# A MÃO PENSANTE

**FABIOLA GUZMÁN RIVERA**

A habilidade de representar o espaço tridimensional usando um meio bidimensional pode se entender como o princípio canônico da ilustração da profundidade espacial. Apesar do atual foco da área da arquitetura em processos contemporâneos e computação gráfica, não podemos negar que a mão e a mente seguem sendo extensão uma da outra e por isso o par perfeito para ilustrar uma idéia. O bombardeio de ferramentas para otimizar o processo de desenho nos está obrigando a repensar a forma de representar nossas intenções espaciais, mas eu não posso deixar de pensar que aquele meio ótimo que sonhamos seja talvez o mais primitivo: o lápis e a folha de papel em branco.

Este repertório de desenhos mostra o completo espectro da representação arquitetônica, desde esboços intuitivos que podem se entender como respostas imediatas a problemas concretos, até representações meticulosas do resultado final do projeto. Todos e cada um deles explora o ato de desenhar; não como meio para um fim, senão como um fim em si mesmo. Alguns deles impressionam a simples vista, são quase um fluxo de consciência, elementos brutos dos projetos e idéias que configuram fragmentos de um processo despretensioso. A qualidade abstrata de algumas das ilustrações fala de uma liberdade que resiste a urgência de ser totalitária. Tratando o desenho como um meio especulativo, como uma ferramenta para a descoberta, Bruno Campos é capaz de insinuar possibilidades ao mesmo tempo que proporciona respostas definidas a problemas espaciais.

Escutava curiosa à narração das histórias atrás de cada ilustração porque ter acesso ao desenvolvimento de uma idéia é fascinante. A maioria dos arquitetos ocultam seus passos no esforço de proteger seu íntimo e precioso procedimento. Diferentemente, Bruno Campos não hesitou em revelar seus métodos. Seus desenhos servem de prova tangível de como o processo de criação se realiza; relatam transparência de pensamento e expõem as múltiples fases na vida de um arquiteto. A palpável qualidade de cada imagem está sempre latente, as idéias são fortes e seus traços oscilam desde o impulsivo até o delicado. Ter acesso aos bastidores de um processo criativo converte o espectador no voyeur de uma realidade alternativa.

Há um aspecto físico na criação de desenhos que está se dissolvendo em uma série de clicks de mouse e comandos que só perseguem a otimização. Mas a nostalgia do ritmo da iteração de idéias através do desenho à mão, por pensar mais detidamente e produzir à base de observações precisas, também não pode ser negada. Não devemos perder essa sensibilidade ou a emoção que este processo provoca, em especial quando o desenho à mão vai se tornando uma relíquia, muito admirada ainda que não mais necessária. Não é minha intenção desvalorizar os atributos da representação digital, mas dar as boas vindas nova-

mente à possibilidade de agregar o papel, caneta e a mão sem pretensões. O conjunto de collages, desenhos e composições do Bruno Campos fala sobre o potencial dos meios que logo serão esquecidos, mas também é um manifesto da urgência para estimular o pensamento por trás do traço manual. Seja utilizando meios digitais ou tradicionais, devemos relembrar que desenhar é pensar, desenhar é representar. É a linguagem que adotamos há muito tempo para comunicar idéias, e neste caso particular, para enquadrar uma discussão.

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# THE THINKING HAND

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To render tridimensional space in a two-dimensional medium can be understood as the canonical principle for illustrating spatial depth. Despite the current focus on contemporary process and computer-aided design in the field of architecture we cannot deny that the hand and the mind continue to be an extension of one another and as a result the perfect couple to render an idea. The bombardment of optimized drawing tools force us to rethink the way in which we deploy spatial intentions, nonetheless I cannot help but to think that the optimal medium we strive for is perhaps the most primitive one: the pencil and a blank sheet of paper.

This repertoire of drawings shows the whole spectrum of architectural representation, ranging from the intuitive sketches that can be understood as immediate responses to problems, to meticulous final representations. Every single one of them explores the act of drawing not as means to an end, rather as an end itself. Some of them are poignant, almost like a stream of consciousness, raw data of projects and ideas that are fragments of an unpretentious process. The abstract quality of some of the examples speaks of a freedom that resists the urge to be final. Treating the drawing as a speculative medium, a process of making discoveries, Bruno Campos is able to hint possibilities while providing definite answers to spatial inquiries.

I listened with curiosity while he narrated the stories behind each illustration because to have access to the assembly process of an abstract idea is quite fascinating. Most architects cover their tracks in an effort to protect this precious and intimate procedure. Bruno Campos did not hesitate to disclose his methods. His drawings serve as the physical proof of how the process of creating unfolds; they speak about transparency of thought and expose the multiple phases in the life of an architect. The palpable quality of each item is latent, the ideas are poignant and the strokes range from impulsive to delicate. Having access to the "back stage" turns the viewer into the *voyeur* of an alternate reality.

There is a physicality that is dissolving into a series of mouse clicks and commands just for the sake of optimization. The nostalgia for the slowness of iterating through hand drawings, for the slowness of thinking and producing based on accurate observations cannot be denied. We should not loose the sensibility or the excitement that this process provokes especially when the hand drawing is turning into a relic, highly admired but no longer required. It is not my intent to undermine the attributes of digital representation but to welcome once again the possibility of putting together paper, pen and an unbiased hand. Bruno's collages, sketches and compositions speaks about the potential of these "soon to be forgotten" mediums, furthermore they are a manifesto of the urgency to stim-

ulate the thinking hand. Either digitally or by hand we should remember that to draw is to think, to draw is to represent. It is the language we adopted a long time ago to communicate ideas and in this particular case to frame a discussion.

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# LA MANO PENSANTE

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La habilidad de utilizar un medio bidimensional para elaborar espacio tridimensional se puede entender como el principio canónico para ilustrar profundidad. A pesar del enfoque actual en procesos contemporáneo y en el diseño asistido por herramientas digitales en el campo de la arquitectura, no podemos negar que la mano y la mente siguen siendo una extensión el uno del otro y como resultado la pareja perfecta para ilustrar una idea. El bombardeo de herramientas para optimizar el proceso de dibujar nos obligan a repensar la forma en que representamos intenciones espaciales, sin embargo, no puedo dejar de pensar que el medio óptimo que tanto anhelamos es quizás el más primitivo: el lápiz y una hoja de papel en blanco .

Este repertorio de dibujos demuestra el espectro de la representación arquitectónica, que recorre desde bocetos intuitivos, los cuales son respuestas inmediata a un problema, a representaciones meticulosas del diseño final de un proyecto. Todos y cada uno de ellos explora el acto de dibujar; no como medio para un fin sino como un fin en sí mismo. Algunos de ellos conmueven a simple vista, son casi un monólogo de conciencia, datos en bruto de proyectos e ideas que configuran fragmentos de un proceso sin pretensiones. La cualidad abstracta de algunas ilustraciones habla de una libertad que resiste la urgencia de ser totalitaria. Tratando el dibujo como un medio especulativo, como una herramienta para descubrir, Bruno Campos es capaz de insinuar posibilidades a la vez que provee respuestas a preguntas espaciales.

Escuchaba con curiosidad mientras él narraba las historias detrás de cada ilustración porque tener acceso al desarrollo de una idea es fascinante. La mayoría de los arquitectos tratan de cubrir sus pistas en un esfuerzo por proteger la intimidad de tal procedimiento. En cambio Bruno Campos no dudó en revelar sus métodos. Sus dibujos sirven como prueba tangible de cómo el proceso de creación se despliega; relatan transparencia de pensamiento y exponen las múltiples fases en la vida de un arquitecto. La cualidad física de cada imagen siempre está latente, las ideas son conmovedores y sus trazos oscilan desde lo impulsivo hasta lo delicado. Tener acceso a la trastienda de un proceso creativo convierte al espectador en el *voyeur* de una realidad alterna.

