, but it was also irreverently described in internal on-line forums as "a stack of soda cans that somebody sat on".[18] To make the debate on the role of architecture more vivid came the 2003–04 MIT-wide salary freeze: a decision which was prompted by all the new building construction, among other things—construction which had been launched with financial lightheartedness at the height of the new economy bubble.

Architecture became a highly-debated topic on campus. This might indeed have been one of the aims of the whole initiative, as stated by Bill Mitchell, President Vest's key strategist: "Any major institution should take risks and innovate in architecture. After all, architecture is not just about being liked, but about exploring new ideas".[19] However, towards the end of the adventure, the time seemed ripe to feed the debate with more empirical evidence and to acquire valuable feedback from what had been built. This explains in part MIT's interest in the Simmons Hall analysis project.

Beyond MIT's interest, we thought there were additional reasons that made the case study particularly

14 The sum of all construction projects was presented, from a public relations point of view, as the MIT Evolving Campus: *http://web.mit.edu/evolving*

15 See *http://web.mit.edu/committees/sll*

16 Quoted in David Dillon, "Starchitecture on Campus," *Boston Globe*, 22 February 2004.

17 See *http://libraries.mit.edu/archives/mithistory/building20*

18 Carlo Ratti, "Redefining the University," *Domus* 858 (April 2003): 40–49.

19 Ibid.

interesting. First, the very nature of the building: a university dorm. As pointed out by Robert Campbell, this typology is very interesting because it eludes market logic and has led in the past to very audacious living experiments.[20] In Cambridge, Massachusetts, Simmons Hall is part of a legacy of university dormitories designed by prominent architects such as Walter Gropius, Alvar Aalto and José Luis Sert. The singularity of such buildings as experiments in form, philosophy or social program has somewhat overshadowed the quality of life they offer to users. "Inside the Sponge" seemed the right opportunity to foreground residents' perceptions, shifting the focus from the architectural oeuvre to the students who inhabit it.

Second, the very design we were dealing with was unique. Steven Holl felicitously opted for customizable student rooms and introduced a certain degree of flexibility. In a certain sense, as with Le Corbusier's Quartiers Modernes Frugès in Pessac, this provided a privileged position from which to view users' modification of space.

Third, we valued the unique ability to draw on Simmons Hall's residents and the MIT community at large. The latter is an extremely articulate and able group composed of undergraduates, graduate students, visiting scholars and permanent faculty members from whom to draw a unique description of the building's life. Studies of lived-in architecture—or post-occupancy surveys, as they are often rather unattractively described—did not take off in the past not only because of the architect's reluctance to expose himself to potentially harmful criticism, but also because of the difficulty of engaging clients and inhabitants: as one of the latter, what would you have to gain by better understanding the failures of the building you live in? Why deal with architects again after a design process that might have just been completed not without pain? Such considerations were not those of Simmons Hall students, who in this case are both the clients of the building—having been involved with the MIT administration in the MIT Founders Group—and its users. As the "Inside the Sponge" initiative demonstrates, they were actually very eager to share their feedback in order to contribute to changing the living standards of their incoming fellows and contribute to MIT's future campus development plans.

Beyond being an enthusiastic community, Simmons Hall residents are also widely known for their

20 Remark by Robert Campbell during the Simmons Hall public competition.

creative "out of the box" thinking. "Inside the Sponge" gives voice to the fiercely creative, experimental, curious and autonomous culture of MIT's student body—as both the subject and means of analysis. Only in such an environment would it have been possible to develop some of the new technologies described below, making possible an analysis of Simmons Hall and perhaps making an innovative contribution to architectural debate as a whole.

MATERIALS AND RESULTS

Some of the material presented in the "Inside the Sponge" exhibition relies on the development of new techniques to describe life inside the building. One of the images shows a kind of thermograph of Simmons Hall, a map that represents the density of people in different parts of the building based on the analysis of traffic on the wireless internet network. Producing these maps for different times of the day gives a better understanding of the dynamics inside the building and of how some of its most characteristic spaces—such as the cavernous lounges that traverse it—are used in the course of the day *(pages 50–51)*.

Another type of study is based on the analysis of the e-mail list-serve "Sponge Talk" *(pages 46–47)*. This is a public discussion forum for all residents of the building, and it seemed a good platform from which to examine the most debated issues in the community. Measuring the frequency of architecture-related words in Sponge Talk and comparing it with that of the same words in plain written English yielded some surprising results: check how many times you are more likely to use the words "window" or "lounge" if you live in Simmons Hall!

Other technologies were developed to describe built space and its usage through time *(pages 12–19)*. Imagine a digital picture where every column of pixels is taken at a slightly different time. The resulting shot might be used to capture the quality of space as it evolves through time, in the span of a few hours or a whole day.

These are just some of the technologies developed by MIT students to analyze the building they live in. Additional material was collected in a more traditional manner. An extensive survey was carried out through on-line questionnaires, following the guidelines of the MIT Committee on the Use of Humans as Experimental Subjects.[21] Geographic and socio-economic data was plotted against the section of the building. A photographic survey was carried out to document all holes in the sponge and all the creative ways in which students found new uses for them—from the little perforations in the wooden ceiling panels transformed into hangers to the gruyere-like furniture used to chain one's bike. A catalogue of all existing furniture configurations in student rooms, whether approved by the MIT administration or not, was made.

All the analyses were integrated with additional raw material that had been collected: newspaper cuttings, existing pictures of the life inside the building, videos in which the students dissected the building and presented it to incoming fellows, etc. The idea was to let these materials speak for themselves.

In this catalogue, the different materials are clustered into groups, each of them of a size between one and a few pages, and relating to a specific question, such as: how has the sponge entered the visual imagination of its community? How creative can MIT students be with modular components inside the building? All of the questions together, however, relate to some more fundamental issues. First, how does built space— in this case, Simmons Hall—affect the culture of the community living inside it? Second, what are the processes by which a community modifies and appropriates space?

In a certain sense our scope can be traced back to a well-known line of research in architecture: what Philippe Boudon calls architecturology.[22] In the introduction to his seminal work on Pessac he wrote:

> *But, although this study is essentially local and circumscribed, I hope that it will nevertheless help to throw light on the more general phenomenon of the conflict between the original intentions of the architect, as expressed in his buildings, and the reactions of the people who live in them. As far as Pessac is concerned, we shall act on the assumption that such a conflict has taken place.*[23]

21 See *http://web.mit.edu/committees/couhes*

22 Philippe Boudon, "De Pessac à l'architecturologie," *Artibus et Historiae 2* no. 3 (1981): 131–43 or Philippe Boudon, *Introduction à l'Architecturologie* (Paris: Dunod, 1992).

23 Philippe Boudon (1969), op. cit., 3.

If one were to replace the word "conflict" with "dialectics" (though a dialectics not without confrontational elements, as can be seen in the following pages) one could probably summarize the guiding idea behind this catalogue.

IN THE END, JUST BETWEEN US, IS IT GOOD OR BAD?

Since the beginning of the "Inside the Sponge" project, one of the most frequent questions we have been asked is: in the end, just between us, is it good or bad? Of course, looking at the issues in such simplified and radicalized terms has never been our goal. Our research question articulates and deals with the complex interplay between a building and the community inhabiting it. As such, different measures by which the building could be judged successful or unsuccessful can be highlighted as part of a complex and contradictory matrix. Furthermore, one should not seek in this experiment a comprehensive analytical study: it has been carried out by a variety of users-students and as such it presents a multitude of voices which do not aim to be in synch or in unison.

However, let us take two of the most direct questions that the "Inside the Sponge" student team asked its fellow residents in an on-line questionnaire: "Are you more likely to be an architect after living at Simmons Hall?" and "What is the most notable interaction you've had with an architect in Simmons?" The answer to the first question is clear cut: 60.7% of residents stated that they would be less likely to become architects after living in Simmons Hall. However, could this response be equated with an overall negative rating of the building's architecture? Probably not, at least not in light of other quantitative data. For instance, Simmons Hall has consistently ranked at the top of MIT student preferences since its opening in 2002, above many other recently-completed dormitories. Incidentally, this status is shared with another example of high design on campus, Alvar Aalto's iconic Baker House. How could it be that students, when asked, expressed a negative view of architecture based on their lived-in experiences while

at the same time ranking the building consistently at the top of their wish list? How might we explain such a discrepancy between the residents' stated "votes" and the way they "vote with their feet?"

Possible answers might lie in the very nature of building that has been the subject of such intense design care. Everything within it is exquisitely detailed: furniture, lamps, ceiling tiles, windows, signs—everything has been designed with a *Gesamtkunstwerk* approach, empowered by new digital imaging techniques and today's ability to mass-customize architectural production.[24] The contrast between such care and the inevitable frustrations of daily life—such as a draft in the elegant glass doors or a translucent curtain that does not sufficiently block daylight, to mention just two popular reasons for dissatisfaction inside the building—acquire a stark relevance. It is as if the students wanted to scream to the architect: with all the care that you put into designing that handle, couldn't you at least make sure that the window would close properly?

But would the students be able to scream to the architect if they did not know his name, if they were living not in revered Simmons Hall but in one of those anonymous 1960s dorms designed by what's-his-name on the MIT campus? Here another factor might come into to play. All the attention that Simmons Hall is attracting in architectural circles—all the prizes it received, the hordes of black turtlenecks it draws from all over the world—might act for students as a multiplier of frustration. Asked "What is the most notable interaction you've had with an architect in Simmons?" some of them reply: "Kicking them out as desk worker and watching them peer through the windows." Another: "I've seen them fanatically taking pictures from the outside." Or: "My most notable interaction would probably be the numerous times an architect has begged me to let them into Simmons." Or bemused: "One morning I walked down to the front staircase, still in my pyjamas, to get some toilet paper from the front desk. There was a small group of very well-groomed architects watching me intently."

