

Review Article

Architecture Competitions as Pedagogical Tools: Bridging the Unit and the Office

Federico Ortiz

The extreme whores of the practitioners and the most withdrawn of the pedagogues of the profession are frequently produced by the AA and this is its strength, because in order to achieve such production extremes a great deal in between – student, staff and member – has also to be produced.

(Price, 1975)¹

With traditional top-down teach-and-test educational methods in crisis, financial pressures and overwork, architecture students have to deal with highly competitive environments. Architecture competitions are usually associated with the practice of architecture and they are indeed a seemingly good way to start practicing architecture, professionally. But within the realm of pedagogy, architecture competitions can prove excellent tools to encourage not competition but collaboration. Expanding and intertwining the practice of architecture across both the professional and pedagogical fields, architecture competitions as pedagogical apparatuses can destabilise roles, positions and ideas in order to produce new knowledge.

Architecture competitions in the context of education encourage the crossing of borders. They allow the academy to prematurely engage with professional structures and external forces, while maintaining a relative level of critical distance and autonomy. And they simultaneously give professional practice a much-needed discerning position that delays full involvement with productive structures. I call this a ‘cooperative pedagogy’,

emphasising not only the cooperation between the two traditionally separated ways of practicing architecture, but also the operational benefits this brings to both of them.

The ‘Unit/Office’ association, then, is here understood as a site for knowledge production that employs this notion of cooperative pedagogy. Many examples of an academic unit (or studio) and an architecture office coming together to produce knowledge can be traced throughout history. However, one school of architecture managed to transform its studio structure and to attract practising architects to work with students on architecture projects. Introduced by its chairman John Lloyd in the late 1960s, the ‘Unit System’ at the Architectural Association School of Architecture (AA) allowed for a more horizontal and collaborative teacher-student relationship. According to tutor Fred Scott, ‘an authoritarian teacher-student relationship was replaced by one of mutual discovery and reinforcement regardless of status, which also formed a basis for a remarkably even distribution of power throughout the school community.’²

To transform a unit into an office, and vice versa, a series of mechanisms have to be applied. We could identify five lines of action, that are non-hierarchical and different in nature, but unfold closely and overlap with each other. These are: *representation*, the architecture of drawing techniques; *narrative*, the textual part which, together with drawings, forms the architectural project; *media*,

engagement with multiple forms of content production, including exhibitions, publications and events; *history*, the operative use of history to inform practice; and finally, *competitions*.³ In this essay I explore one such case of a Unit/Office and their use of professional architecture competitions as pedagogical tools.

Unit/Office

London, early 1970s. The AA had recently restructured itself after a deep political and financial crisis. Alvin Boyarsky had been elected by the school community as its chairman and a new era was about to begin. Expanding and strengthening the school's unit system, Boyarsky was celebrated for curating a strong collection of unit tutors who – sometimes clashing, sometimes collaborating – were pushing themselves, each other and students to new frontiers in architecture pedagogy.⁴ From Mark Fisher's inflatable architecture to John Turner's housing and community preoccupations, each Diploma Unit had its own themes and obsessions, led by tutors whose professional architectural production was already widely recognised outside academic circles, including Archigram's Peter Cook, Warren Chalk and Ron Herron (Unit 6); the so-called London Conceptualists such as Bernard Tschumi, Nigel Coates and Jenny Lowe (Unit 2 / Unit 10); and in Unit 9, Elia Zenghelis and Rem Koolhaas's emerging Office for Metropolitan Architecture (OMA).⁵ [Fig. 1]

Elia Zenghelis studied at the AA between 1956 and 1961, becoming tutor of the Second Year in 1963, then radically transforming the First Year and later having his own unit in the Diploma School – the last two years of the five-year architecture education. Unit 9 had explored, for more than ten years, particular modes of understanding architecture and the city, and of practicing pedagogy. Zenghelis's genius was in collaborating with other units across the school, like with the previously mentioned London Conceptualists or with Leon

Krier's Unit 2;⁶ proposing competitions to other units and even schools; but also in nurturing and encouraging students who would then become tutors in the unit, work with him in his professional practice, liaise with other units, and ultimately explore and evolve their own paths and architecture projects.⁷ [Fig. 2]

By charting the development of the Unit through the AA *Prospectus* and *Projects Review* and the expansion of the Office across architectural magazines, we can trace how the pedagogical model was 'contaminated' by Zenghelis's professional practice, and vice versa.