Hay un aspecto físico en la creación de dibujos que se está disolviendo en una serie de "mouse clicks" y comandos que sólo persiguen la optimización. Hay cierta nostalgia por la iteración de ideas a través de dibujos a mano, por pensar detenidamente y producir a base de observaciones precisas. No debemos perder esa sensibilidad o la emoción que este proceso provoca, en especial cuando el dibujo a mano se va tornando en una reliquia admirada pero sin embargo no requerida. No es mi intención menospreciar los atributos

de la representación digital, sino de dar la bienvenida una vez más a la posibilidad de juntar papel, bolígrafo y una mano sin pretensiones. El conjunto de collages, dibujos y composiciones de Bruno Campos habla sobre el potencial de medios que pronto serán olvidados, sobretodo es un manifiesto para estimular la sabiduría detrás del trazo manual. Ya sea utilizando medios digitales o tradicionales, debemos recordar que dibujar es pensar, dibujar es representar. Es el lenguaje que adoptamos hace mucho tiempo para comunicar ideas y en este caso en particular, para enmarcar una discusión.

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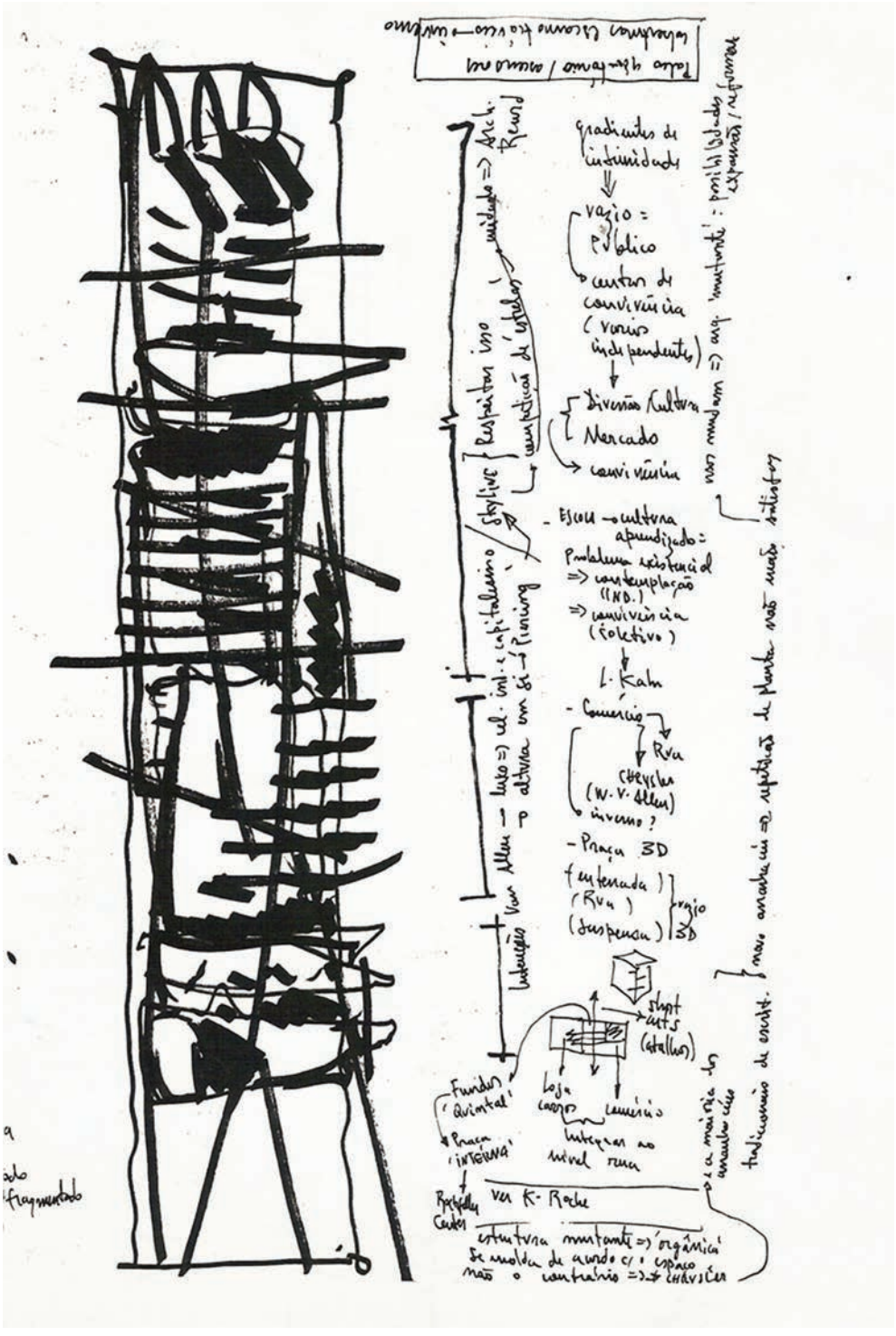
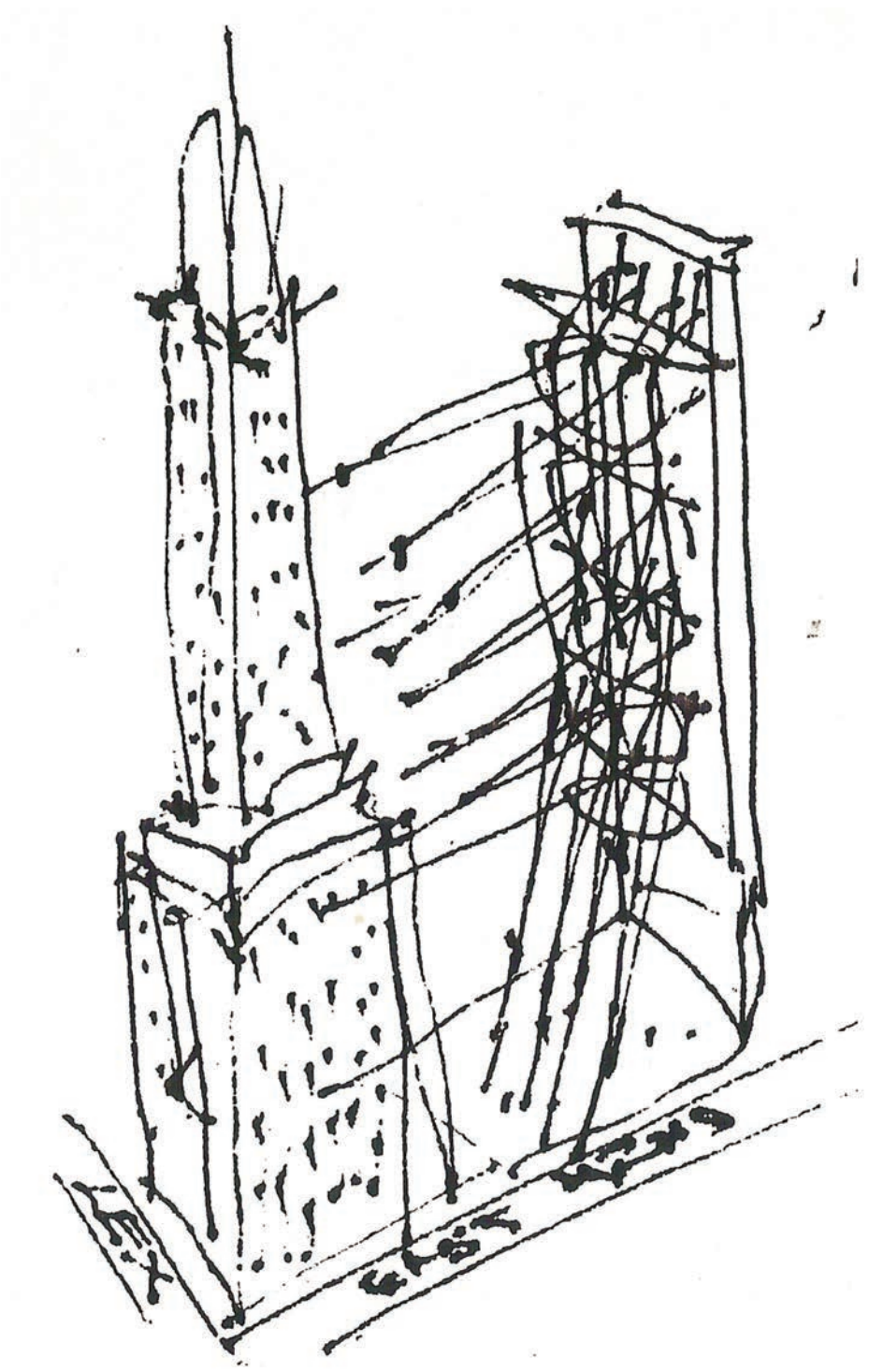



