Insights from a series of unpublished interviews for Arquine Magazine with research units in New York practices reflecting on their business models and objectives: OMA/AMO; ennead/Lab; Thorton Tomasetti/CORE Studio and; Terreform.

Innovative research units in architecture studios in New York

Francisco Brown

Reinier de Graff claimed in an interview at the Moscow-based Strelka Institute – where AMO, the think tank of the Office for Metropolitan Architecture (OMA), designed the curriculum – that:

> […] *we operate a lot from the gut, from intuition, from intuitively embracing things that we're interested in, things that very often don't seem appealing, high-brow, or very tasteful at first sight. I think that, if anything, our mission is to explore unexpected subjects in an unprejudiced way – to approach unexpected subjects without a preconceived mission.*[1]

De Graff spoke as co-founder of AMO, the academic research workshop, parallel business unit and marketing strategy consultancy for OMA. Within a decade of AMO's founding, numerous New York architecture firms also established in-house research units. These research entities, or labs, are each unique in their scope, funding and their stakeholders. They do not offer alternative or tangential ways to practice architecture. Instead, these units live and work in the studio context and adhere to the protocols and cultures of architecture offices. They follow similar design-think/problem-solve paradigms but operate with different frameworks and business models, providing different services. They challenge the binary division of client and architect, and are located in a different position in the decision-making process.

Research units like this are growing in number, with architecture studios diversifying their work portfolio in an attempt to amplify their popularity and influence. As a result, architects' creative and political interests have produced new exploratory platforms with stable financial performance within their business models. Thornton Tomasetti's CORE Studio has collaborated with Autodesk on cutting-edge design software almost since its inception. Snøhetta's brand design unit was commissioned to design Norwegian banknotes, and Prada/AMO, as a design-powerhouse duo, has had significant influence. The field of architectural design,

often relegated to intellectual isolation or wrongly commodified, is thus finding innovative ways to detach product and process, and capitalising it in novel and sophisticated ways. Such initiatives seem to have launched the studios concerned into new markets and disciplines, harnessing the transdisciplinary nature of the profession while expanding the scope of their curiosity.

This emphasis on other kinds of innovation is notable, especially in a field that seems reactive to such changes. Bansi Nagji, Vice-President of Corporate Strategy and Business Development for McKesson Corporation, suggests that companies which invest more in transformational new products and market increase their share price performance over the long-term. Wealthy tech companies spend about 70% of their budget on transformational innovation with the remaining 20% and 10% going to core innovation products.[2] Architecture seems to operate most usually on the opposite side of that economic spectrum. This paper examines the commercial context for architecture research units in New York city. How can architecture studios conduct open research in one of the world's most expensive cities to run a business? And how can they do it in an industry notorious for questionable labour and pay practices, tight budgets and unstable contexts of operation.

In 2014, I interviewed prominent architecture studios with successful in-house research units in New York. We discussed their methods and how they manage their financial and human resources. I explored with them what prompted their bold exploration into new, creative territories. What follows are excerpts are from four interviews with: Shogei Shigematsu, OMA/AMO; Richard Olcott, ennead/Lab; Jonatan Schumacher, Thorton Tomasetti/CORE Studio; and Michael Sorkin, Terreform.

Shogei Shigematsu, OMA/AMO

Francisco Brown (FB): Tell me about the history of AMO, from your own experience at OMA Rotterdam in the early days. Why do you think they needed an independent research unit?

Shohei Shigematsu (SS): AMO started when I was in Rotterdam. We were doing multiple architecture projects like the Universal Studios Headquarters in Los Angeles; the Seattle Public Library, and the Prada project had just started. It was kind of a momentum for OMA. Before, we were delivering radical and inspiring projects, but not necessarily buildings [...]. We began to get all these architecture commissions, but many of them required some rethinking of the typologies. We started asking about: how an office space operates in this day and age, before common working spaces even started?; what is the future of the library, when the digital age is taking over?; what is the future of retail space? [...] That's probably the beginning of AMO. And also, by formalising it, we thought we could just...

FB: …create a business out of it?

SS: Not necessarily. It was about the creation of the dialectics within the office […]. One of the best descriptions I heard of it was – when everyone was talking about foamy-computer generated architecture – Rem said: 'what if virtual architecture is not about making and recreating a form of the virtual space, but doing anything out of architecture with architecture thinking?'. That was our notion of virtual architecture. AMO became a vehicle to catch up [with the world] at different speeds. I think about Prada and speed in the fashion industry for example. We have an entity that continually feeds knowledge and aesthetics at a record speed, and the whole process became a project on its own.

FB: So you're talking about a different rhythm. It takes years to build, but fashion shows happen every trimester. Was 'architecture thinking' fast enough to answer this new set of questions?

SS: Sometimes even more than a trimester! Good point, and that's why we reached out to different entities that we were collaborating with, like Harvard [University] and other institutions and thinkers. We were already working with them, and by extending our intellectual desire to observe, and intellectual bases to learn, we made it an important method […].