Starting with what could be considered a pedagogical manifesto, in the 1974 'Statement of Aims for a Diploma School Unit' Zenghelis explains the projects the Unit developed to help the students foster their ideological positions on the city. First, there are 'Points and Lines', formed by areas of metropolitan interest that radiate or attract 'urban intensity'. Secondly, 'projects of Metropolitan interest', which refer to historical projects that will be studied to understand and, through them, develop a unique personal point of view and new architectural proposals. The final aim of these projects is to examine such 'real' existing areas of the city and to shift them into the 'possible' by proposing new injections of urban intensity. Finally, all Unit members would also work on 'actual competitions with sufficient symbolic potential'. The 'real' starts entering the realm of education as the professional practice of the tutor starts penetrating the pedagogical model. The last paragraph of this statement establishes the structure of the Unit and explains how it employs 'cooperative pedagogy'. The main component of this site of knowledge production is the work collaboratively produced by both students and tutors.⁸ Thus, the Unit was also called a 'collaborative workshop'.⁹

The Office for Metropolitan Architecture (New York-London-Berlin) – active since the early

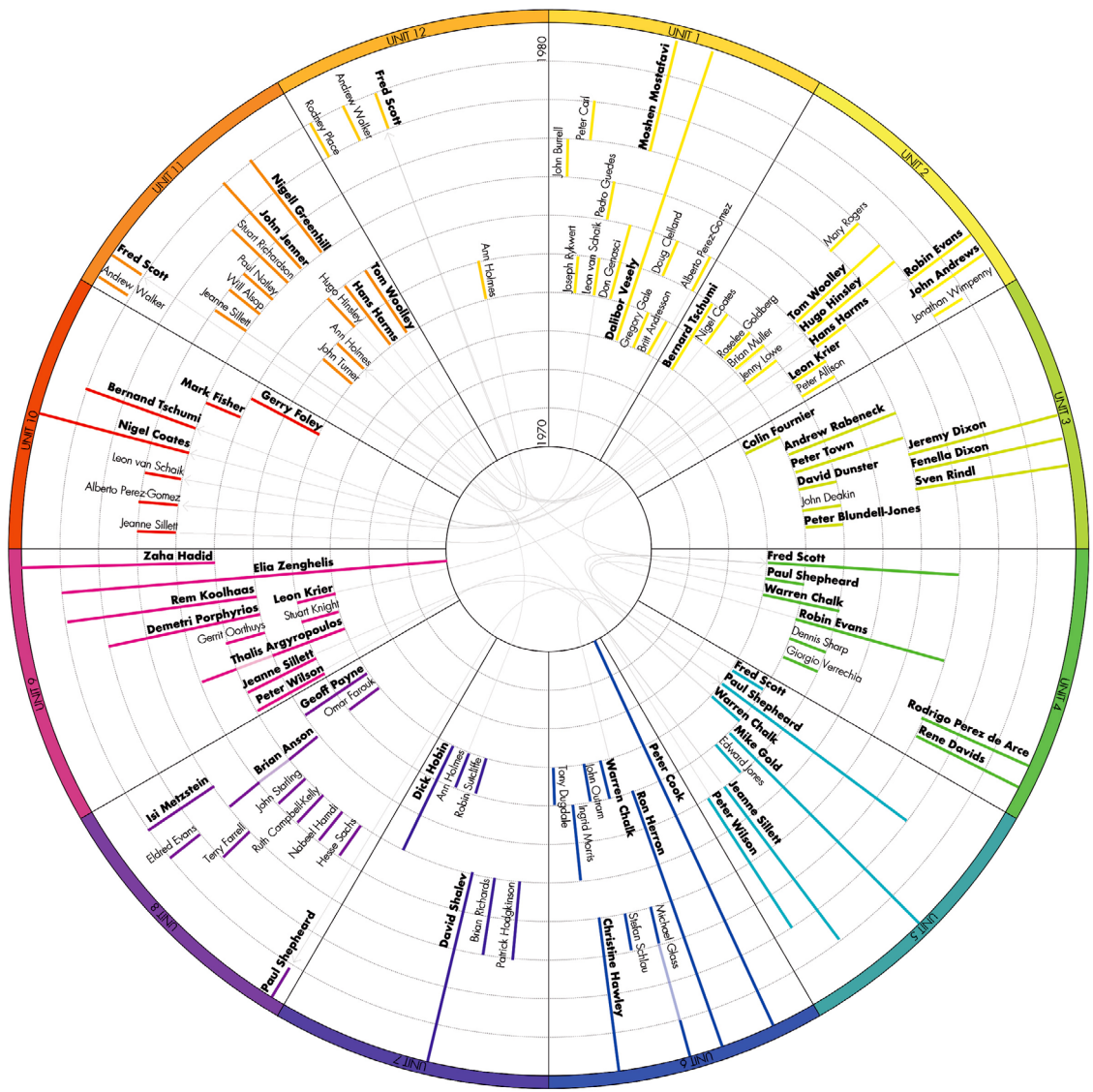


Fig. 1: Diagram 1: AA Diploma Units 1970 – 1980. Source: author.

seventies, was officially founded on January 1, 1975 to develop a mutant form of Urbanism – new types of architectural scenarios which would result in the rehabilitation of the Metropolitan lifestyle – which accepts the Megalopolitan condition with enthusiasm and which will restore mythical, symbolic, literary, oneiric, critical and popular functions to the architecture of large urban centres'.¹⁰

This extract from a 1976 issue of *Lotus International* magazine clearly states the aims for an architecture office that, founded by Elia Zenghelis, Madelon Vriesendorp, Rem Koolhaas and Zoe Zenghelis, started working on three categories of architecture projects: conceptual-metaphorical, idealised and realistic. The first two were conceptual architectural theorems identified in Manhattan, then put to work to produce highly idealised 'architectural forecasts' – two examples of this kind of project are *The City of the Captive Globe* and *Hotel Sphinx*. The last category belongs to the projects that incorporate the lessons of Manhattanism but were intended to be immediately realised.¹¹ Architectural competitions were used to test these types of projects, to release them from their otherwise purely theoretical nature.