Anexo para o Chrysler Building, NY – Hidrográfica sobre papel manteiga (20x40cm), Bruno Campos (1994).

*Annex to the Chrysler Building, NY – Water-based ink pen on tracing paper (20x40cm)*, Bruno Campos (1994).

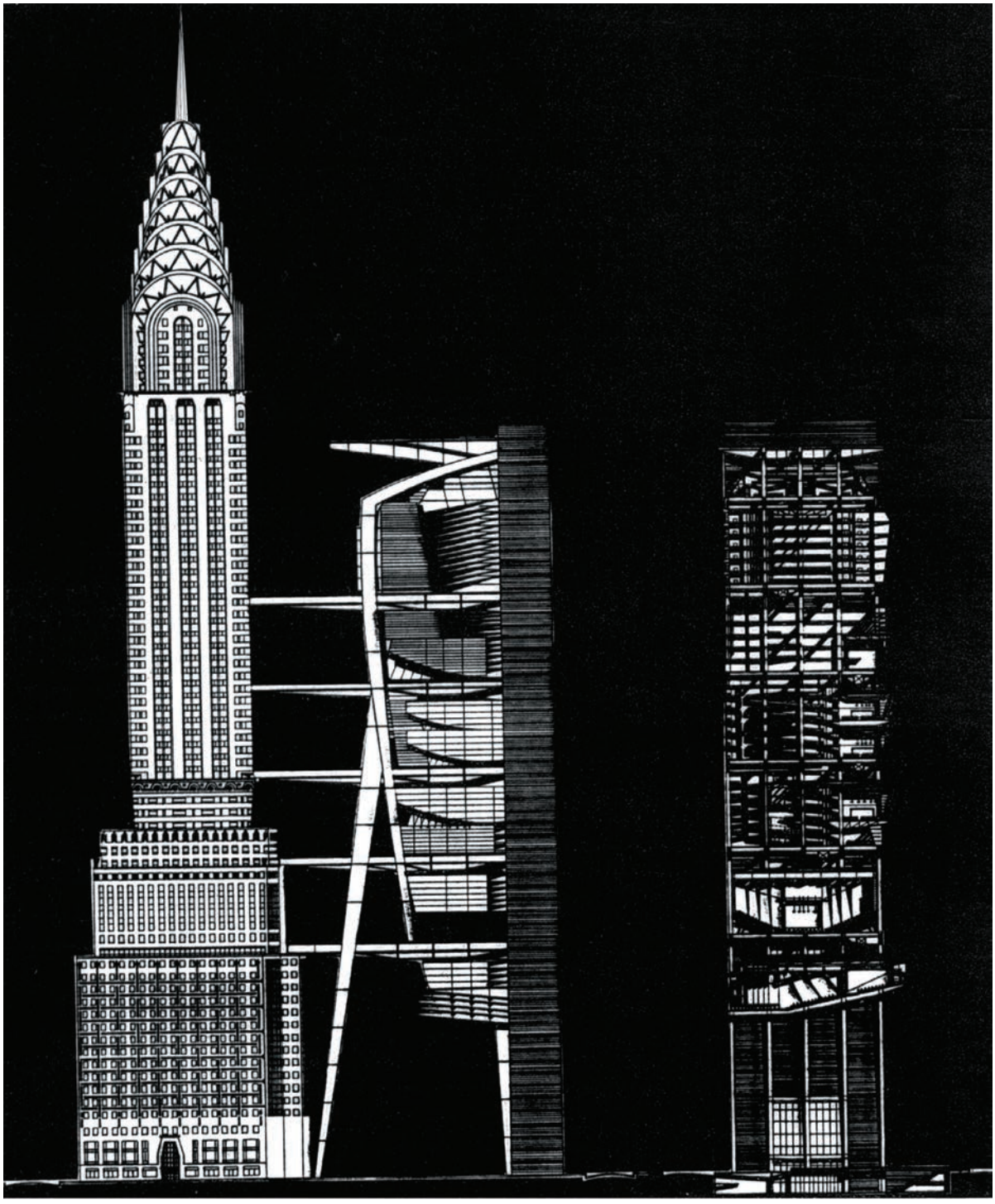
*Adjunto para Chrysler Building, NY – Hidrográfica sobre papel manteca (20x40cm)*, Bruno Campos (1994).



Anexo para o Chrysler Building, NY – Hidrográfica sobre guardanapo (7x10cm), Bruno Campos (1994).

*Annex to the Chrysler Building, NY – Water-based ink pen on paper napkin (7x10cm)*, Bruno Campos (1994).

