

# Design Resolution



## FANTASTIC CHAIRS AND WHERE TO FIND THEM

### ABOUT THESE CHAIRS

Featured here is a collection of mythological chair types that inhabit the city of Pretoria. They have taken on the personalities of the spaces they inhabit and evolved into a family of curious beings that occupy our inner city spaces. Their personalities are based on what they 'hear' – what they acoustically witness. Some enjoy their surrounds, others fear them, and still more begin to project their own sound effects into the spaces. Importantly though, it is necessary to recognise the individuality of each and the environs in which they are located. If they serve as nothing else but a reminder to stop and listen every once in a while, they will have fulfilled their purpose.

### A BRIEF HISTORY OF CHAIR AWARENESS

The chairs are believed to be as old as the city itself and have continued to inhabit it alongside humans since the beginning. According to available records, chairs and people used to enjoy a close and friendly relationship – the chairs revelled in the variety of acoustic environments being created as the city developed. However, during the period of heavy construction during the middle and latter half of the 20th century, the onset of modernism fuelled the destruction of a great number of these habitats. As such, the record of chairs that is available at present is vastly incomplete and the chairs' dwindling numbers bear this out. No longer are the patrons of the city greeted by a friendly chair in the morning as the remaining survivors have taken to listening rather than anything else. It is believed that the chairs migrated into the hidden and inbetween spaces of the city in search of greener pastures.

### CHAIRS IN HIDING

Although many chair types have been accounted for, some may have slipped through the notebooks of the intrepid chair-ologists that have recorded their existence. Some are believed to have camouflaged themselves so well as to go undetected and have morphed into the spaces that they once occupied.

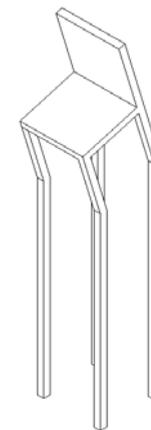
## WHY CHAIR-ZOOLOGY MATTERS

If we are to understand the existence of these fantastic chairs and conserve them for future generations, it is necessary for us to understand the habitats they occupy. It is only through awareness and listening that we can begin to understand the full story of the chairs and what we can learn from them.

### WHAT TO DO IF YOU ENCOUNTER A CHAIR

Should you be in the fortunate position of encountering one of these rare creatures in the city, be not afraid – simply take a seat and listen.

## A COMPENDIUM OF CHAIRS AND THEIR SPATIAL EFFECTS



### Rooftop

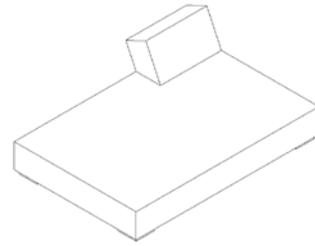
Looks down upon the city from its lofty height, and as such believes it has far more perspective than any other chair. It comes across as indignant, smug and unwarrantedly majestic. It enjoys its view of the sky and the horizon beyond. It shares its rooftop home with the birds of the city and concerns itself with their well-being, gathering them close so as to hear their stories. Often though it over-hears noises that reach it from below – quiet because of their distance – and wonders about conversations that are happening and slips into gentle contemplation. Even the sounds of taxi's and buses, so often grating when heard from street level, obtain the a more gentle quality up high. Despite the feeling of superiority then, often finds itself gazing downward rather than upward.

▲ Fig. 269  
Fantastic chairs of Pretoria



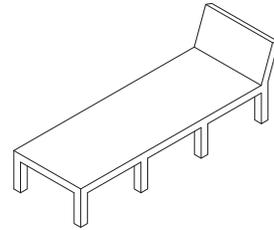
### Basement

The basement-dweller grew to like its cavernous, underground dwelling; enjoying the sanctity of being hidden away from the noises of the street, aware only of the faint ripples of sound that reach it from above. The bassy-rumbles that reverberate through the structure of its surroundings are nothing more than a pleasant massage when felt from underground, and it is to these rumbles that it prefers to listen to – spreading itself wide and low; basking pleasantly in sonorous sound waves. In the evenings, when all is quiet, it is said to sing softly to itself, returning the ripples of sound to the surface – although no-one is around to hear it.