In the span of ten years this Unit/Office complex was to use architectural competitions as a way to produce knowledge that would feed into both the professional practice of architects and the education of future professionals. The Unit/Office was operating in what the tutors called 'the spectrum from theoretical to real',¹² which meant that first research would be developed to be able to produce, through evident operative historical distortions, 'architectural theorems' that could be put into practice directly in real design projects.¹³

Contemporary professional architecture competitions were used to create a space where the asymmetrical hierarchies of students and tutors of diverse backgrounds and with different points of

view would productively meet and clash. This practice was not confined to Unit 9, other units were also employing architectural competitions as part of their pedagogical briefs, establishing a cross-cultural collaboration not only within units but also among architecture schools and, most importantly, between architecture practice and education. [Fig. 3]

'Actual competitions with sufficient symbolic potential'

We will now follow the unfolding of four case studies in which competitions developed by the Office were used in the Unit as pedagogical exercises. These projects evidence the complex network of internal and external cross-cultural relationships that established a contact zone that went far beyond the limits of the architecture school and the city of London, connecting sites of knowledge production across the Atlantic and bridging the gap between the academy and professional practice.

Roosevelt Island Housing Competition

In 1969, the City of New York transferred the urban and financial management of Welfare Island to the Urban Development Corporation (UCD), a real estate development entity funded by Nelson Rockefeller as an instrument of his housing and urban policy. In 1972 the island was renamed Roosevelt Island to house the F. D. Roosevelt Memorial, designed by Louis Kahn. A masterplan of the island, developed by Philip Johnson and John Burgee, divided it into Southtown and Northtown, joined by a Main Street. The housing competition was a call for proposals for the development of an area of Northtown, made by the UCD together with the Institute of Architecture and Urban Studies (IAUS) in 1974.

In London that same year, Unit 9 proposed this competition as part of one of its exercises, calling for 1 000 homes, to be done in collaboration with two other diploma units at the AA and the graduating year at Columbia University in New York. This