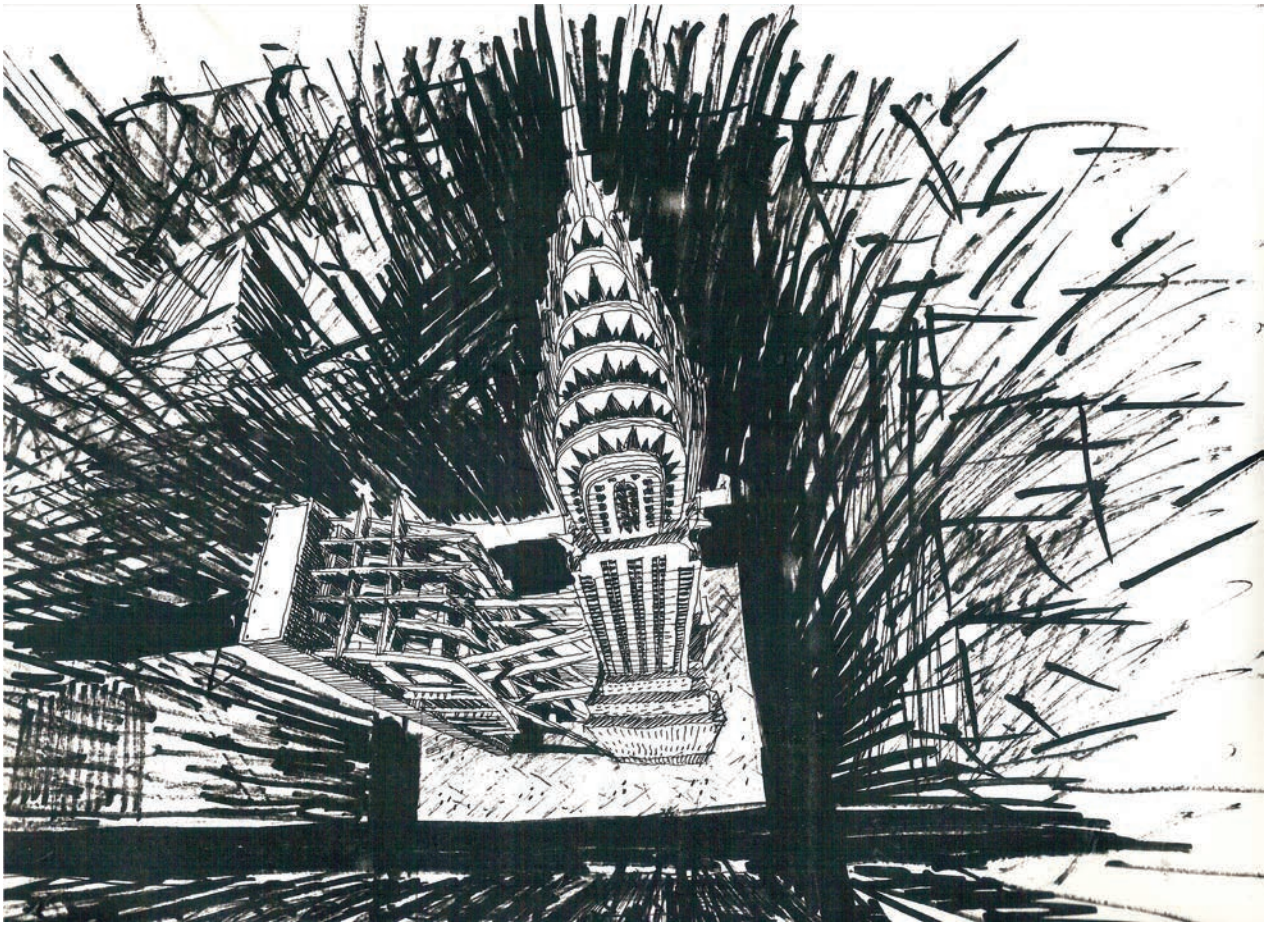
*Adjunto para Chrysler Building, NY – Hidrográfica sobre servilleta de papel (7x10cm)*, Bruno Campos (1994).



Anexo para o Chrysler Building, NY – Nanquim e hidrográfica sobre papel vegetal (60x85cm), Bruno Campos (1994).

*Annex to the Chrysler Building, NY – India ink and water-based ink pen on drafting paper (60x85cm)*, Bruno Campos (1994).

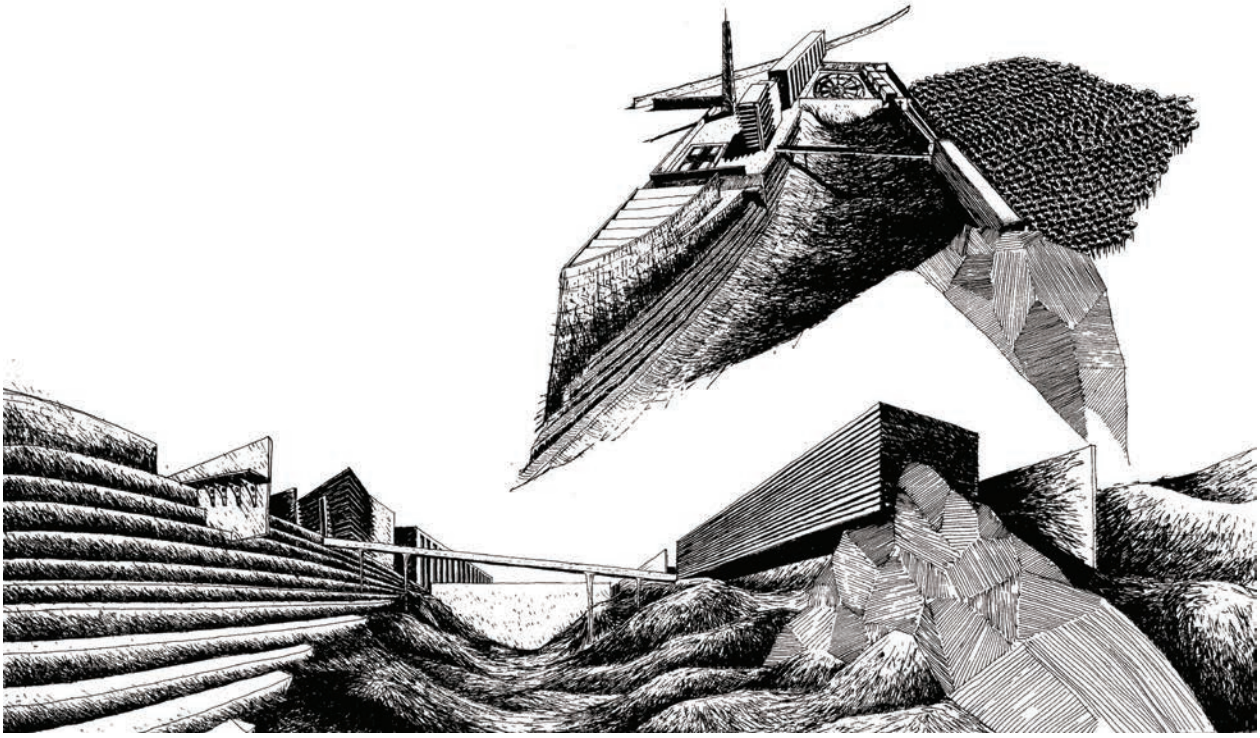
*Adjunto para Chrysler Building, NY – Tinta china e hidrográfica sobre papel vegetal (60x85cm)*, Bruno Campos (1994).



Anexo para o Chrysler Building, NY – Lápis, nanquim e hidrográfica sobre papel vegetal (40x30cm), Bruno Campos (1994).

*Annex to the Chrysler Building, NY – Pencil, India ink and water-based ink pen on drafting paper (40x30cm)*, Bruno Campos (1994).