From this point of view, it might be fair to say that Simmons Hall, architecturally speaking, is a victim of its own success.

24 See for example Frédéric Migayrou, ed., *Architectures Non Standard* (Paris: Centre Pompidou, 2003).

ANALYZING THE SPONGE

Student-produced comic book, *Integral Force: The First Derivative*, featuring characters and adventures inspired by MIT life.

SURVEY

Simmons Hall is certainly not a neutral architectural environment. It affects its residents' daily lives both by its unique spatial character as well as the visitors and attention it draws. This study frames the impact of such a reality upon the resident students' attitudes towards architecture and architects alike.

Are you more or less likely to be an architect after living in Simmons Hall?

CIRCULATION

Within a student-produced REX (Resident Exploration) video parody of a scientific analysis of Simmons Hall, students dissect the notoriously counter-intuitive circulation design of the building.

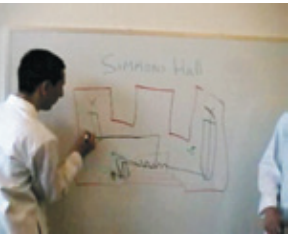


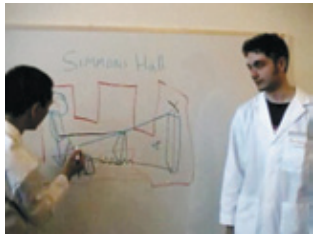






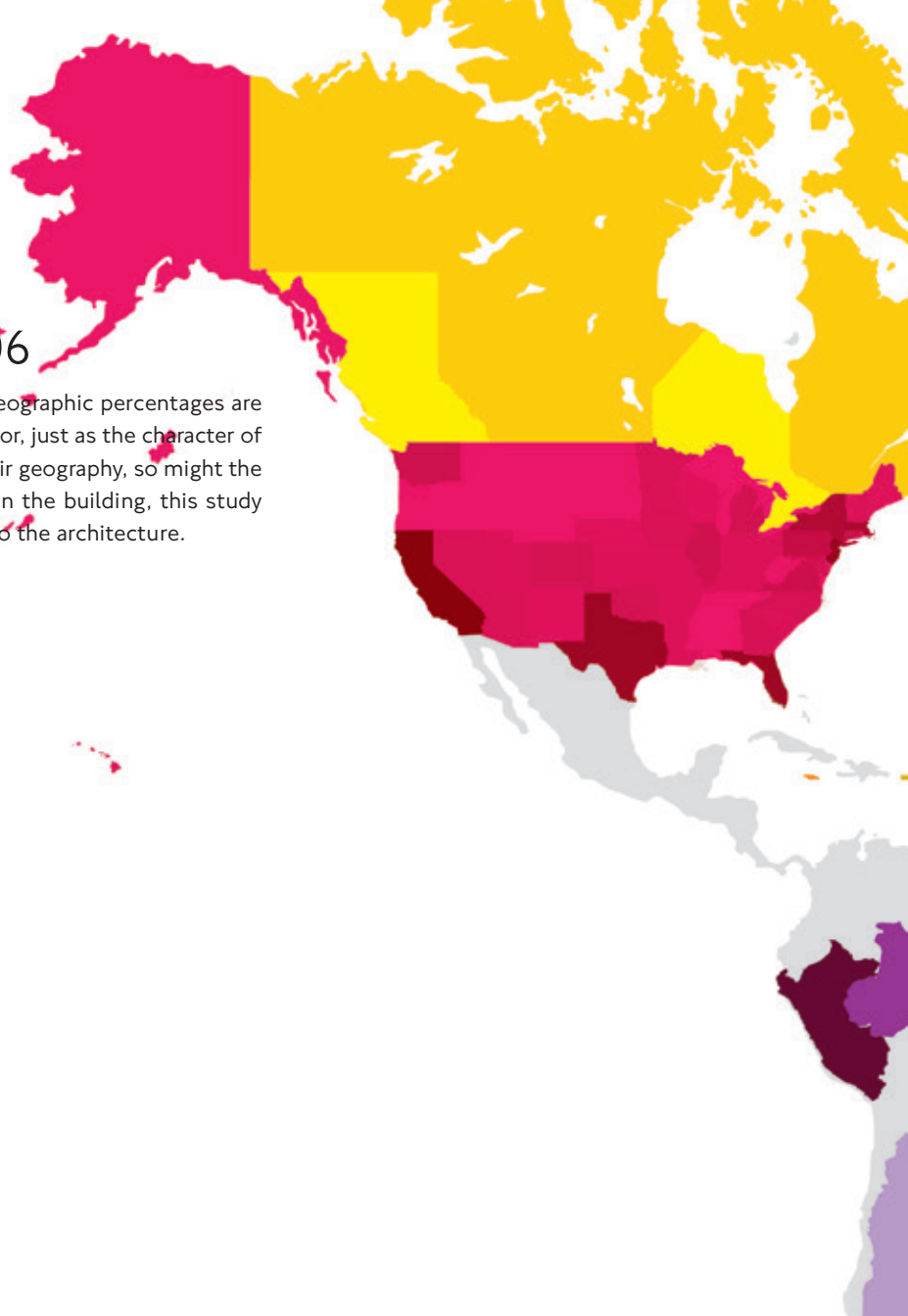


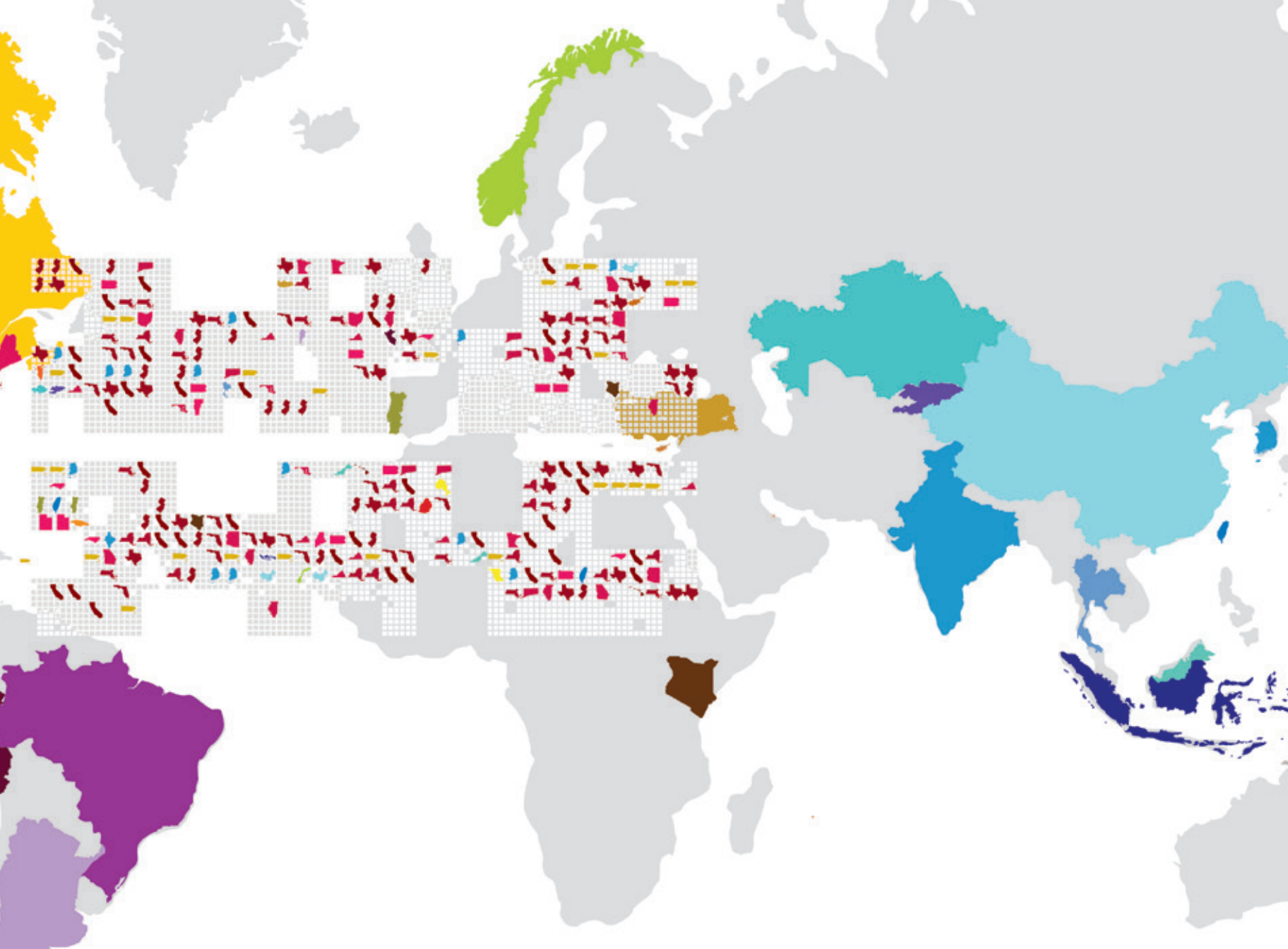



RESIDENTS' CITIES OF ORIGIN, 2005–06

Simmons Hall, like MIT, is comprised of a global student body. Although the geographic percentages are known, the local patterns of settlement are not. This was a point of question, for, just as the character of a city becomes defined through the relations between its communities and their geography, so might the character of Simmons. Comparing the spatial and geographic structures within the building, this study probes whether settlement patterns are occurring, and, if so, how they relate to the architecture.