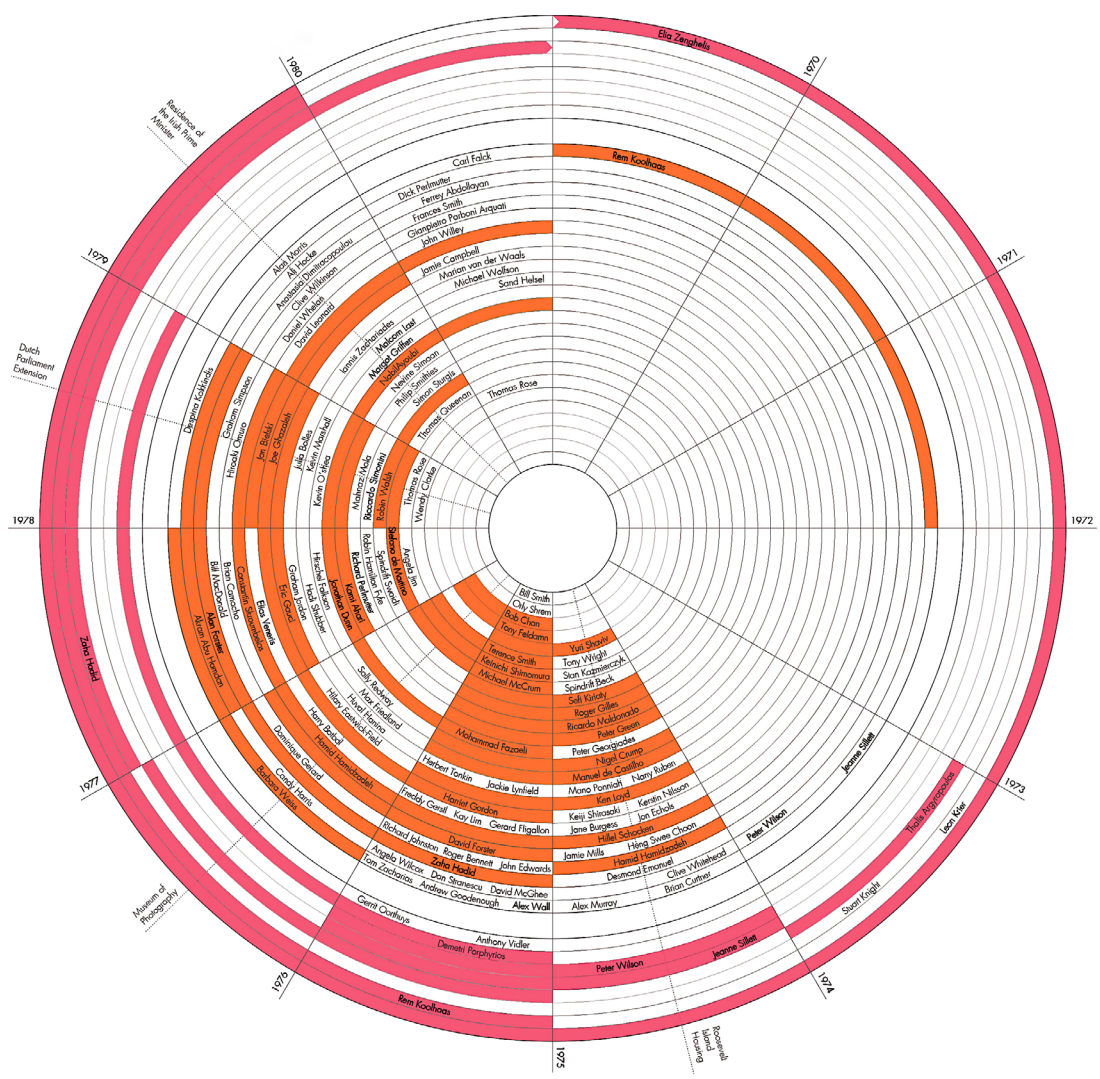


Fig. 2: Diagram 2: AA Diploma Unit 9, 1970 – 1980. Source: author.

competition is one of the most interesting cases in the first years of the Unit/Office, as it opens up a series of connections that unfurl a network of production.

Zenghelis was the main tutor both at the AA and at Columbia (1973–1975), and Koolhaas was using his colleague's units to test the production of the Office – not only competitions like this one but also media products like the first chapters of *Delirious New York*, which were presented to students as lectures. OMA, which in those years included Oswald Mathias Ungers as a main collaborator, developed two proposals for the competition: one by Ungers in collaboration with K. L. Dietzsch, Jeff Clark and Arthur Ovaska, and the other by the Zenghelis, Vriesendorp and Koolhaas in collaboration with the IAUS, specifically the interns Livio Dimitriu, German Martinez, and Richard Perlmutter – who would later join Unit 9. Within the IAUS itself, some of its members also took part in the competition, most notably Peter Eisenman, with Anthony Pergola and Gary Davis.

Together with Unit 9, AA Diploma Unit 5 – led by tutors Mike Gold, Edward Jones and Paul Shephard – and Unit 6 – led by tutors Ron Herron, Peter Cook and Ingrid Morris – also took part in the competition and proposed it to their students. Archigram submission was explicitly proposed as a group submission by staff and students together, including Ron Herron, Peter Cook, Ingrid Morris, Christine Hawley, Tom Heneghan, Penelope Richards, Gerry Whale, John Robins and Keith Priest.

Finally, there were four tied winners of the competition: Robert Stern and John Hagmann; Kyu Sung Woo; Sam Davis with the ELS Design Group; and Robert Amico and Robert Brandon. Like Zenghelis and Koolhaas, Stern was teaching at Columbia University, where they held common debates on the project.¹⁴

Most of the teams responded fairly similarly to the challenge of the competition: this comprised the extension of the Manhattan grid over Roosevelt Island and the exploration of low-rise high-density, including re-appropriated Manhattan typologies, from skyscrapers to brownstones. No one in the Office nor in the Unit won the competition, but it certainly established a productive mechanism that would be explored in the following years.

Museum of Photography

In 1976, Emile Meijer, the director of the Van Gogh Museum in Amsterdam, proposed the realisation of a photography museum situated between its building and the Stedelijk Museum. The lot is in essence a continuation of the Van de Veldestraat that sits, with its typical lines of trees on both sides of the street, between the two buildings. In their proposal, OMA's attitude from the beginning was that of the 'as found' – a concept embraced by Alison and Peter Smithson, tutors of both Zenghelis and Koolhaas. However, the Smithsons' inspiration in and appreciation of the ordinary, of things as they are and as people use them, was quite different from OMA's acceptance of pre-existing conditions used only to develop original design strategies that would inform the project.

Probably one of OMA's first reflections on the notion of context in physical terms, their project, led by Koolhaas, proposed to bury the museum and to leave the street above intact. Underground, a series of identical exhibition rooms were only interrupted by areas that contain the necessary soil for the trees to remain living and a crossing street – to become a typical OMA tactic, bringing an episode of dramatic change and formal exuberance into a rational programmatic organisation. The interior evoked the outside world by using the existing street pavement as its floor and replacing the street above with glass bricks. This competition and its extreme preservationist attitude would become the main source of



Fig. 3: Diagram 3: AA Unit 9 Architecture Competitions. Source: author.

inspiration to the Unit for the 1976/1977 academic year.