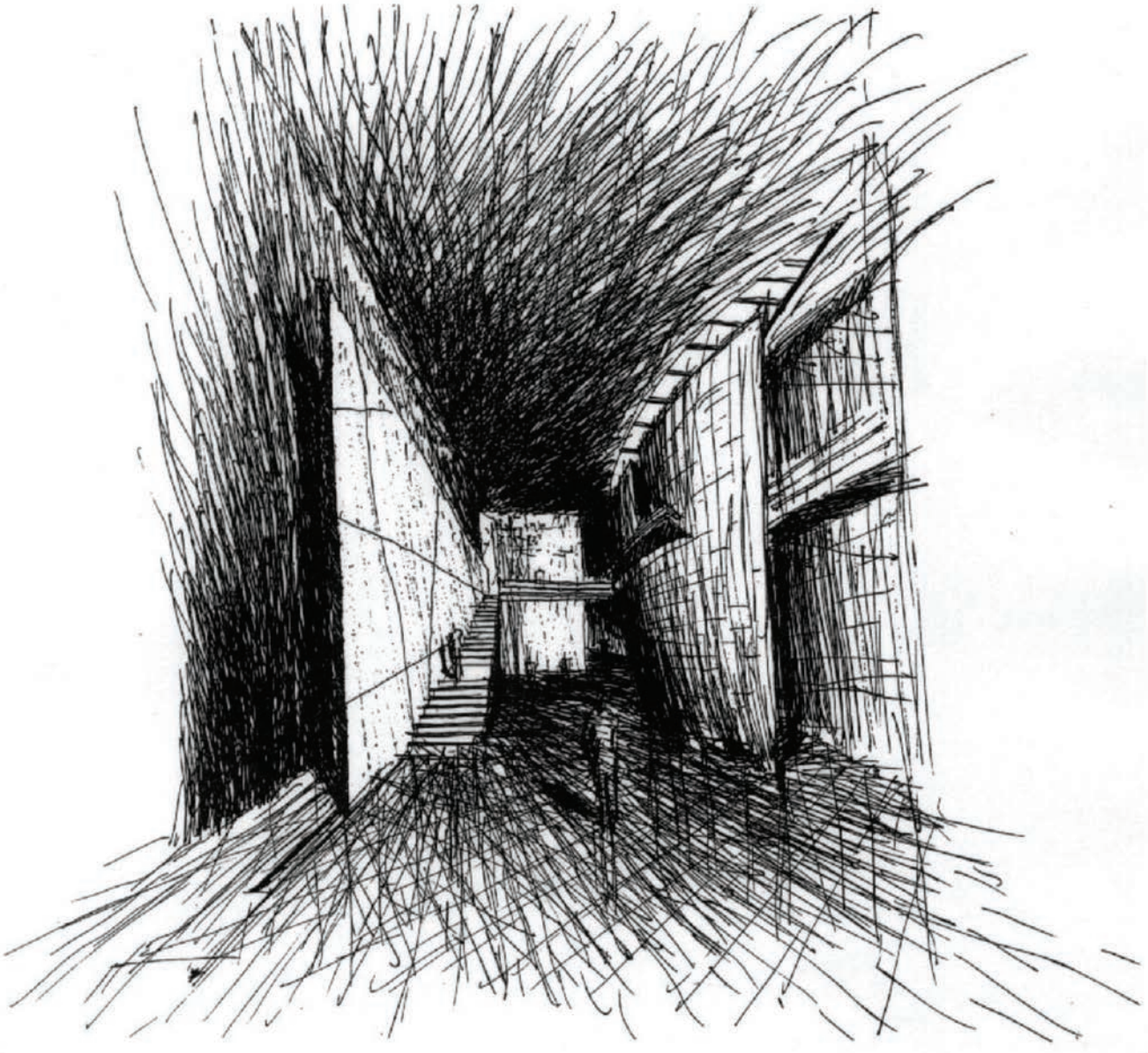
*Adjunto para Chrysler Building, NY – Lápiz, tinta china e hidrográfica sobre papel vegetal (40x30cm)*, Bruno Campos (1994)



Mosteiro Taquaraçu de Minas – Nanquim e hidrográfica sobre papel vegetal (85x60cm), Bruno Campos (1992).

*Tauqraçu de Minas Monastery – India ink and water-based ink pen on drafting paper (85x60cm)*, Bruno Campos (1992).

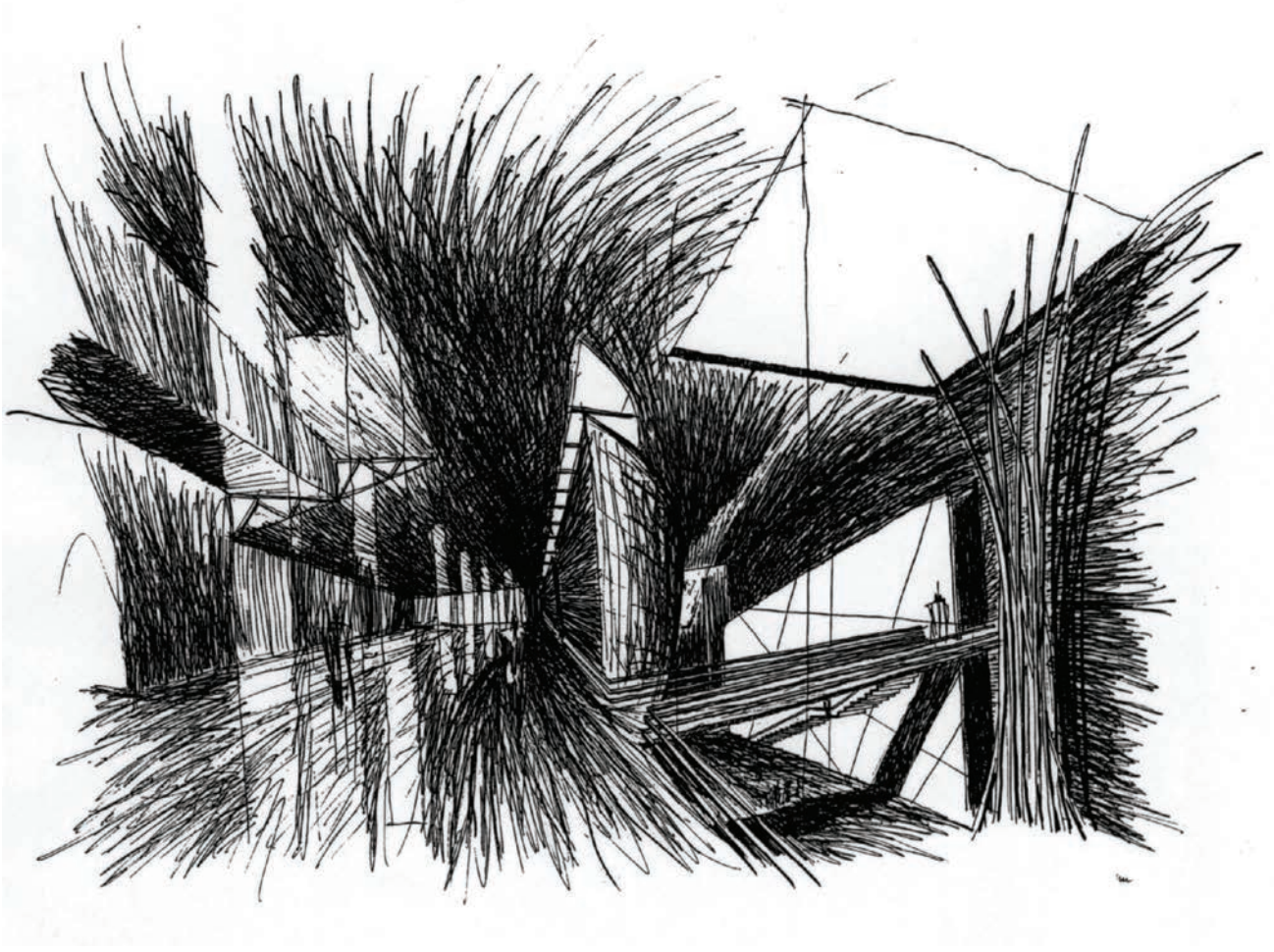
*Monasterio Taquaraçu de Minas – Tinta china e hidrográfica sobre papel vegetal (85x60cm)*, Bruno Campos (1992).



Showroom Fórum/Triton, São Paulo – Lápis, nanquim e hidrográfica sobre papel vegetal (40x30cm), Bruno Campos (1999).

*Fórum/Triton showroom, São Paulo – pencil, India ink and water-based ink pen on drafting paper (40x30cm)*, Bruno Campos (1999).

*Showroom Fórum/Triton, San Pablo – Lápiz, tinta china e hidrográfica sobre papel vegetal (40x30cm)*, Bruno Campos (1999).



*Showroom Fórum/Triton, São Paulo – Lápis, nanquim e hidrográfica sobre papel vegetal (40x30cm)*, Bruno Campos (1999).