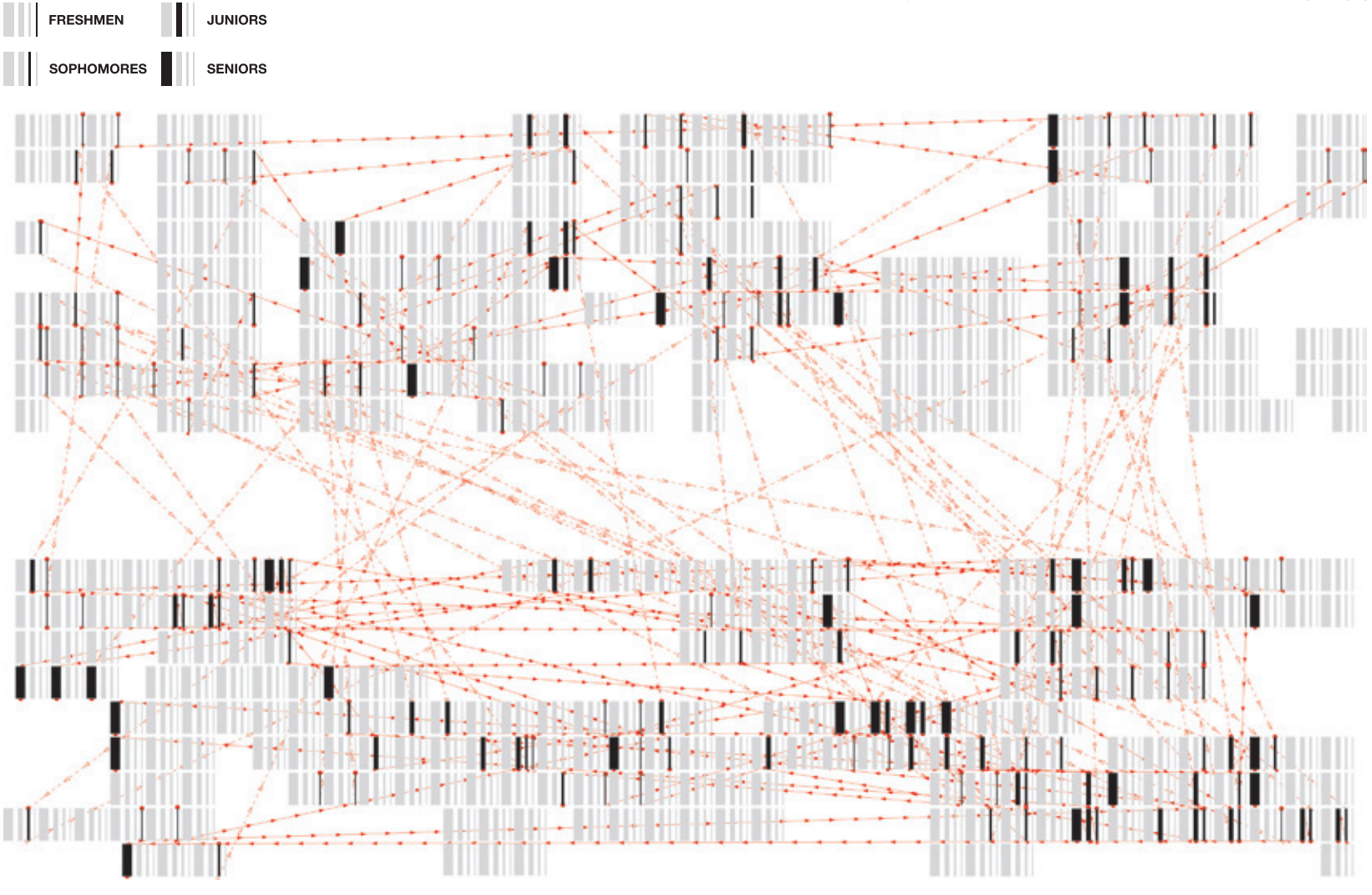


T-shirts designed by MIT students.


SIMMONS HALL
SHADOW GOVERNMENT
Simmons REX '03
COMING SOON TO A CAMPUS NEAR YOU
SIMMONS HALL CONSTRUCTION SET
Steven Holl's Revenge
September 1, 2005
SIMMONS HALL
SIMS
REX 2005
SIMMONS HALL
IMMONS HALL

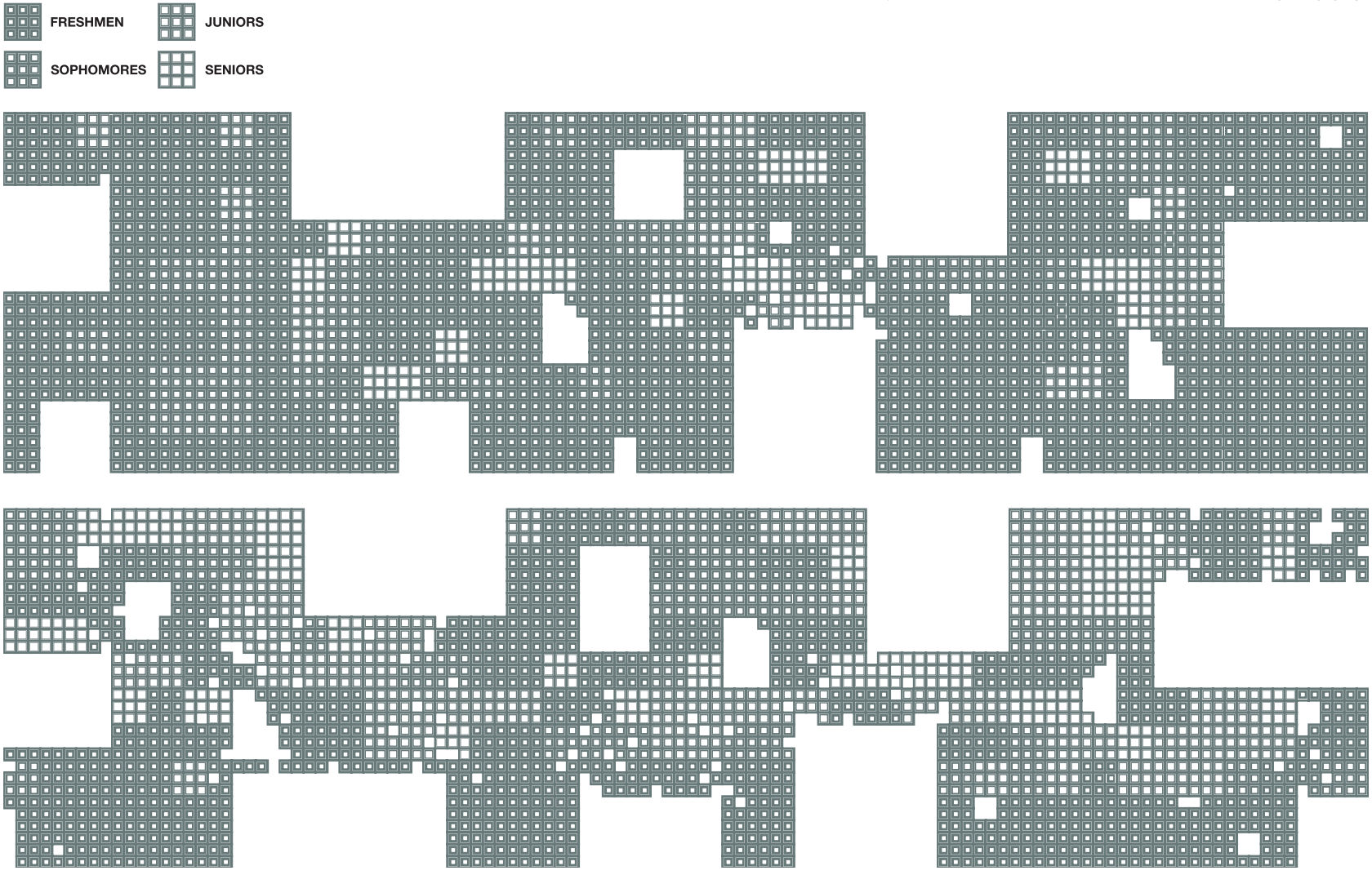
MIGRATION PATTERNS OF THE CLASS OF 2006, 2002–06

How does one move within a sponge? MIT's residence scheme is fairly unique amongst universities in that most undergraduates stay within the same residence for the entirety of their undergraduate education. Every year the resident students participate in a housing lottery by which they select their room for the forthcoming academic year. This study takes a look into how this combination of luck and seniority manifests spatially in the building by looking specifically at the movement pattern of Simmons Hall's first full-term graduating class over the course of their four years.


FRESHMEN
JUNIORS
SOPHOMORES
SENIORS

RESIDENTS' CLASS YEAR, 2005–06

Inhabited by first- to last-year students, Simmons Hall allows each student to select his or her room in an order determined by seniority and a lottery process (for instance, fourth-year students will always choose before third-year students, but the order of the fourth-year students is determined by chance). This study examines where and how the students (by class) occupy the architecture, as a means of relating the class hierarchy to the spatial hierarchy implied by the students' choices (note, for instance, the predominance of higher year students occupying the front side vs. the back side of the building).


FRESHMEN
JUNIORS
SOPHOMORES
SENIORS

RELATIVE FREQUENCIES OF “SPONGE TALK”* WORDS BY YEAR, 2003–06

Perhaps the archetypal “tech-savvy” student body, MIT students constantly participate in digital communications of all sorts, including “Sponge Talk”, the highly active e-mail discussion group of Simmons Hall residents and affiliates. This study aims at uncovering the ways in which the building’s architecture has infiltrated the collective consciousness and the day-to-day discussions of the building’s community by rendering the hierarchy of “Sponge Talk” words according to the frequency with which they appear.