The students in the Unit reproduced the same strategies. Most projects occupied the street in between the buildings, respecting the existing conditions as much as possible. In all the projects we find: the parallel lines of trees, a series of repetitive underground rooms along a rectangular building, and a secondary street disrupting the composition. However, placing the whole museum underground was a strategy that did not seem appropriate to all the students, some of whom instead explored different formal configurations, mostly various extrusions of the plot. The use of professional architecture competitions as pedagogical exercises allowed students to learn not only by working side by side with their tutors on the same project, but also empowered them to challenge the tutor's ideas.

Dutch Parliament Extension

Originally a fortress, the Binnenhof is the house of the Dutch Parliament and Government. After centuries of additions and extensions, in 1978 the government held a competition to bring some clarity to the fragmented agglomeration and to extend its facilities. Two projects shared the first prize: one by the Dutch structuralist architect Leo Heijdenrijk and the other by OMA. However, neither of the projects were built and, after a series of new commissions, Pi de Bruijn was the architect who finally gave shape to the new building in the 80s.

The Office's project, usually described as three fragments, was most importantly an attempt to appropriate the fortress as a type and to open it up in a democratic gesture, not of transparent facades, but of an explosion of modern fragments injected in the middle of a context that should have otherwise been perfectly restored. The result is a complex composition of singular elements that conquer the old fortress, invade its empty crannies and create

public spaces framed by two large blocks and surrounding mini formalistic episodes, much like an Architekton, all connected by bridges and interpenetrating volumes.¹⁵ This anti-rational, anti-contextual and anti-structural project appropriated the typology of the fortress, transforming it through the unapologetic injection of concentrated congested modern episodes.

For this competition, OMA consisting of the Zenghelis, Vriesendorp, Koolhaas and Ron Steiner, incorporated as a main partner a former Unit 9 student, Zaha Hadid, and two current Unit 9 students as collaborators, Elias Veneris and Richard Perlemutter. After this competition, Hadid started her own office, and would then continue the legacy of Unit 9 for almost another ten years after joining as a tutor in 1977 and then taking over from Zenghelis and Koolhaas in 1981. Veneris was part of OMA only for this competition, but later joined Zenghelis when he opened the OMA branch in Greece during the 80s. Perlemutter stayed working for OMA until the early 80s, collaborating on the Kochstrasse / Friedrichstrasse Housing project for IBA Berlin, among other ex Unit 9 students Stefano de Martino and Alex Wall. The latter, now professor at Harvard GSD, worked for OMA until 1989 and joined Hadid as tutor of Unit 9 in 1983. OMA founders Madelon Vriesendorp and Zoe Zenghelis also joined Hadid in the 80s, running the Colour Techniques Workshop.

With this project, OMA had identified three post-modern attitudes that they were consciously trying to avoid; three 'isms' dealing with historical town centres became the target and the source of work for the Unit/Office. 'Contextualism', especially Colin Rowe's methodology, was attacked for compressing in a single act of creation years of historical urban transformation and for fossilising both idealised pasts and present circumstances together with their future possibilities. Likewise, the tutors of Unit 9, would fight against the idea of eternal typologies and morphologies that the 'Rationalists', mainly Aldo

Rossi and the Krier brothers, found to be perfected urban organisations developed throughout centuries of history. In their eyes, both Contextualism and Rationalism were 'pre-empted tactics which abort history before it even happens'.¹⁶ Finally, chiefly opposing Aldo van Eyck and Herman Hertzberger, OMA did not agree with Structuralism's idea that breaking large programs into smaller formal units would re-establish a 'human scale'.

Unit students explored similar ideas: not restoring the original type and not respecting the formal physical context, but inserting regular prismatic elements that opened up the group of buildings to the metropolitan congestion. In particular, the work of Alan Forster and Stefano de Martino, consisted as well of longitudinal buildings and its interconnecting bridges. However, they moved in the opposite direction from their tutors: instead of interrupting the fortress with perpendicular slabs, they made a parallel intervention to it and then connected it with smaller elements. The drawing techniques are remarkably similar to those of the tutors, especially in de Martino's project, exploring an isometric floor plan that reconstructs three-dimensionally only the proposed buildings in an exploded axonometric, à la James Stirling, but with a stronger constructivist tone. Both de Martino and Forster, would become part of OMA's team for the next competition. Other student in this academic year was Ricardo Simonini who later joined OMA for the 1980 IBA projects in Berlin (Kochstrasse / Friedrichstrasse and Lützowstrasse Housing), competition projects that Hadid would incorporate in her 1984 Unit 9 briefs following the tradition of using competitions as pedagogical tools.

It is interesting to note that while the Unit was trying hard to 'get real', it was not by means of developing projects realisable in the immediate future that the aim was to be achieved. Rather, the mutual immersion of pedagogical and professional practices in each other's realms would allow the

Unit to become involved in the real practice of architecture. Architectural competitions were used as a didactic way of testing ideologies in the professional practice.