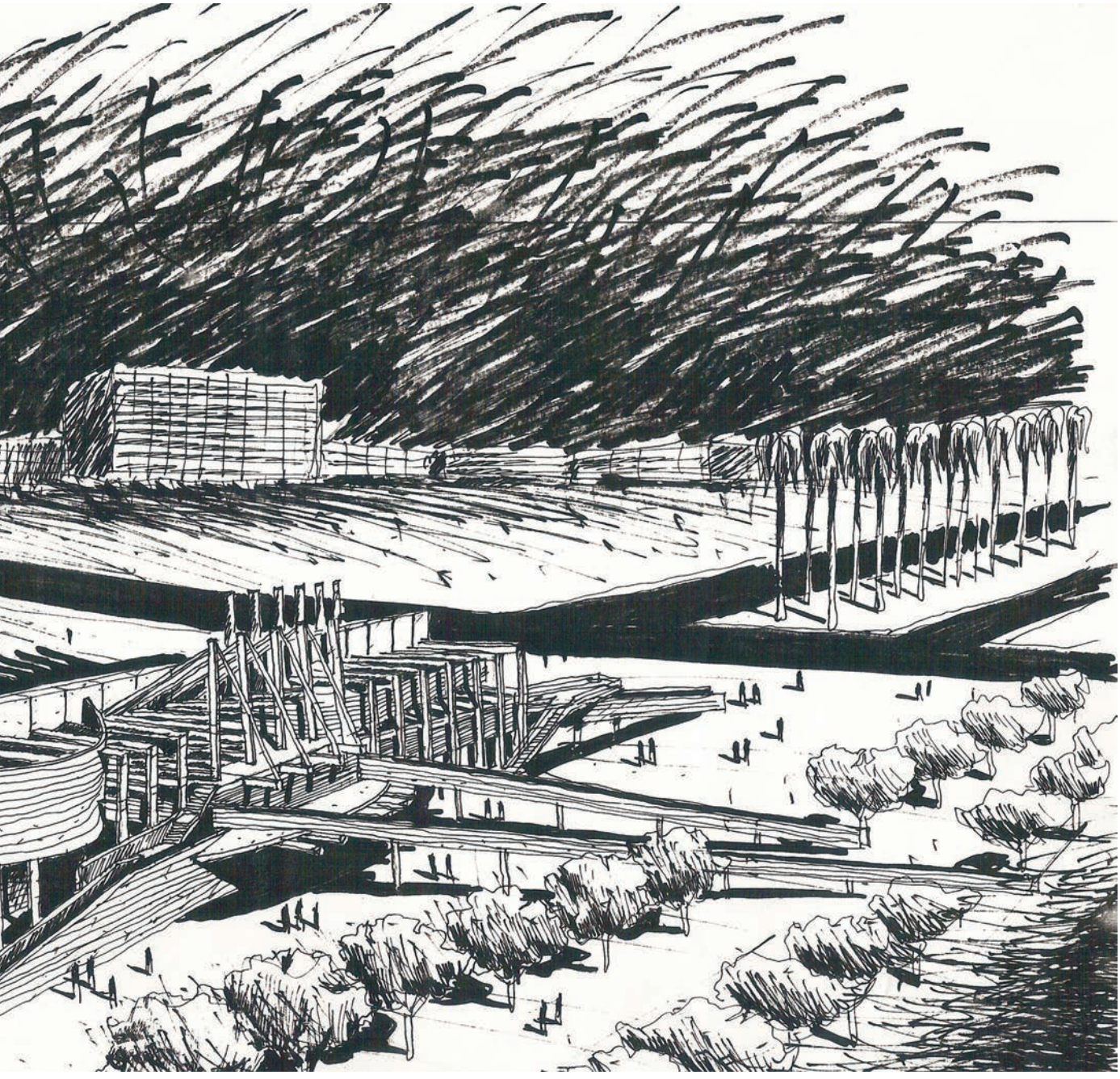
*Fórum/Triton showroom, São Paulo – Pencil, India ink and water-based ink pen on drafting paper (40x30cm)*, Bruno Campos (1999).

*Showroom Forum/Triton, San Pablo – Lápiz, tinta china e hidrográfica sobre papel vegetal (40x30cm)*, Bruno Campos (1999).

Centro de Convivência *Campus* da Universidade Federal de Minas Gerais – Lápis, Nanquim e Hidrográfica sobre papel vegetal (40x30cm), Bruno Campos (1992).

*Universidade Federal de Minas Gerais Campus Facility Center – Pencil, India ink and water-based ink pen on drafting paper (40x30cm)*, Bruno Campos (1992).

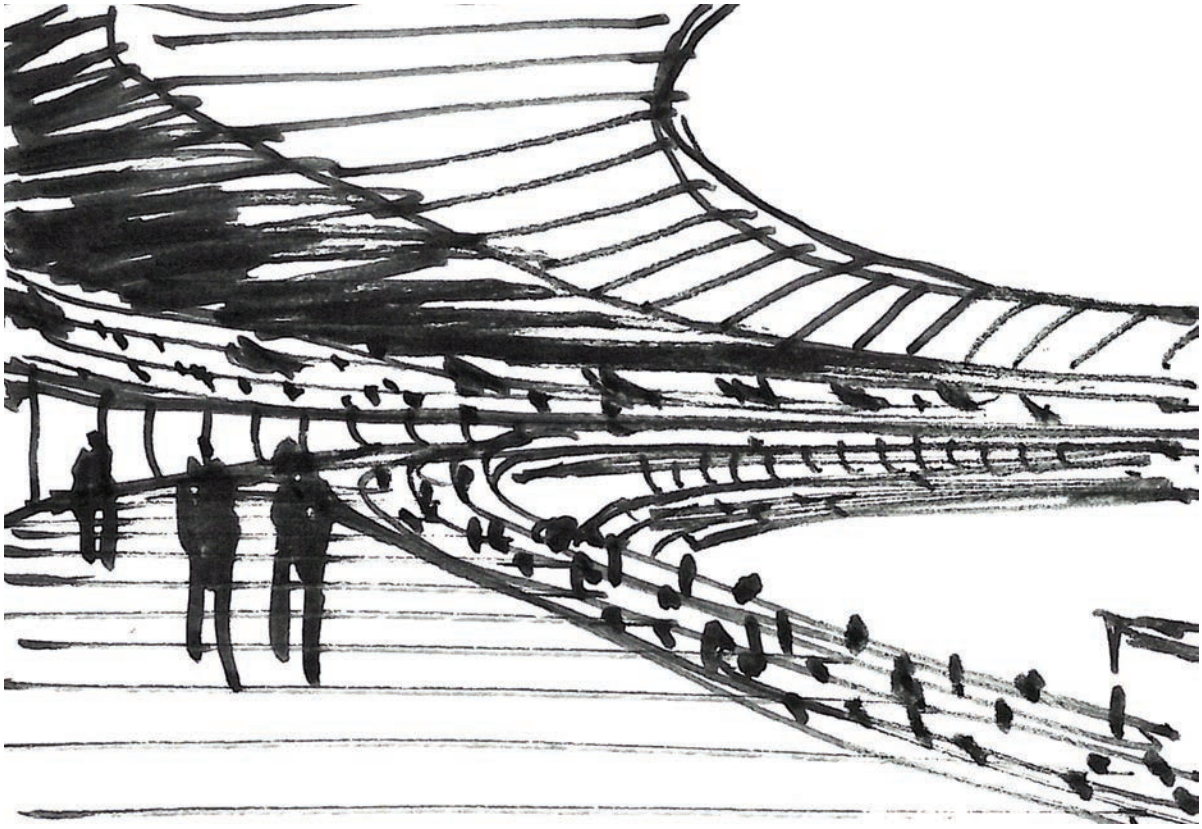
*Centro de Convivencia Campus de la Universidade Federal de Minas Gerais – Lápiz, tinta china e Hidrográfica sobre papel vegetal (40x30cm)*, Bruno Campos (1992).



Pavilhão do Brasil, Expo Sevilha – Lápis 2B e grafite 6B sobre papel manteiga (60x85cm), Bruno Campos (1990).

*Brazilian Pavillion, Expo Sevilha – 2B pencil and 6B graphite pencil on tracing paper (60x85cm)*, Bruno Campos (1990).