(*Simmons Hall’s internal e-mail discussion group)

simmons
people
we
where
want
should
thanks
think
those
through
us
two
references
really
saturday
science
technology
students
street
someone
spam
sunday
take
vassar
weather
web
well
whatever
why
work
world
year
yes
3948 e-mails
2003-2004 • 3427 e-mails
anyone
because
before
being
better
building
cambridge
campus
can
can't
class
community
could
come
committee
computer
course
day
does
doesn't
doing
department
dorm
down
during
each
everyone
events
get
graduate
house
how
however
might
like
know
list
live
lounge
lounges
make
meeting
money
more
need
new
next
night
only
open
over
own
paper
part
please
reason
proposal
put
question
remaining
remember
remove
residents
rooms
run
same
say
seem
send
sent
service
set
short
show
side
sign
since
sims
small
snow
social
something
soon
sorry
space
special
spend
spending
spent
sponge-talk-
storage
student
study
stuff
summer
sure
system
table
taking
talk
talking
tax
tea
team
tech
technology
tell
term
test
thank
that's
there's
they're
thing
things
thought
three
ticket
tickets
times
today
toilet
tomorrow
tonight
tower
trip
tropical
true
try
trying
tuesday
used
using
vassar
able
across
activities
actually
adam
add
address
after
again
against
agenda
ago
agree
alarm
allowed
almost
already
also
always
amount
andi
andrew
announce
another
anything
anyway
apathy
area
aren't
around
ask
athena
attend
available
away
awesome
back
bad
based
behalf
believe
below
benefit
best
between
big
bill
borrow
boston
both
break
brelinsky
bring
bubble
budget
build
building
burnbusiness
buy
bylaws
call
care
case
cathy
cc
center
chair
chairs
changecheck
close
clothes
coffeehouse
college
coming
concert
contact
cool
cost
couple
cream
create
current
currently
david
days
deal
demonstrated
departmentdesk
did
didn't
different
dining
dinner
discussion
doesn't
doing
dollar
done
door
dorms
drinkdrive
ducks
due
each
early
east
ee
effect
either
electrical
else
end
engineering
enjoy
enough
entire
eric
especially
etcevent
ever
every
everything
exactly
expected
experience
extra
facilities
fact
fair
fall
far
feel
few
findfire
first
floor
following
food
form
forwarded
found
free
freshman
freshmen
friday
friends
front
full
funds
future
gameneal
gets
getting
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government
great
group
groups
guy
guys
hall
happen
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hard
haven't
having
head
hear
heard
heat
help
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hey
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high
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hours
housing
however
hurricane
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i'll
i've
ian
ice
idea
ideas
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includeincluding
information
instead
institute
interest
interested
involved
isn't
israel
issue
issues
jeff
job
john
join
josh
joshua
kashlevkeep
kind
lab
large
last
later
laundry
leadership
learn
least
leave
left
less
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life
likely
limited
little
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living
location
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look
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machine
mad
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majority
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man
many
massachusetts
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mean
means
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music
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name
national
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needs
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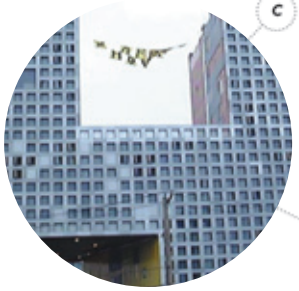
nice
not
nothing
number
off
office
officers
official
oh
ok
old
once
ones
online
opportunity
order
original
others
outside
own
paper
part
participate
past
pay
per
perhaps
person
personally
phone
pick
place
planning
play
poll
pop
possible
power
president
pretty
probably
problem
problems
professor
program
project
provide
quite
raining
random
rather
read
real
reception
red
remaining
remember
remove
rero
residents
rest
rooms
run
running
rush
sale
same
saturday
say
saying
says
school
science
second
seem
seems
send
seniors
sent
service
set
short
show
side
sign
since
sims
small
snow
social
society
someone
soon
sorry
sound
space
special
spend
spending
spent
sponge-talk-
spring
st
stars
start
starting
statestates
stop
storage
storm
street
student
study
stuff
stupid
summer
sunday
support
sure
swim
system
table
take
taking
talk
talking
tax
tea
team
tech
technology
tell
term
test
thank
that's
there's
they're
thing
things
think
those
thought
three
through
thursday
ticket
tickets
times
today
toilet
tomorrow
tonight
tower
trip
tropical
true
try
trying
tuesday
used
using
vassar
venkatraman
very
video
vietnam
visit
voice
voted
walls
war
watch
water
way
we'll
we're
wednesday
week
weekend
welcome
went
whether
white
whole
willing
win
windowswinter
women
working
works
writing
wrong
you've

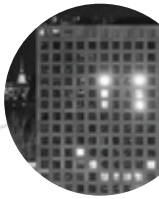
a & b: Gathering in front of the building students sport the gifts given to them by the MIT Department of Facilities as a gesture of welcome and apology—despite best efforts, the building was still under construction during the first few months of their stay.

d: Creative exploration and claiming of some of the lesser known public spaces of Simmons Hall.

e: An impromptu "hallway occupation" spurred by students' comically literal interpretation of instructions to "remove all possessions from lounges" for maintenance purposes.



c: A Simmons "hack," in MIT's long tradition of intricate and daring student pranks. This "hack" sees Simmons sporting a banner adorned with its inaugural and affectionate nickname "Waffle House" (appropriated from the chain of restaurants in the American South of the same name).



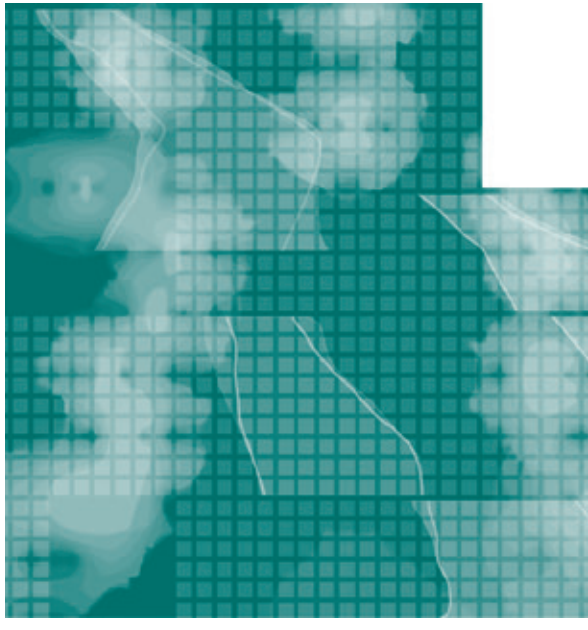
f, g & h: In the first months of Simmons Hall's life, students made and wore the building as their Halloween costume.

i & j: Halloween is a major event at Simmons Hall—students convert the building into a haunted house open to the MIT and city communities.

k: Student resident Jessica Vechakul's creative use of the façade's window pattern as featured in the MIT daily newspaper *The Tech*. "Last night from 10:00pm–10:30pm, Simmons C Tower smiled in lights and even winked at 10:15pm."

WIRELESS INTERNET USAGE PATTERNS

Almost as ubiquitous as slide rules in the 1950s are the personal laptops of MIT students today. Laptops grant the notoriously hard-working student body a tremendous amount of mobility. MIT furthered this mobility by making the entire campus internet accessible through wireless access points, a process which was completed in the fall of 2005. Untethered, students are now able to congregate and work where, when and with whom they choose. Interestingly, this has also allowed new ways of reading the campus and how it is being used by using the data of internet (laptop) users and their locations at any given time. This study, developed as part of the larger iSPOTS project (*http://senseable.mit.edu/ispots*), maps Simmons Hall's wireless internet activity according to how, where and when students choose to congregate in the building's communal and individual spaces.