Residence of the Irish Prime Minister

In the late 70s, there were plans to turn an old Georgian building in the middle of Phoenix Park in Dublin, into the new residence of the Irish Prime Minister. For this purpose, a competition was held to find a solution for a complex brief: the PM's residence and the State Guest House, which had to be separated but linked by both formal and informal connections, situated in the middle of a big urban park with many other historical buildings.

As we have seen, OMA was employing students from the AA, Columbia and the IAUS, as collaborators for their competitions. This 1979 competition proposal was done by the Zenghelis, Vriesendorp, Steiner and Koolhaas, with the collaboration of Unit 9 students Forster and de Martino. The latter, currently professor and former dean of the Faculty of Architecture University of Innsbruck, stayed working for OMA until 1983, joined Hadid as tutor in Unit 9 in the 80s, and later had his own unit until 1991. As previously mentioned, for this completion Hadid started her own office and submitted a proposal in collaboration with Camilla Ween and with Unit 9 students Jonathan Dunn and Kami Ahari. Tutors from other AA Diploma Units also took part in the competition, in fact the winning project was by Evans & Shalev Architects, led by David Shalev tutor at Unit 7 and Eldred Evans tutor of Unit 8. Other team in the competition, formed by Unit 5 tutor Edward Jones in collaboration with Russell Bevington, included Unit 7 student David Chipperfield and Unit 9 students Malcom Last and Margot Griffin.

OMA's project consisted of two independent houses: the Taoiseach's Residence and the State Guest House. The former was an intersection of

two curved prismatic volumes, one opening to long vistas over the landscape and the other spanning over the main road access. The latter was a rectangular cloister that contained a private garden surrounded by bedroom suites, in the form of separate pavilions interrupted only by public facilities. These two fragments were connected by a roundabout system, transforming the residence into a drive-in motel. Finally, to intensify the contextual relationship, the architects proposed to reconstruct original fencing stone walls and to recreate the organisation of the surrounding parkland in a series of bands of coloured flora. Given the circumstances of the contextualist debate, this could be OMA's most ironic critique or most serious postmodern project.

The Office's reaction to these divergent demands was to resolve it

by dividing the site along an east-west axis, a trajectory that goes from the curvilinear to the rectilinear, from the agitated to the serene, from the (relatively) exposed to the shielded. The two houses are an architectural extrapolation and interpretation of these themes: they echo and amplify the existing gradation of the land.¹⁷

However, the so-called natural landscape was not more than an urban park and the standing buildings hardly had any historical value – in fact, of almost one hundred entries, only four preserved these buildings. Therefore, the question of preservation – mostly what to preserve and how – was already part of the Office since its beginnings.

While the contrast between the curvilinear PM's Residence and the rectilinear State Guest House was the Office's main input, the projects developed by the Unit students had little to resemble the tutor's intentions. The students focused on the rectangular limits of the existing wall and the internal-external relationship between the perimeter and its content.

While their tutors proposed a very clear formal contradiction between two objects, the students did not even explore the possibility of rebuilding the perimeter in order to contain a private garden. Perhaps one of the most interesting projects is Forster's version, in which a series of rooms are placed next to each other in what might seem an endless grid. Considering that he was simultaneously part of OMA's team for this competition, his project demonstrates how students were able to develop their own ideology and use the competition as a tool to test ideas and find new answers. All other proposals, however, accepted and even emphasised the conflicting relationship between form and program: the programme was not large enough to fill in the formal weight of a Prime Minister's Residence. At this point students, confident with the methodology, would also start choosing themselves the competitions that they wanted to work on and develop projects individually.¹⁸ Even if students were working in different projects the Unit continued to be a space for interchange and collaboration.

Exodus: back to the beginning

In 1980 Koolhaas left London to establish himself back in the Netherlands and opened a second branch of the Office in Rotterdam. Later, Zenghelis also went back to his home country and opened a third branch of OMA in Athens, running it until 1987.¹⁹ Between the three cities, the professional production of the Office started to take off. The partners, now ex-tutors of Unit 9, and their collaborators, mostly ex-students, started working on real architectural projects with the sole intention of building them. Across all cities, the Office was working on projects that challenged the postmodern ideas of context, form, language and programme, by extracting and developing models from the Unit/Office's catalogue of ideas.

Coinciding with the end of Zenghelis and Koolhaas teaching at Unit 9, the AA displayed in 1981, the work of OMA. In the exhibition catalogue, Koolhaas

introduced their work as a critique of the postmodern attitudes of contextualism and rationalism. Through the projects for the Dutch Parliament extension and the Koepel Panopticon renovation, he explained how these projects understood the fortress and the panopticon neither in a historical nor typological sense, pushing forward a new modern attitude. Their 'New Sobriety' favoured a modern ideological position based on functionalism – without a formal obsession – and programmatic imagination that would formulate content for a Culture of Congestion.²⁰ OMA was reflecting and using the already consolidated history of the modern movements, especially its 'misfits', for its own production, but it was simultaneously creating its own history. In the previous year OMA had occupied another exhibition space, this time at the Luce van Rooy Galerie in Amsterdam, where they showed nothing more than its already well-known 'Exodus'.