*Pabellón de Brasil, Expo Sevilla – Lápiz 2B y carboncillo 6B sobre papel manteca (60x85cm)*, Bruno Campos (1990).

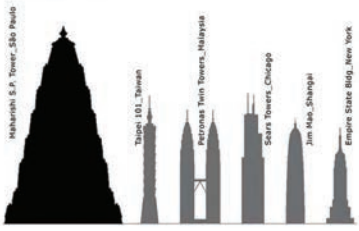


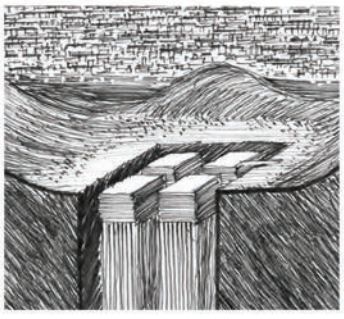
Renovação Estádio Mineirão para a Copa do Mundo 2014 – Hidrográfica sobre papel sulfite (20 x 20 cm), Bruno Campos (2011).

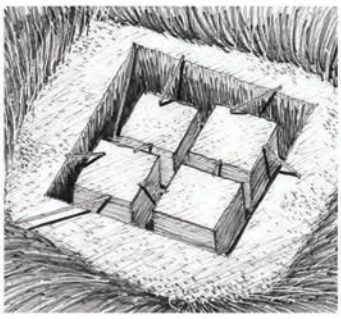
*Mineirão Stadium Renovation for the 2014 FIFA World Cup – Water-based ink pen on printing paper (20x20cm)*, Bruno Campos (2011).

*Renovación Estadio Mineirão para la Copa delo Mundo 2014 – Hidrográfica sobre papel sulfito (20 x 20 cm)*, Bruno Campos (2011).

In 2000, The Beatles ex-guru Yogi Maharishi and Brazilian entrepreneur Mario Garnero set forth to the design of São Paulo's Tower, eventually the highest worldwide. Nevertheless, it does not come true. 'Maharishi Tower', a real-fantastic epic, tells the possible unfolding of the would-be tower 20 times bigger than the world's largest skyscraper.



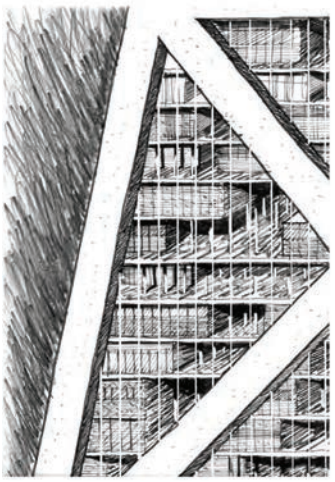


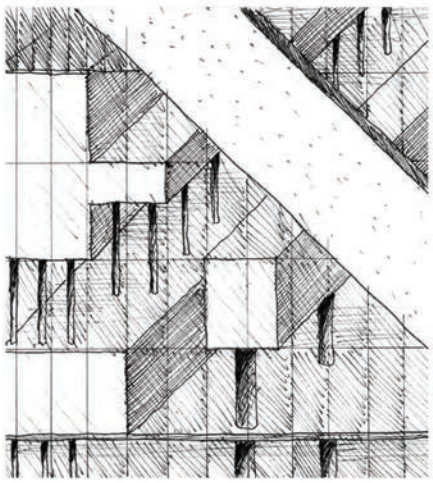
1. The guru Yogi Maharishi or "the great wiseman, scientist of the conscience" idealized the tallest building in the world, São Paulo's Maharashi Tower. The building was meant to be a compliment to the science of the Vedas and to hindu teachings ; it would avail itself of Vedic architecture, and have a total built area 20 times bigger than its existing counterpart. Besides, the project would be backed up on scientific research based in neuro-physiology, in psychology-expanding techniques, and on every field of knowledge directly or indirectly related to architecture and urbanism.

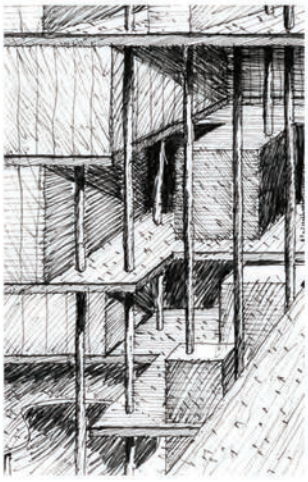
2. Out of all of the construction phases, the longest was the foundation: it lasted 5 years and reached 140 meters undeground level 300m (average level of nearby Tamanduatei river). Built in a 60-block area (or circa 7,500,000 square feet), the pilings occasioned the removal of mountains and mountains of earth that were taken to the construction of a huge landfill over the park that was supposed to integrate the design. Announced benefits were two museums, sixteen malls , four convention centers, five hotels, seven spas, and ten million square feet of constructed area distributed among offices, shops, apartments and everything else that a city may fit.

3. There would be four towers in fact: one at each corner of a square, and the space in between them would be addressed to suspended public areas in each of its 108 floors. Its pyramid-log shape, typical of Hindu architecture, would also bring to São Paulo the inherent power of the divine forces and supernatural energies capable of fighting evil and human sorrows and to put an end to violence, greed, jealousy, covetousness, and to every sin and vices of mankind.

4. And so, when the foundations were completed, the time came for the superstructure, which would be inspired by John Hancock's Building in Chicago, built in 1969. Inserted in the building's perimeter, all strengths of the structure would be reflected in the drawing of its tubular matrix, excusing the use of internal columns. The thrusts, reactions, settlings and torsions would be sorted out and refletected on the facade of the building. The architect chosen to develop the project was the Nipo-American Minoru Yamasaki. The reaction from the city against the monster was prompt: local architects, intellectuals, artists, etc. were definitely against the project and voiced their harmless opinions in newspapers and television networks -- while the first vertical signs of the pyramid had already been risen up in the horizon....