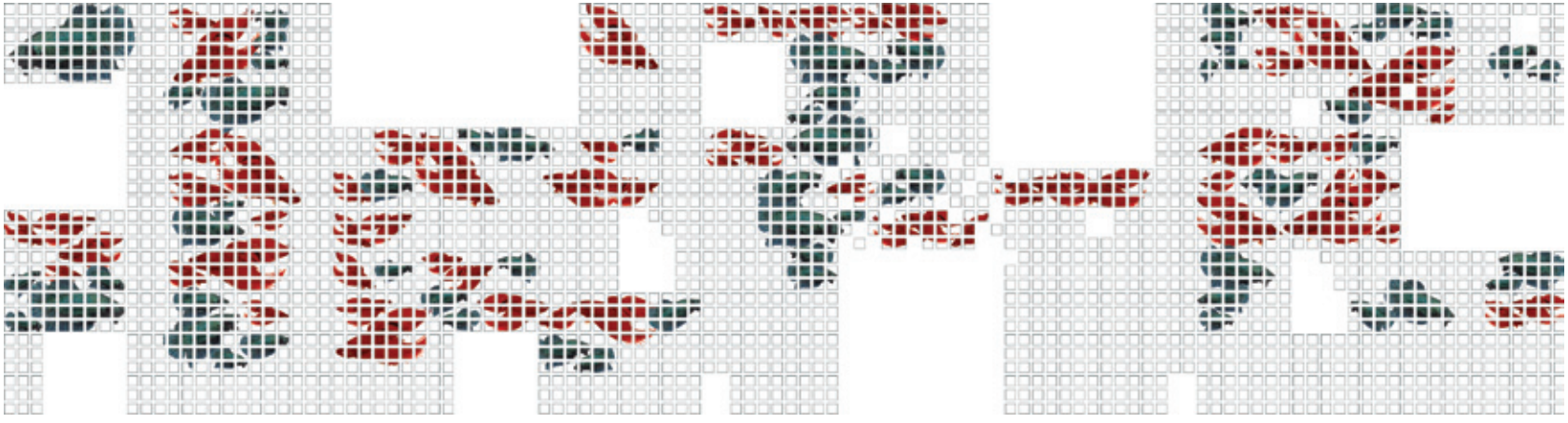


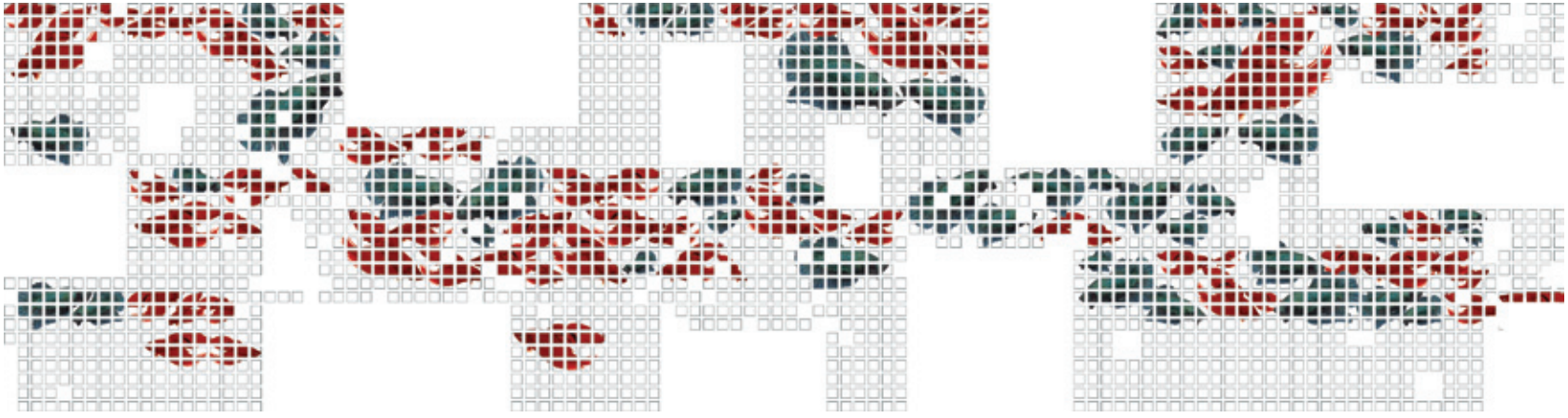
RESIDENTS' GENDER, 2005–06

MIT's undergraduate population is approximately 55% male and 45% female. When thrust into this type of architecture, characterized by hallway and tower spaces, the pattern of their self-distribution was of interest—how do male and female students integrate, and how does this relate to the architecture? The red betta fish represent the male students and the blue bettas represent the female students.

FEMALE

MALE





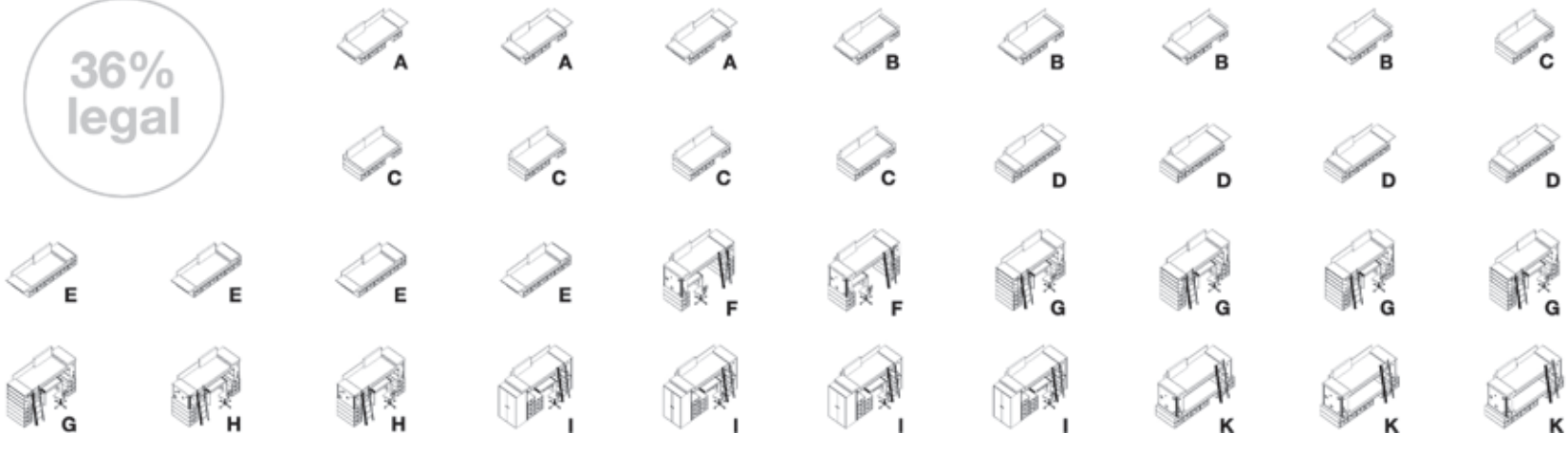
STUDY OF STUDENT ROOMS, 2005–06

With quite different views from front (river and MIT athletic fields) and to back (train tracks and industrial buildings) Simmons Hall rooms or "cells" range from the average 9-window rectilinear box to rooms with up to 27 windows and curvilinear lounge/atrium walls. Animated by the students' configurations of the Steven Holl custom-designed modular furniture and their personal collections of "stuff," the rooms serve as microcosmic glimpses into the interface of the architecture and its users. This study takes a peek at this interface to examine the ways in which the "cells," and their particular architectural characteristics, are inhabited and engaged.

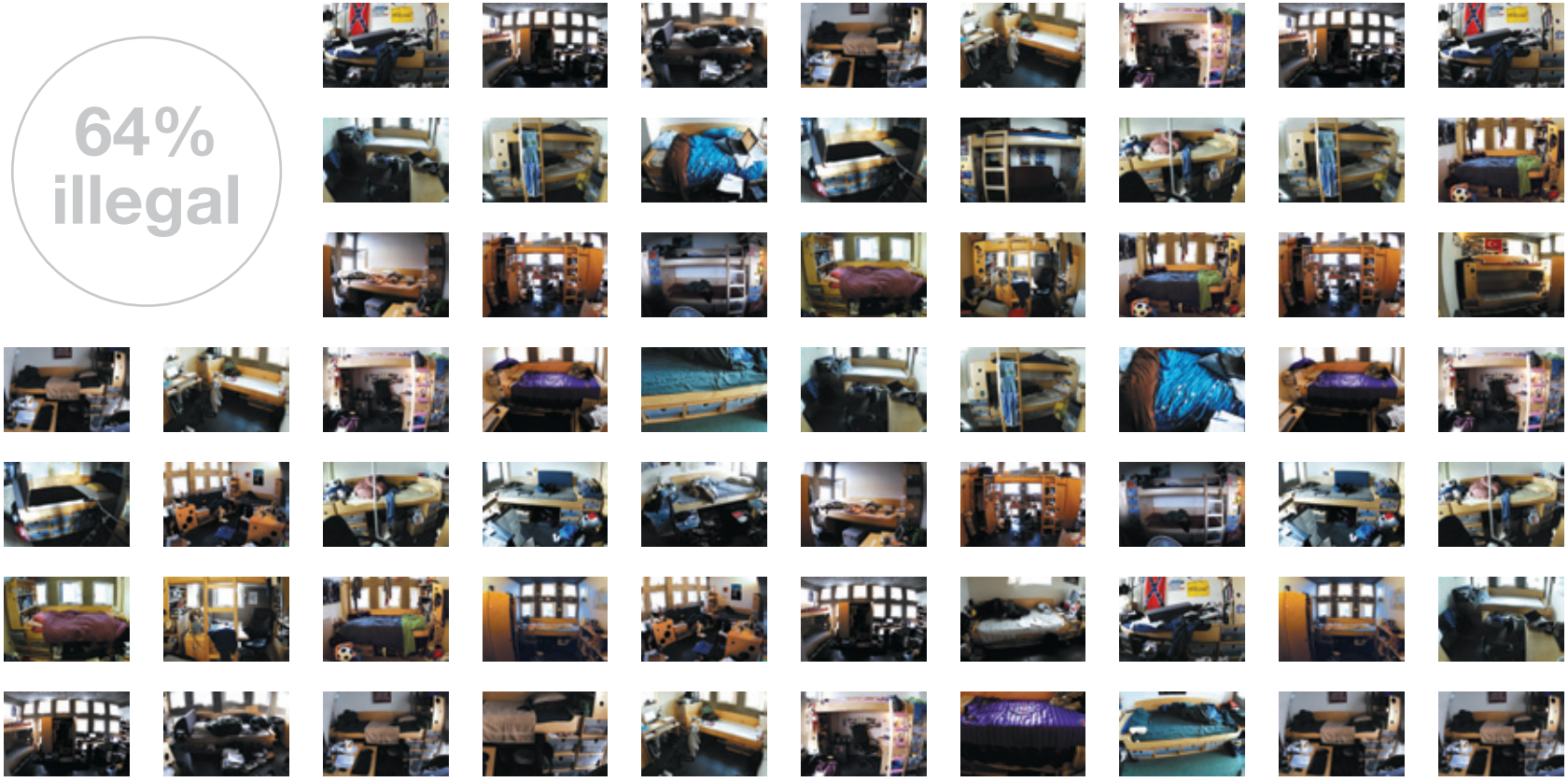
PERCENTAGE OF “LEGAL” VS. “ILLEGAL”* FURNITURE CONFIGURATIONS IN STUDENT ROOMS

Each student room of Simmons Hall is furnished with custom-designed modular furniture by Steven Holl architects. Because of the structural properties, modularity and design of the objects, there are only eleven “legal” configurations of the furniture (A–K). Only those people “certified” to configure the furniture are “officially” allowed to do so. However, in keeping with MIT’s “do-first-ask-later” ethos, many students have taken the liberty of designing their own, sometimes rather creative, configurations. This study reveals just how many students opt for “legal” vs. “illegal” furniture configurations, and the nature of the configurations themselves.