'Exodus or the Voluntary Prisoners of Architecture' was the entry for Casabella's competition 'The City as a Significant Environment' submitted by the Zenghelis, Vriesendorp and Koolhaas in 1972. Many pages have been written about this project, its drawings and its narrative, but there is usually a fact that is difficult to grasp. As previously mentioned, Zenghelis was a First Year tutor, but as the school was malfunctioning during the 69-71 crisis, he started receiving students from other years, leading the popular 'Greek Unit', that led in Boyarksy years, to Unit 9. In 1968, Koolhaas joined the AA as a student, Zenghelis's Unit a year later, and then left in 1972, only to return three years later as a tutor in Diploma Unit 9 with his former teacher.²¹ Then, the co-creators of 'Exodus' founded in 1975 the Office for Metropolitan Architecture, based on their collaboration for the Casabella competition. In 1973, after the project was published in the magazine, Zenghelis, drawing on the competition and the project, introduced to Unit 9 students a brief for 'The Utopian City'. Peter Wilson's projects 'The Fire' and, joint Diploma project with Jeanne Sillett, 'Dorset:

Inhabiting a landscape', originate as a response to this brief and is a testimony of both the cultural and ideological landscape across units at the AA in the 70s and illustrates the productive forces unleashed when using competitions as pedagogical instruments.²²

Was therefore 'Exodus or the Voluntary Prisoners of Architecture' part of the production of an architectural Office or a student's project for a pedagogical Unit? It was neither one nor the other, and yet it was both. This was the beginning, as we have seen, of years of a productive cooperation between education and professional practice: an apparatus that found its productive force in the exploration and exploitation of the Unit/Office as a productive site and in architecture competitions a tool for producing ideas that would transform the reality of cities.

Architecture competitions allow architects to create stories, not only answering questions posed by a brief but also reframing these questions and asking new ones, in order to identify new answers – or even new problems. Students should find in architecture education a space for cooperation, dialogue, and fundamental questioning. In architecture competitions lies the potentiality of imagining and expanding original productive educational models hand in hand with innovative roles for architects. Ultimately, these historical accounts shine a light on other forms of architecture practice and pedagogy, and encourage not only an experimental use of architecture competitions but also a hybrid relationship between professional practice and education at large. Instead of competitions being understood as spaces of rivalry, teachers-architects-students can find ways to cooperate and establish productive relationships that subvert the individualistic ideology of entrepreneurship, towards a practice that allows for exploring radical empathy and critical pedagogy in both the profession and schools, blurring the boundaries between the architecture office and the classroom space.

Notes

1. Cedric Price, 'A Useful Irritant' in *A Continuing Experiment: Learning and Teaching at the Architectural Association*, ed. James Gowan (London: Architectural Press, 1975), 39.
2. Fred Scott, 'Myth, Misses, and Mr Architecture' in Gowan, *Continuing Experiment*, 169.
3. Here I refer to Tafuri's concept of *operative criticism*. Manfredo Tafuri, *Theories and History of Architecture* (London: Granada, 1980), 141.
4. As with every new beginning and experiment, tutors and students were also testing the system, specially people like Nigel Coates and Jenny Lowe, who joined three different units as students, and Jeanne Sillett who, together with Peter Wilson, joined as a student both Elia Zenghelis's Unit 9 and Dalibor Vesely's Unit 1, and later joined as a tutor Unit 5, 9, 10, 11, and led her own 'special unit' *LOT 90*.
5. Nicknamed by Peter Cook as 'The London Conceptualists', this group led by architect Bernard Tschumi and RoseLee Goldberg, director of the Royal College of Art, explored ideas around a conceptual understanding of space and its relation with performance art, through performances, lectures, exhibitions and teaching – first in Unit 2, were Tschumi and Goldberg collaborated, and then in Unit 10. The 1975 exhibition 'A Space: A 1000 Words' displayed the work of artists and architects, including Tschumi's former students Will Alsop, Jenny Lowe, Nigel Coates, Peter Wilson and Jeanne Sillett (both also part of Unit 9), all later tutors in the unit; but also other AA unit tutors like Unit 4 / Unit 5's Paul Shephard and Unit 9's Elia Zenghelis, with Zoe Zenghelis. For more on the 'London Conceptualists' see Sandra Kaji-O'Grady, 'The London Conceptualists: Architecture and Performance in the 1970s', *Journal of Architectural Education* 61, no. 4 (2008): 43–51.
6. Leon Krier started teaching with Zenghelis in 1973 but then, suggested by Boyarsky, started his own unit. Unit 9 and Unit 2 maintained a good relationship for a couple of years and collaborated in a series of projects and lectures: 'Weekly lectures and seminars will be organised in conjunction with Elia Zenghelis. They will discuss the history of the European City and territory, the dialectic of building types and urban morphology, architectural language and the use of types and the radical critique of modern town planning.' 'Diploma Unit 2' in *AA Prospectus 1975–1976* (London: Architectural Association School of Architecture, 1975), 48. Flying straight from New York in 1975, Koolhaas joined Zenghelis as a tutor in Unit 9 shifting the focus on the traditional European city towards the exploration of the metropolitan culture of congestion and the reconsideration of radical modernities, such as the work of Russian architect Ivan Leonidov – which explains the incorporation of Gerrit Oorthuys as a tutor, with whom Koolhaas was working on a never published book on the work of Leonidov.
7. Gaps in mapping this history of the AA Units is due to the lack of records because of the institutional crisis between 1968 and 1971, when Boyarsky was elected chairman. 1973/1974 was the first academic year when the 'new' unit system was fully in place and the first time the new AA Prospectus and Projects Review were published, establishing a long-standing tradition of documenting the school's production.
8. 'I would very often work on the competitions and my own projects in the studio, so students would see me working. That was an important part of the teaching. This way, you showed the students that one was involved in the same kind of things that they were. We were going through the same struggles and it was visible, they could see me struggling on my drawing board – in those days there were no computers – through the whole process.' Elia Zenghelis in conversation with the author.
9. Elia Zenghelis, 'Diploma Unit 9' in *Prospectus* (London: Architectural Association, 1975), 8.
10. Pierluigi Nicolini, ed., *Lotus International*, No. 11. (Milan: Elemond Periodica, 1976), 34.
11. Rem Koolhaas, *Delirious New York: a Retroactive Manifesto for Manhattan* (New York: Oxford University Press, 1978), 10.
12. Demetri Porphyrios, Elia Zenghelis and Rem