FB: What is the relationship between the two sides of the studio? What makes an OMA project part of AMO?

SS: AMO camouflages into OMA and OMA is camouflaging into AMO […] We have established a system that is more flexible […]. A system that allows us to shift from architecture to other non-architecture projects, with a more dynamic approach and results.

FB: The research was getting you architecture commissions and the architecture commissions getting you some research opportunities?

SS: In a way, yes […]. AMO creates a point of preoccupation or observation points that we are interested in exploring. Like our research project about Biennials and the cultural shift from museums to art fairs such as Miami-Basel. Or, the studies we did about the food industry, which lead to an exciting commission from a food company. The research became a vehicle to get architecture commissions as well. That's an intriguing thing about taking architecture thinking into research, then you can supply and extend that thinking to a building project.

Richard Olcott, ennead/Lab

FB: Why, in such a well-consolidated architecture studio, did you feel the need to start a lab? What type of research did you want to do outside your successful architectural practice?

Richard Olcott: It all started some years ago. We were inspired by exceptional research going on, including OMA's work, but we didn't have Harvard students to crank out books for us. We wanted to expand the office into other initiatives that we were already doing in the background. These activities included project-related research, advocacy, and other social work, and we needed to bring that right to the foreground. [...] We decided we would figure-out how to do it, and use it as a platform for people around us to explore interests they might have outside of the daily job [...]. It [ennead/Lab] tries to establish architecture as an active participant in the project flow. We usually get involved once a project has been determined to be for us. The traditional architecture model. We wanted to challenge this model; why not bring-on architects as a part of the research and the problem identification at the beginning of the process, in a more proactive approach?

FB: What is precisely the Lab, then, and what is the relationship with the architecture studio?

RO: There was a culture from the beginning of the firm about research. We were always pulling-in the younger, more energetic components of our studio and building a lot on that, as well as other interests from our 150-160 member-studio. How could we take what we were already doing in such a way that we could build upon it? Could the office support that effort in some way? Could the office help push agendas for specific topics each year […] We can't do everything but we created an open-door policy to bring big ideas forward, and let the office help move these ideas to the next level […]. It works as a collaborative hub. It's another conduit for us to reach out to collaborators, to reach-out to non-profit organisations, to civic leaders, to scientists, to researchers, to other professionals.

FB: The model seems to be a kind of pro-bono venture?

RO: Yes […] I think we would like to say that pro-bono is a tool. There are many ways of being a proactive practice. Pro-bono was one of them but we have done competitions and pursued other models of engagement. When you think about the big idea projects, they need the first push, right? They need to be a big idea before they gain traction. That's what moves us, developing unique ideas, most of them from the staff's outside activities, so the connections and motivation are already there.

FB: Who works for ennead/Lab? And How does the project selection work?

RO: Anyone and everyone! We have a process where colleagues propose a 'project' and they write a little brief for the selection committee […] composed of some directors and other staff members. What we did was to establish a baseline, including who will be working on it, what are we going to do for X number of months, etc. We defined a percentage of our annual hours per year to invest in some kind exploration and research venture. I believe is 1.5% of the hours a year.

FB: There is no dedicated staff for the Lab. Do you manage it like another ennead architects project?

RO: To me, the beauty of a firm of our size is that we have that sort of flexibility. Senior members supervise the lab but it's mostly junior or middle-level staff who work on the projects […]. The Lab allows us to keep people energised researching on other issues. It raises the bar for the type of work and agenda that the office can push.

FB: What specific projects have you done with a critical innovation component?

RO: The refugee camp design algorithm for the United Nations in Rwanda. We partnered-up with different institutions and started asking: how do you make a better refugee camp, and how do you transition people from a refugee camp into a functioning society […]? That's it right there, the reason why a proactive architect is necessary, to solve some of these questions. These are complex issues, and architects alone can't solve them, but we're good at getting a lot of people in a room to figure out how to solve things.

Jonatan Schumacher, Thorton Tomasetti/CORE Studio

FB: What is CORE Studio, and why did you start an in-house technology developer in an engineering firm?

Jonatan Schumacher: CORE Studio is short for computation and research. We started in 2010 while working on a stadium competition with a tight deadline. Grasshopper just came out, and we did a five-day exercise together with the architects for the project, using this relatively new software. This experience brought the matter of efficiency-solving through technology to the office. We thought: 'We have to take these workflows and let the whole company know about them', and we hired people to help establish these workflows and train others.

FB: Does it operate like another consultancy branch of the company?

JS: Yes, and no. It's pretty self-sufficient actually. The fact that engineers don't have time to try new things, and think outside the box in a regular architecture firm, hinders innovation. We essentially use 40% of our time on a project-related work and we have 60% overhead. We allocated the time to research thoroughly about new workflows, and new training methods with technology […]. Since the competition, management was really interested in what else we could do to increase efficiency in the office workflows. That's clearly a time-setting component, but now we are working with new architects that we didn't used to work with, and we even developed software for them that we get paid for.