(*Officially, only eleven “legal” configurations of Steven Holl’s modular furniture were approved. Unofficially, students have developed many more.)



64%
illegal



CULTIVATING THE SPONGE

JEFF ROBERTS

My name is Jeff Roberts, and I'm pleased to be here to talk briefly about the origins of Simmons Hall.[1] Most of you probably know Simmons Hall as the masterwork of the contemporary architect Steven Holl. I'm here to talk about a slightly different Simmons Hall, which is Simmons Hall as an MIT undergraduate dormitory. I'm not an architect, I don't have any background in architecture, and I don't intend to talk about architecture. I hope that those of you who were looking forward to a lecture about architecture won't be disappointed and that you will find this look at Simmons Hall from another perspective interesting.

I'd like to start by talking about what it means to be an MIT dorm. Simmons Hall, like all MIT dorms, houses undergraduates from all four class years, and most students stay in one dorm or living group for their whole time at MIT. This is an important characteristic. Students enter MIT under the watchful eye of the upperclassmen who live with them; later they join them in welcoming the classes of new freshmen who come after them. Students also choose which dorm they will live in as freshmen through a lottery process in which most students get to live in one of their preferred dorms. This is also important, and reflects the fact that different dorms appeal to different students, and for different reasons.

1 This article is based on a lecture presented by Jeff Roberts (student involved in the planning process from its early stages) at the CCA in Montréal on 5 October 2006.

In terms of their operations and social programs, dorms are practically autonomous from each other and from the central MIT administration. The administration relies on a system of live-in faculty housemasters and graduate student advisers who provide resources to support student well-being. The system of organization and support is different for all dorms. Moreover, programming in the dorms relies heavily on student participation and self-governance. The students themselves play the greatest role in shaping the social life of the community and manage the process of raising and spending the dorms' social budgets.

These four things that I've mentioned—the four-year community, choice in housing, autonomy and self-governance—combine to create an interesting effect in MIT's dorms, something that I call culture. Dorms have strong internal communities, and they also have history and traditions that are passed down from one generation of students to the next. Over time, each dorm has developed its own unique culture that sets it apart from the rest and provides identity to its residents. Students identify with their dorm and feel a sense of camaraderie with their fellow residents. Rather than expounding on this theory of culture, I'd like to talk instead about the place I lived in for four years. I lived in a dorm called Baker House from 1998 to 2002. It was named for Everett Moore Baker, a Unitarian minister who became MIT's Dean of Students in 1947. Baker was a very popular figure around campus and a very outspoken figure around the nation on issues related to education. He died in a plane crash over Egypt in 1950, and the new dorm that was just completed was named after him. The inscription in the lobby of the dorm reads: "This house is dedicated to Everett Moore Baker in the hope that those who live here will as he did trust in the integrity of youth, believe in the dignity of man, and build a better community in which each is responsible for the good of all."

This is the Baker House I knew for four years. Baker House was a large, diverse community that was aggressively and unapologetically social. It was a place where everyone knows your name and where no value is placed on privacy. There are parties every week and barbecues every weekend, and all events are dorm-wide—if you aren't there, then you aren't really part of the dorm. Dinner is served nightly in the dining hall, which is where the residents of the dorm congregate to talk about life, classes, and the news

of the day—a modern-day salon of sorts, but probably with somewhat fouler language. The dining hall is a particularly important place. It was where I made some of my closest friends, and it was where I knew I could find them at the same time every day. In many ways, my interest in Baker and how it worked as a community was what drove me to get involved in the Simmons Hall project.

Now, dorm culture is more than just fun and parties, and it's more than a social support network. We could use the words of Everett Moore Baker himself, from an address he gave in New York in 1947, to illustrate this: "Education for tomorrow must serve three purposes. It must instill in the student a high sense of responsibility, a cooperative spirit and a deep feeling for the ideals of a free democracy. Essential to the fulfillment of these purposes is a sense of belonging: a student to his college or university, a citizen to his town, state or nation and to his world. The human being who does not feel that he belongs to something bigger than himself cannot be a participating member of a free and democratic world."[2]

He also made the following remarks in an address at Dartmouth College in 1949: "The great purpose of education is to help young men and women to become self-reliant, responsible citizens in a cooperative community. I am not at all sure that self-reliance and responsibility can be taught in the same sense that physics and history can be taught. Initiative, imagination, cooperation and responsibility can, however, be learned, given the environment of the academic community. He who spends four years in the presence of such an opportunity and does not learn to carry his citizen responsibilities, to cooperate with his fellow men in the maintenance of the commonwealth, and to strive constantly for freedom under law, has failed in his proper educational purpose."[3]

This provides an interesting perspective: dorm culture as having an educational purpose. Students don't just live in their dorm, they belong to their dorm. The dorm experience instills a sense of cooperation, responsibility and citizenship. The kind of learning that Baker refers to, which he wanted to instill in future generations of students, is happening inside the building that bears his name. This idea, moreover, isn't just the random musing of one person. It's a widely accepted notion that is incorporated into the educational mission of MIT and many other institutions of higher learning. In 1949, the year Baker House was completed, MIT's Lewis Commission released a report[4] describing MIT's educational mission,

2 Everett Moore Baker, "Address at the One Hundredth Anniversary of the Delta Kappa Epsilon Fraternity, New York City, December 29, 1947," Everett Moore Baker August 28, 1901–August 31, 1950 (New York: private printing, 1951), 94.

3 Everett Moore Baker, "Baccalaureate Address Dartmouth College, June 12, 1949," Ibid., 101.

4 Committee on Educational Survey, Massachusetts Institute of Technology, Report to the Faculty of the Massachusetts Institute of Technology (Cambridge: Technology Press of the Massachusetts Institute of Technology, 1949).

remarking that "education is preparation for life" and stressing the importance of the overall environment in which students learn. Almost 50 years later, in the same year it began the design and development of Simmons Hall, MIT revisited its educational mission with the Task Force on Student Life and Learning.[5] The Task Force re-asserted that community is an essential part of the educational experience, remarking that: ". . . through professional, recreational, and social interaction with one another we build a culture of discovery and learning that distinguishes MIT from other universities." The report went on: "Residences at MIT are not just places of repose: in undergraduate life they are the central unit of student organization, and they act as a haven for social, cultural, and intellectual exchange among students."

That brings us back to Simmons Hall. The Chancellor of MIT, who was in charge of the project, said his goal was to create "the new Baker House"—this is what he told Steven Holl when he hired him to design it. There were obvious similarities between the Baker House and Simmons Hall projects. In each case, one of the most renowned architects of the day was hired for the design. In each case, the project was guided by a faculty report just released emphasizing MIT's commitment to residence and community in the educational experience. The Chancellor appointed a group of faculty and students called the Founders Group to shape this new community and be the guardians of MIT's educational mission. I served on this committee from 1999 to 2002. This, briefly, is how Simmons Hall was born. I would now like to take a moment to talk about architecture, even though I don't feel entirely qualified to do so. I will try to tread lightly as a result. MIT seemed to have a two-fold directive for Simmons Hall: to create an architecturally significant addition to campus, and to create a new residential community which would contribute to MIT's educational mission. It is worth asking, as I asked myself many times while working on Simmons Hall and since: does one have anything to do with the other?

Let's go back and think about this question in the context of Baker House—the place where people are supposed to be building a better community in which each is responsible for the good of all. Clearly Baker is an architectural marvel and has a striking aesthetic. There's no other building quite like it, and it is regarded by the architectural community as a very significant work. Alvar Aalto was probably granted a large degree of freedom to design creatively and think outside the norms. But does the design have an

5 The final report of the MIT Task Force on Student Life and Learning (1998) is available at *http://web.mit.edu/committees/sll*

impact on the life and culture of the dorm? From my experience living there, I'd argue that the answer is yes. One could approach this topic from a variety of angles, but I will try to mention just some of the key features. The floor layouts are identical throughout the building, with all the rooms, lounges and stairwells in approximately the same place on each floor. In this way, any location in the building is easy to describe and equally easy to get to. The physical centre of the building is also the social centre, where you find the entrance, front lobby, dining commons and both main stairwells, as well as the building's only elevator. You can get from anywhere to anywhere else in Baker in a matter of a couple of minutes. It's very hard to go anywhere without bumping into someone; even the undulating curve of the building, which gives it its aesthetic signature, plays an important community function by making the building feel smaller from the inside. The total effect of the architecture is to make this building of over 300 residents feel like a small, intimate house with a well-organized, interlocking system of common spaces. Can the same be said of Simmons Hall? I don't know as much about it as a resident, but I do know a few things from being involved in it as a member of the Founders Group, which reviewed the architectural design.

When Steven Holl first presented his ideas to us, he told us his overall design theme was "porosity," which basically meant that he wanted to design a building with holes or gaps in order to minimize the "street wall" effect. We soon learned that this concept led to some fairly outlandish design ideas. I wasn't concerned about this at first, since I knew from my experience in Baker that an architecturally interesting building could also be a good dorm. In any event, a standard, typical dorm wasn't what we wanted. Steven Holl seemed to have a nearly endless supply of "porosity" designs, and we actually saw a few of them before we finally had one that was acceptable. The first was a series of tall, skinny "pencil towers" all connected only at the ground floor. He showed us this right after talking at length about how much he liked Baker House, which put us in the awkward position of having to tell him how unlike Baker we thought this was. Students would have been stacked vertically into tiny compartments with little opportunity to interact with anyone but their immediate neighbors. Eventually, this was rejected and we moved on to another concept, which Holl called the "Italian hillside village," with rooms distributed along a single sloped hallway that zig-zagged up into the sky. Many people on the Founders Group supported this one,

since we felt that the idea might support large-scale community in a similar way to Baker. After working on this for several months, it became clear that there were too many physical constraints in this type of design and that it was not going to receive approval from the Planning Board. This concept was scrapped as well.