- Koolhaas, 'Diploma Unit 9' in *Prospectus*, (London: Architectural Association, 1977), 49.
13. Architectural Association School of Architecture, *AA Prospectus, 1976–1977* (London: Architectural Association School of Architecture), 49.
 14. 'We did the project as part of OMA, students developed their projects, and Robert Stern, who was teaching History and Theory at Columbia at the time, participated in the competition as well. We worked on the project while the competition was going on and at the end of the semester we had the final review. Rem and I presented our project, the students presented theirs, but also Bob presented his project. The students were very positive about our project, but they gave Bob a very bad review. The next day he won the first prize for the competition.' Elia Zenghelis in conversation with the author.
 15. Kazimir Malevich's *Architekton* was part of the Unit's pedagogical toolkit. Understood as form without content and mixed with the Surrealist's technique of *cadaver exquisite*, it was used to produce fragments of personal architectural worlds that would then be reassembled under one single project.
 16. Haig Beck, ed., 'OMA: Office for Metropolitan Architecture. Urban Intervention: Dutch Parliament Extension, The Hague' in *International Architect* 1, no. 3 (1980): 47–60.
 17. Office for Metropolitan Architecture, 'Irish Prime Minister's Residence', <https://oma.eu>, accessed 30 June 2019.
 18. 'We were doing all sorts of projects. You were free to propose your own briefs and make your own projects. In the Fourth Year, for example, I was the only one doing a competition for the Acropolis Museum.' Elias Veneris in conversation with the author.
 19. Zenghelis continued OMA projects in Greece with Elia Veneris, former Unit 9 student, but left the Office in 1987 when he started a new practice with Eleni Gigantes, ex Unit 9 student under Zaha Hadid. Zenghelis continued teaching for many years at Princeton, the Kunstakademie in Düsseldorf (1989–2002), the Berlage Institute (1993–2010), ETH Zurich (1998–2000), Accademia d'Architettura Mendrisio (2000–2007), and most recently at The Bartlett, the AA, and Yale.
 20. Rem Koolhaas, 'Our "New Sobriety"' in *OMA Projects 1978–1981* (London: Architectural Association School of Architecture, 1981), 9–10.
 21. AA Newsheet No. 13. Summer 1971/1972 (London: Architectural Association School of Architecture, 1972).
 22. Peter Wilson had simultaneously joined Tschumi's Unit 2 and after graduating from Unit 9, together with Jeanne Sillett joined as tutors until 1976 and were simultaneously affiliated to Unit 5. Sillett later joined Unit 10, Unit 11 and for only one year led a special Unit 13 and LOT 90. Wilson stopped teaching at the AA in 1988, to concentrate on his professional work with Bolles + Wilson, office established with also former Unit 9 student Julia Bolles. On Peter Wilson at the AA see Isabelle Doucet, 'Architecture Between Politics and Aesthetics: Peter Wilson's "Ambivalent Criticality"' at the Architectural Association in the 1970s', *Architectural Theory Review* 19, no. 1 (2014): 98–115.

Biography

Federico Ortiz is an architect, researcher and writer. He studied History and Critical Thinking at the Architectural Association, where he received a distinction for his thesis entitled *The Unit and The Office: Cooperation in Practice*. Previously, Ortiz studied architecture and urbanism at the National University of La Plata and worked as an architect in Argentina and Switzerland. Ortiz has recently worked in curatorial and editorial projects at the Canadian Centre for Architecture. He is currently a Programme Manager at New London Architecture and a Visiting Lecturer at the University of Hertfordshire.