FB: How did this research benefit the company, besides the economic aspect?

JT: We get paid to do different things nowadays than we originally intended to do. I'm aware that [CORE Studio] does help the company from a marketing perspective, but it helped us to have a different kind of conversation.

FB: Tell me a bit about your relationship with clients like Autodesk. How did you end up developing software for a software developing company?

JS: I think Autodesk is an exceptional client. It was never our intention to work with them so closely but this showed us that we could do it. We're now at a point where we probably can find enough work to support most of our group outside of Thornton Tomasetti's projects, and earn a bit of 'pocket money' to do more research.

FB: How do you cope with such a fast-paced industry?

JS: We organise conferences every year for example. We try to understand what the industry is doing as a whole, including particular trends. But you're right, it's challenging trying to stay on top of what's happening. The other source is teaching, and being actively involved in academia.

FB: Most of your team is either teaching or connected with academic research. Why is it important to have a group composed mainly of university professors?

JS: We wanted to have a team of people that contribute to a bigger system. Our goal is to make the whole company smarter […], and for all the project teams to work better […]. We work on complex projects, then we develop custom solutions to solve those projects. If they work well, the results get documented and taught to the rest of the team.

Michael Sorkin, Terreform

FB: Tell me a bit about Terreform and its inception. Why is it important to have a parallel practice to your architecture studio?

Michael Sorkin: I'm from the 1968 generation. In those days, the idea of architecture practice was very problematic. It seemed so tight to structures of power, and we wanted to resist. I thought there was a lot of circling around of some of the essential tasks of architecture for exclusively political reasons. I started doing […] utopian projects, in a way to try to evade a conventional professional architectural career, especially when I was involved in politics. But somehow, little-by-little, it came clear to me that my practice will never be about singularity. It will be about doing things colluding with a series of disciplines that formed me and defined the horizon of the territory of architecture. The idea of making that side of my work as a non-profit was always very attractive as well.

FB: Why this specific model? An NGO has a very particular legal structure and mission.

MS: Well, the original fantasy was for the professional office to subsidise the non-profit side of it. Of course, that never quite worked out. The main reason to adopt this mode of work was to be in touch with the neighbourhoods. We're very keen on local issues, and we like to intervene from a third perspective. Terreform does not take clients, we do self-initiated projects.

FB: What kind of projects did you develop with sufficient traction for external funding, and with enough social scope to fit the NGO regulatory framework?

MS: Plenty, and not enough! One of them is a project in Upper Manhattan that was prompted by Columbia [University] expansion. We found out the area was inhabitable and making slightly better architecture didn't seem very interesting. We transformed the idea. The substantial investment from Columbia allowed us to leverage [resources] for the larger community. We're investigating strategies that will benefit housing, employment and the quality of the environment. The other one is research to try to determine how self-sufficient New York City can become.

FB: How do you select the topics and areas of research?

MS: We invent the topics. I'm around, so a lot of these ideas are in the air in many cases, and some of these things come for discussion to Terreform […]. We are not a think-tank that you hire, we support things that we consider to be important, and we pursue these ideas through research and exploration. Of course, if somebody comes to us with 10 million dollars and a really good idea, one that matches our interests, we're certainly going to talk it over.

FB: Your work seems to speculate about different matters. What kind team do you need to run this research agency?

MS: The best practices are the craziest practices. They deal with water management, urban agriculture and the urban heat island effect. Our team is interested in dealing with these issues, and in making equable neighbourhoods and no-energy transportation, for example. We would like to be that kind of important global resource for the most imaginative solutions to these problems […]. We are interested in cities because they seem like rational increments of political organisations. All of this in an era in which nation states are dangerous and competent multinational corporations are even marginalising people.

FB: Anything else Michael?

MS: I actually want to say that our perspective, our fundamental motive is love. We love justice, and we love this city. We want to make the city convivial, human, democratic, beautiful and sustainable. That seems like a project for a reasonable lifetime.

References

[1] Reinier de Graff and Vanessa Quirk, 'AD Interviews: Reinier de Graff', online at: https://www.archdaily.com/407313/ad-interviews-reinier-de-graaf [accessed 12.11.17].

[2] Bansi Nagji and Geoff Tuff, 'Managing Your Innovation Portfolio', *Harvard Business Review*, May (2012), 5-11.

Author's biography

Francisco (a.k.a. Pancho) Brown is a New York-based architectural designer with experience in architecture, research, and project management. He currently balances his curiosity between the demands of high-end design at Workshop/APD, and architecture journalism as a correspondent for the Mexico-based *Arquine* Magazine. Prior to this, Pancho worked for the United Nations International Organization for Migration (IOM) in Kabul, Afghanistan, designing a variety of projects and leading the architecture team. He is a registered architect in Nicaragua. He holds a Bachelors in Architecture from the Catholic University in Managua; and a Masters in Architecture at the Center for Architecture, Science and Ecology (CASE) located in New York's Rensselaer Polytechnic Institute campus (RPI) at the SOM offices in Lower Manhattan.

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