We finally moved to the "sponge" concept, which at first seemed to offer some promise. In Holl's initial drawings, the "amorphous" lounge spaces were large and open to the hallways. All of them had multi-level stairways which made them accessible from any floor. We saw these as having tremendous potential for supporting cross-building community by connecting people across hallways and vertically between floors. The building's "holes" also created unique outdoor terraces for community use. And the first-floor spaces could potentially be a draw for the dorm residents and the entire campus. As the design went from conceptual to detailed, however, the designers had to start considering constraints such as safety, fire codes and costs. Compromises needed to be made, and it turned out that the designers were most unwilling to compromise on the aesthetic features of the design. Little by little, the design of the common spaces changed over a series of months, and while the innovative aesthetic elements remained intact, the building's capacity to support community suffered. As concerns about fire safety were raised in regard to the "amorphous" lounge spaces, they were made smaller, closed off from the hallways, pushed to the sides of the building and stripped of most of their stairs. As a result, not only are the lounges not as friendly or accessible as they were originally imagined, they don't function well as connectors between floors. To move vertically through the building, residents rely on elevators or emergency stairwells, which, by some accident, don't exit onto the first floor. Also, when MIT was concerned about the safety of the outdoor terraces, the architects solved the problem by restricting access instead of improving safety railings, which might have compromised the visual quality of the building's exterior. A visitor admiring Simmons Hall for its artistic qualities might not notice these small things, but these are the types of things that define the community experience.

We never asked for a dorm exactly like Baker House nor were we expecting one. But based on the stated goals of the project, we were expecting a dorm that felt open, integrated and close-knit.

What we got, in my opinion and according to my impression of the response of those who have lived there, is a building that is confusing, fragmented and isolating. What might be the reason for this difference in the impact of Baker House and Simmons Hall on the community, despite all their apparent similarities? Are all the differences merely accidental? Would Simmons Hall have met our goals better if Holl had not been as constrained by rules and regulations, or would that have simply resulted in a building that is fragmented and unsafe? Do the differences between the two buildings have anything to do with differences between the styles and philosophies of the designers? Had Alvar Aalto been thinking about something that Steven Holl wasn't? Moreover, was it even Steven Holl's responsibility to uphold the community ideal in the design of the building? If it is MIT's role to support the educational mission, does the responsibility fall on MIT for hiring him in the first place? One might even ask if the reason the building does not achieve its community goals is because I and other members of the Founders Group did not defend them strongly enough.

One could go on speculating about these questions forever and not come up with a definitive answer. However, I can offer you a little anecdote that might add an interesting perspective. In 1999, the 50th anniversary of Baker House, I went to see a lecture by Alvaro Siza about Alvar Aalto's work. Most of the lecture was incomprehensible to me, because I have no architectural training, but one thing did resonate with me. Siza commented that in Aalto's view—and I paraphrase based on memory—architecture manifested itself not just in the structure and materials of a building, but in the way people move through it. This provided me with an interesting explanation of why people feel a connection with the architecture of Baker House: perhaps they are a part of that architecture. A few months later, I bumped into Steven Holl in Baker House while he was waiting for a meeting with the Founders Group. Having met him before, I engaged him in conversation and spent the next hour or so doing my best to explain how the life of the building worked and why certain features and connections were important to building community and culture. Eventually I mentioned the idea that residents of a building can provide some insight into its architecture because they comprise an important part of the architecture itself. He seemed less than convinced by this, to say the least, and turned his attention to measuring the exact physical specifications of Aalto's furniture.

Perhaps he simply didn't want to talk to me, and it's true that I was probably annoying him a little. But I also wonder whether it says something about his philosophy, or the philosophy of contemporary architecture in general: is it less concerned with the social impact of design and more concerned with the design's aesthetic and the lofty philosophical ideals it is supposed to represent? This is the question I would like to leave with you today.

DRILL A HOLE IN SIMMONS HALL

A DESIGN COMPETITION, 2005

COMPETITION BRIEF

Organized by the resident visiting scholar, architect Carlo Ratti, the competition solicited creative proposals from students for new and innovative uses of the building. The MIT Simmons Hall housemasters, with the blessing of architect Steven Holl (designer of the ultimate sponge on campus!) and in coordination with MIT's Senseable City Laboratory, launched the following design competition.

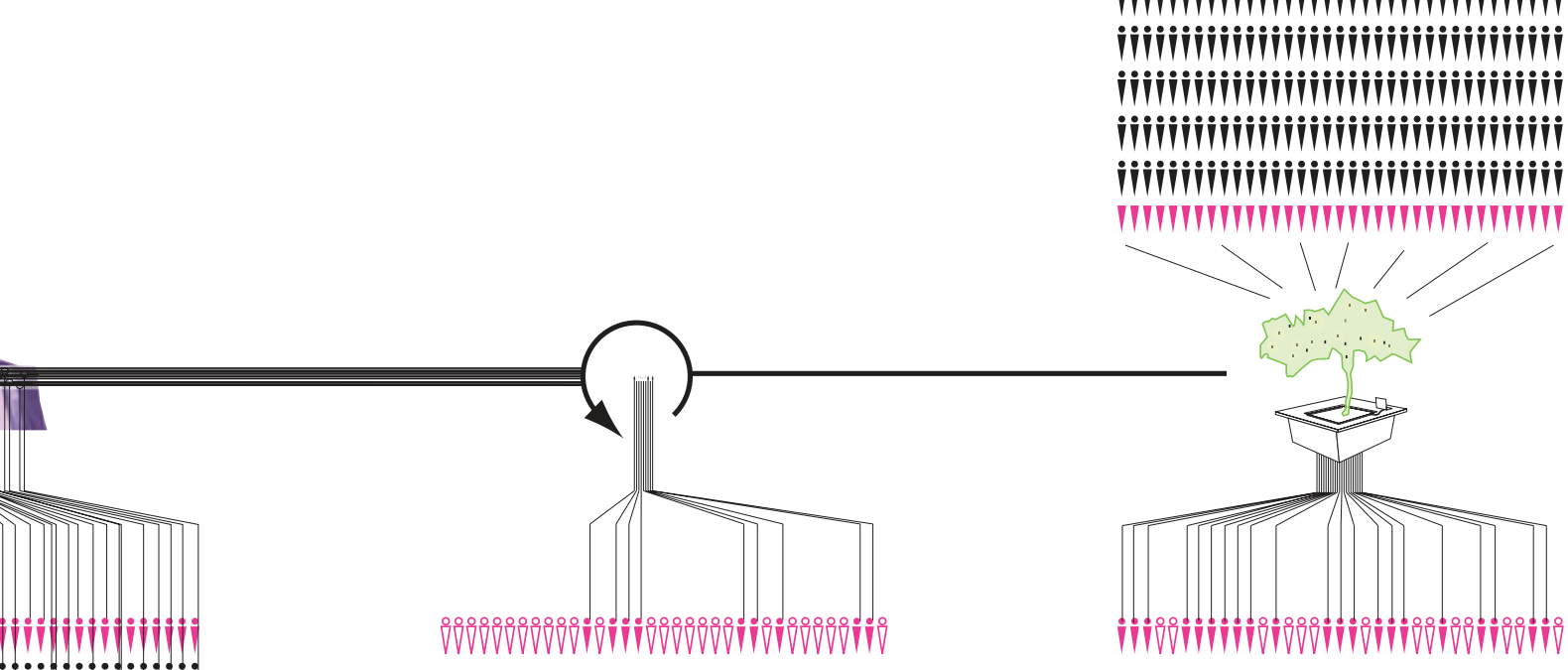
AIMS

The competition addresses two sets of issues. First, some practical issues: a) The need to make changes to the 8th floor terrace and add an additional fire escape so that it can be more accessible and host groups larger than 49. b) The necessity to create a physical or digital infrastructure for internal communication among residents of Simmons Hall. Second, the competition is a unique opportunity to suggest any other change of or addition to the building, such as improvements to the multi-purpose room seating, the other terraces of the building (including the roof, which is currently not accessible) or the internal lounges. Proposed changes can include both the building and its furnishings.

A DUPLICATE SIMMONS

THOM COVERT, STEPHEN FORM,
AND CORYN KEMPSTER

a: A second Simmons Hall is contructed on the other side of Vassar Street. This twin Simmons allows architects and tourists to make their pilgrimage without disturbing the residents.



b

DATA TREES

TALIA DORSEY, ANDRES SEVTSUK
AND SHUJI SUZUMORI

b: For this proposal, we aimed to activate the underused lounge spaces in a way that they could become central to the collective student life of the building. Each group of students surrounding a given lounge is associated with the activity that is registered within it. The information is collected through an interactive whiteboard-type surface that is applied directly to a strip of the lounge walls. For each lounge there is a "data tree" on the terrace wrapped in an array of programmable RGB LEDs.