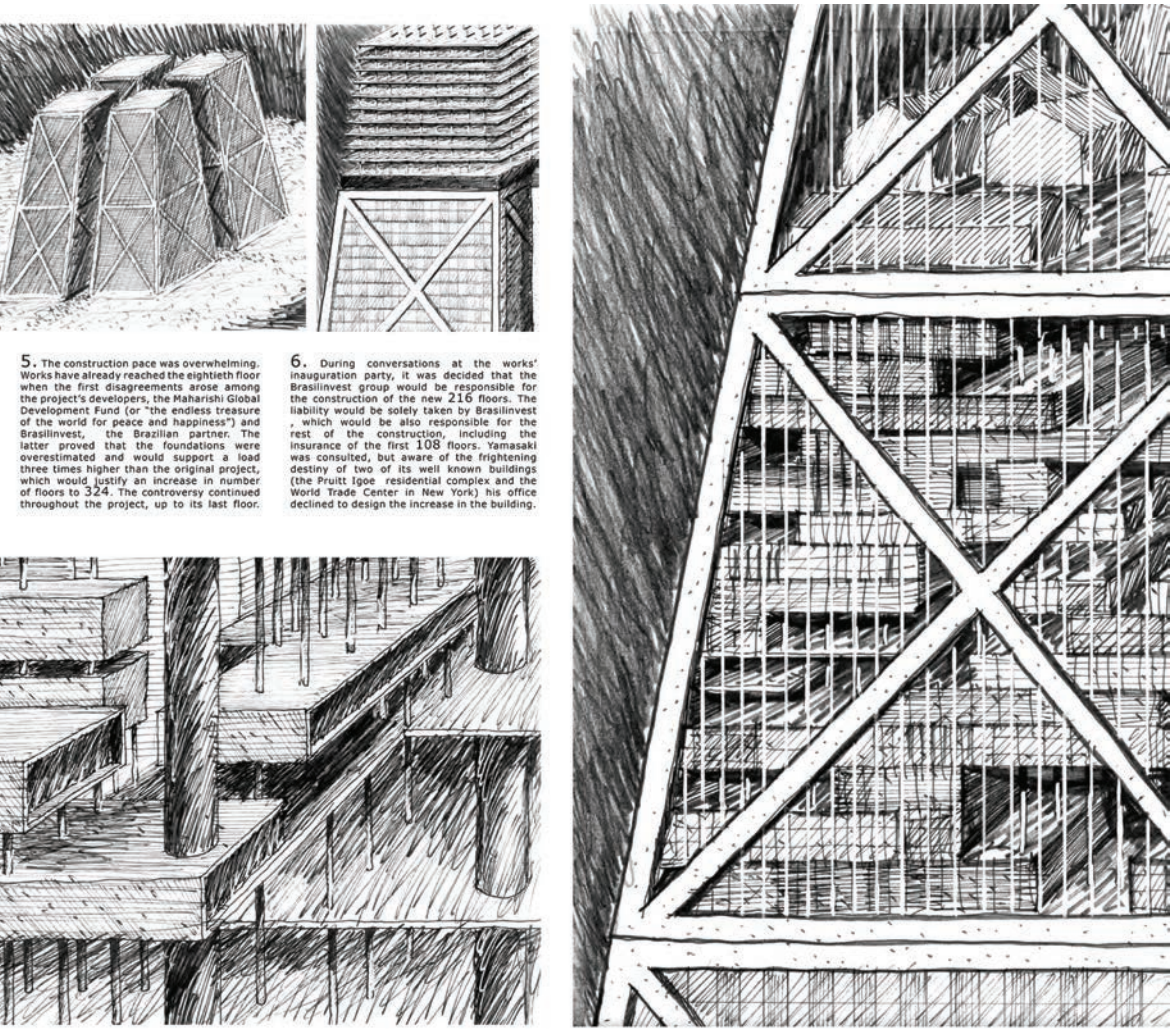




7. Nevertheless, the new structure could not be just a mere continuation of its original project: it would have to be adjusted in its perimeter so that the new loads would not damage the structure already erected, calculated to receive only 108 floors. Specialists were consulted and came to the conclusion that the best solution would really be to adopt another type of structure, which would alter the original structure of the building.

8. The guru's protests did not hamper the disturbance of the blessed-undertaking pyramid. An engineer specialized in reinforced concrete -- the typical structure of Brazilian architecture -- decided to insert a traditional mesh with orthogonal pillars and beams to reinforce the structure, according to practices prevailing in the country. Huge transitional beams would then support a mesh of 124 pillars located in the core of the building and no longer on the facade.

9. Up to the 147th floor, the developers themselves started to fear the height re by the construction. Three-meter swaying from side to side on the last floors workers descend desperately to levels less vulnerable to the wind-caused movem Frightened, the developers consulted architects and engineers of famous skyscr and came up with the idea to revert to a metallic structure by the insertion of cylindrical pillars into the middle of the building, which would reinforce the str of the skyscraper and make possible the maximum, effective use of its founda



5. The construction pace was overwhelming. Works have already reached the eightieth floor when the first disagreements arose among the project's developers, the Maharishi Global Development Fund (or "the endless treasure of the world for peace and happiness") and Brasilinvest, the Brazilian partner. The latter proved that the foundations were overestimated and would support a load three times higher than the original project, which would justify an increase in number of floors to 324. The controversy continued throughout the project, up to its last floor.

6. During conversations at the works' inauguration party, it was decided that the Brasilinvest group would be responsible for the construction of the new 216 floors. The liability would be solely taken by Brasilinvest , which would be also responsible for the rest of the construction, including the insurance of the first 108 floors. Yamasaki was consulted, but aware of the frightening destiny of two of its well known buildings (the Pruitt Igoe residential complex and the World Trade Center in New York) his office declined to design the increase in the building.

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10. That was the way the construction, up to floor number 184, had gone.

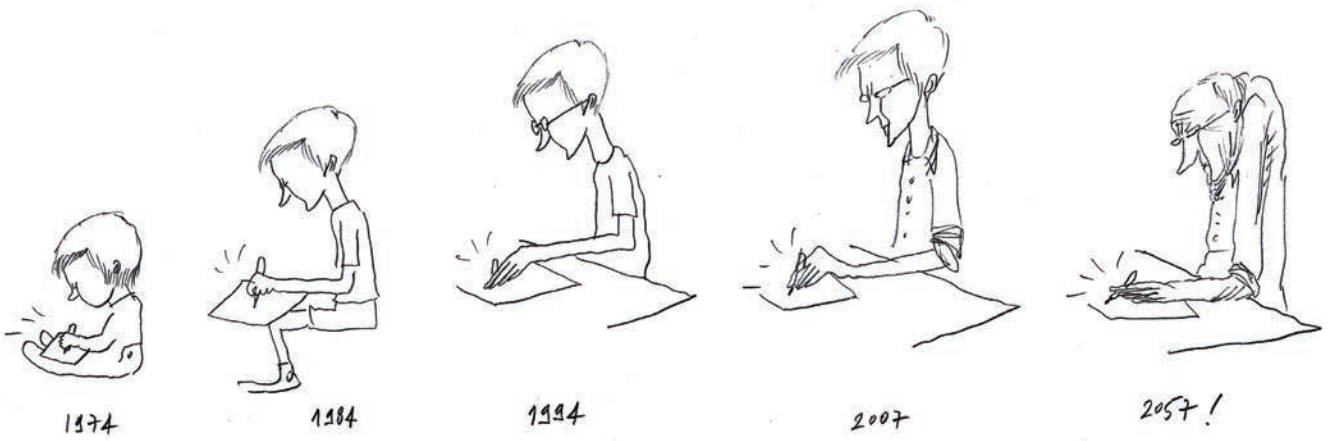
11. Suddenly, the developers ran out of funds. Oscillations in the always impredictable Brazilian economy, rumors about the building's destiny, and the reluctance from São Paulo's mayor to save the venture with public fundings led to the announcement of the end of the construction, at least temporarily. Works had stopped for more than three months.

12. But the workers of the four buildings – proud of that hundreds of floors already built – saw that incomplete colossus unbearable to their eyes and decided to carry on with the project themselves. "We want to continue the job by ourselves", they said. With no experience and no salaries, foremen and workers substituted metal trusses for wooden overlays onto the concrete and the previous work (concrete bridges and viaducts that articulated the four buildings), executing their own ideas whereas they were previously subordinated to engineers.

Maharishi, "O Condomínio Absoluto" – Lápis 2B, grafite 6B, nanquim, hidrográfica e corretivo ("Liquid Paper") sobre papel manteiga (vários tamanhos), Bruno Campos (2006).

*Maharishi, "The Absolute Condominium" – 2B pencil, 6B graphite pencil, India ink, water-based ink pen and correction fluid ("Liquid Paper") on tracing paper (various sizes)*, Bruno Campos (2006).

*Maharishi, "O Condomínio Absoluto" (El Condominio Absoluto) – Lápiz 2B, carboncillo 6B, tinta china, hidrográfica y corrector ("Liquid Paper") sobre papel manteca (varios tamaños)*, Bruno Campos (2006).




"Brunos" – Hidrográfica sobre papel sulfite (30X20cm), Bruno Campos (2007).

*"Brunos" – Water-based ink pen on printing paper (30x20)*, Bruno Campos (2007).

*"Brunos" – Hidrográfica sobre papel sulfito (30X20cm)*, Bruno Campos (2007).

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