The data gathered from the surface activity in the lounges can be mapped to pattern the array of LEDs. Each student group is responsible for mapping their respective activities and each tree becomes personalized, hackable, and a means of displaying the activity of the group's lounge. The tree itself is also left in the care of the student group. We hope that it is only a matter of time before the dramas unfold, and in this way the garden terrace might become not only a highly activated space full of life, but also a portal and a potentiator for the communication, community and life of the entire dorm.






c

iHOLE

DHEERA VENKATRAMAN, MATTHEW BOULOS AND NUPUR GARG

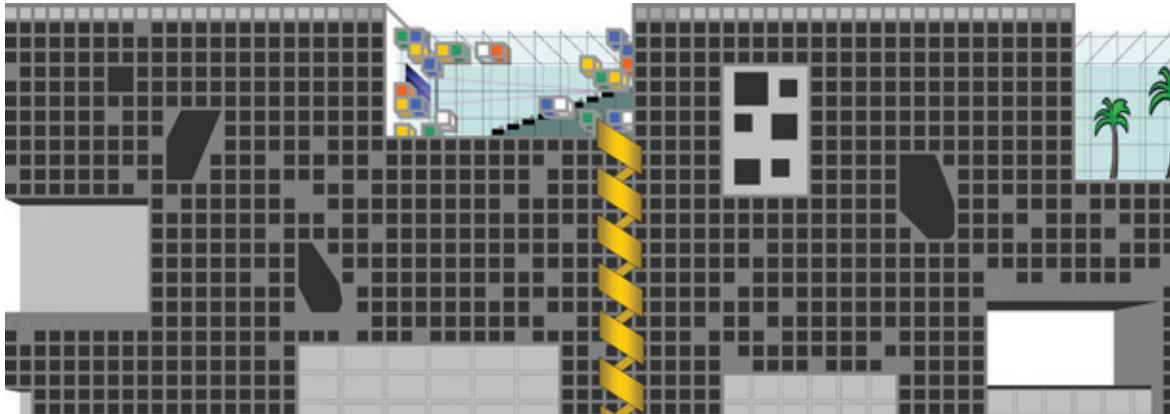
c: The iHole vision is to implement a collection of changes to the physical structure and social arrangements of Simmons Hall so as to bring about a revitalization of student life within the dormitory. These changes will include: artificial plants to add colour to the front lobby and other public space; atria walls extending into the hallways and painted with chalk-friendly paints for impromptu student scribblings; a low-cost projection screen above the front desk area that can alert students to campus news, SafeRide/Tech shuttle scheduling announcements, and videos; wall-mounted televisions in the dining hall to provide news, information and entertainment; chalkboards or whiteboards mounted on hallway walls to facilitate project collaboration and creative expression; and a scrolling LED display in the mail lounge, also for news and announcement purposes.

MIT SKY THEATRE

MAX CORTES

d: A movie theatre will be built on the level 8 terrace, with wrap-around glass walls and ceiling. This terrace is used rarely in the warm months as the eastern wall blocks most of the afternoon sun, and not at all during the winter months. This plan proposes to create a year-round, enclosed, accessible entertainment space for the students. The theatre itself will seat 120+ people in a stadium seating arrangement with all the required amenities.

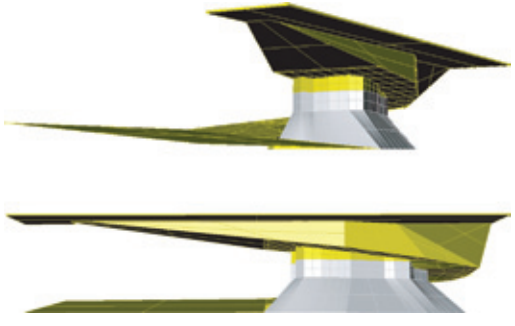
d

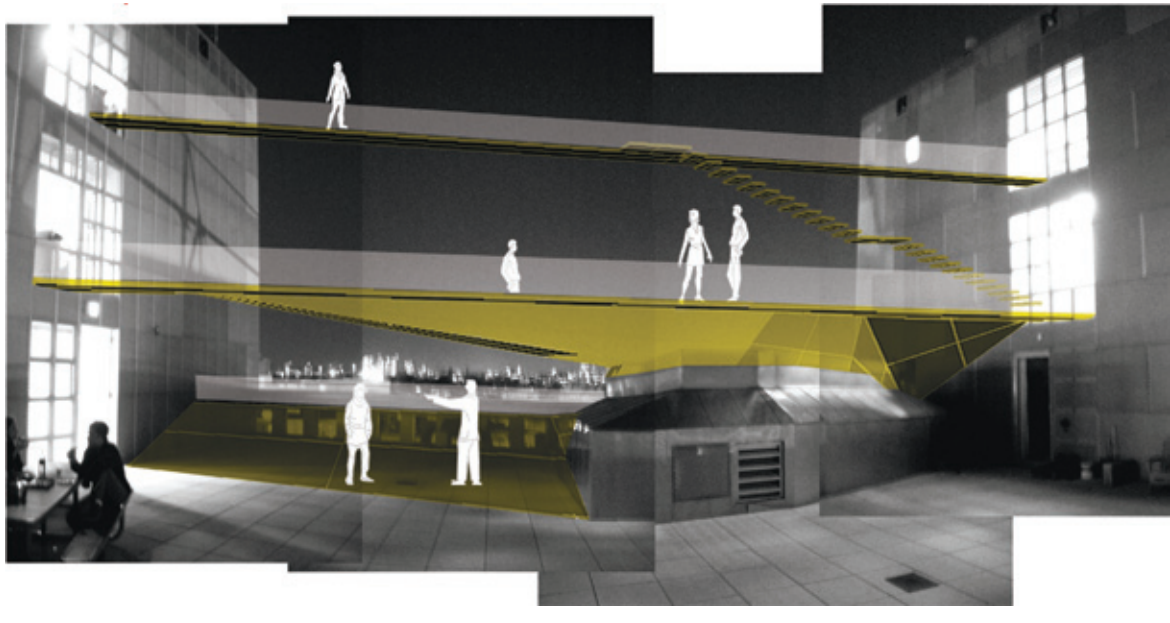


HOLES CONNECTOR

ARON ZINGMAN AND JOSEPH CHARTOUNI

e: This proposal aims to blur the boundaries between levels 8, 9 and 10 with non-programmed platforms, circulations, and ramps, meant to incorporate currently unused spaces.

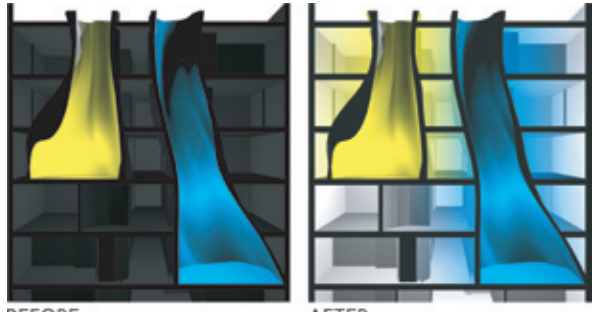




AERATING THE SPONGE

CASEY RENNER AND MATTHEW TRIMBLE

f: This proposal is an attempt to address conditions of community spaces and communication within Simmons Hall in multiple scales, while maintaining an overall coherence to the established language of Stephen Holl's design. This modification perforates the solid interior walls surrounding the multi-level study spaces. By inserting a matrix of glass or acrylic tubes into the walls of the multi-storey shafts, light may be drawn from the interior of the study spaces to the adjacent walls on the levels above in similar manner to the fibre optic cables. Though the physical connection is lost due to the fire code restrictions, this is an attempt to remedy this disconnection by communicating the presence and activities of open spaces below to floors above—daylight within the study spaces will be transferred through the walls to the corridors, and an internal glow in the evenings will communicate the presence of occupied spaces.



BEFORE AFTER

INSIDE THE SPONGE

THE EXHIBITION

The opening of the exhibition
at the Canadian Centre for Architecture
in Montréal, 10 August 2006.


Vie dans
Inside the Sponge
l'éponge
Les étudiants occupent le MIT Simmons Hall
Students Take On MIT Simmons Hall
SIMMONS HALL


39.3 %
probablement
more likely
60.7
probablement pas
less likely
Pensez-vous devenir un(e) architecte après avoir vécu à Simmons Hall?
Are you more or less likely to be an architect after living in Simmons Hall?
hall
room
lounge
floor


hall
room
lounge
floor
door
building

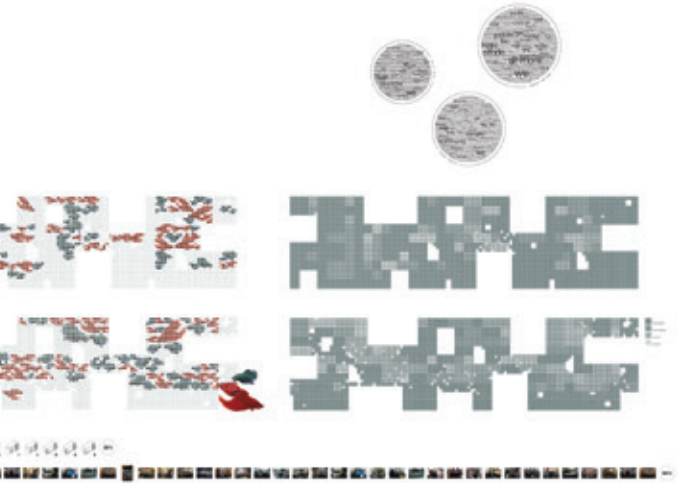
Residents' Cities of Origin, 2005–06

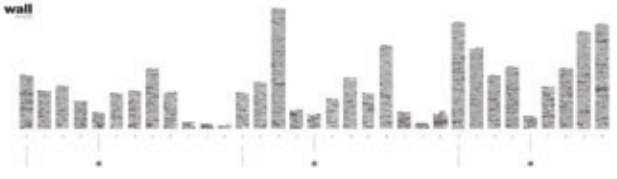
Percentage of "Legal" vs. "Illegal" Furniture Configurations in Student Rooms

Residents' Gender, 2005–06

Study of Materials and Holes

Study of Student Rooms, 2005–06





STRUCTURE CAVITÉS/CAVITIES

Relative Frequencies of “Sponge Talk” Words by Year, 2003–06

Relative Frequency of Architecture-Related Words in “Sponge Talk”

Wireless internet usage patterns in Simmons Hall.

Residents’ Class Year, 2005–06

Monthly E-mail Volume and Relative Word Frequencies in “Sponge Talk,” 2003–06

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