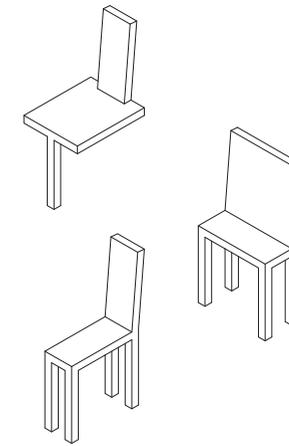
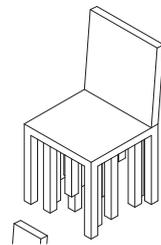
### Multi-Story Parking Lot

The greedier cousin of the basement-dweller, takes up more and more room in its efforts. More pompous and indiscreet than its cousin, it broke free from the underground in an effort to hear more of the world. Lurking demurely under the pretence of utility and cloaked by commercialism and privacy, it lies in wait for its victims. Twice a day, around eight and five, it springs into life and, having waited patiently, it greets with gathered exuberance, spluttering the day's news at a somewhat incoherent pace. Exhausted after such outbursts, it takes its time to recover, sharing the space with its other silent partners and listening sleepily.



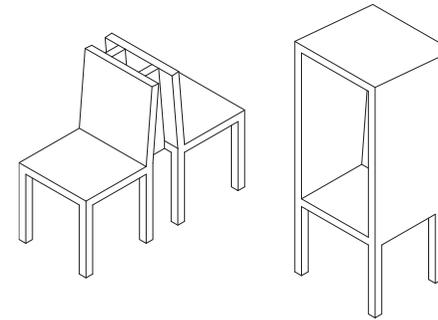
### Atriums and Enclosed Volumes

A confused individual, mutated by the reverberations of its artificial interior. Sounds reach it through tunnels, light is filtered through skylights, plants are ever-green plastic. Nervous, it tries to please all – emulating the pastiche of its surroundings.



### Gaps

Wanders the city at night trying to fit into the gaps between buildings, but no gap is quite right – being too wide mostly. Once nestled it awaits, trying it on for size and fooling people into thinking that it isn't there. Inevitably someone stumbles across it, and forces it into use; but that isn't its purpose; it is only there to seek out the voices of ghosts between two buildings that refuse physical contact with each other.



### Pedestrianised Streets and Open Arcades

The most popular of the chairs, but more by chance than personality, the XXXXX found itself surrounded by people and activity. As such it has spawned numerous types and forms in response to the sounds it follows around. Always busy and always talking, wanting to interact with people, the XXXXX is forceful, rude perhaps, and overly interested in the conversations between people. It puts you on display and doesn't allow privacy, waiting for its chance to unleash the latest rumours that it has eavesdropped on. One can feel its cravings for rumours growing, a gathering excitement that clamours forth in its outbursts. No-one or no-thing is safe, and if it has been heard it will be repeated.

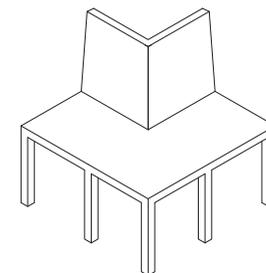
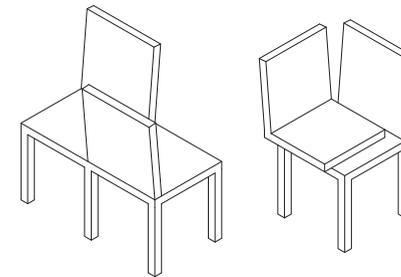
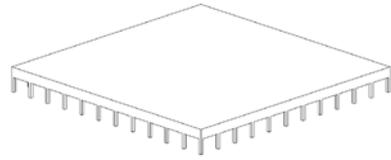


Fig. 270-80  
*Fanstastic chairs of Pretoria*

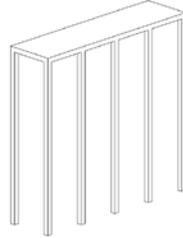
### Hard Square

Open to all sounds, from all sides and all directions. However, despite its friendly and gracious nature, the sounds only reach it from a distance. It can't understand why, but no matter how hard it tries it can't get them to come closer. Most definitely giving more than getting, it spreads a little more by a little more, trying to edge itself closer to where it knows the sounds are coming from. Occasionally people stop by, rest for a moment, and its heart is warmed; but before long, and far too quickly for the XXXXX, they move along and out of ear.



### Closed Arcades

Feels trapped, longing for fresh air and a view of the sky. It is believed to be an original resident of the city of Pretoria, but has become stifled in recent years, choosing rather to sulk in its darkness - slightly bittered with the passing of time and neglect. It wasn't always like this and it often reminisces of a grander time when everyone would pass by and greet it warmly. It would play songs and entertain children, give advice on the latest fashions and generally contribute positively to the city.



### Service Alley

Watches furtively as the world goes by. Few heed its presence, only rushing past with occasional gestural politeness; yet it continues to call softly, and await softly, unnoticed and underappreciated. It remains polite at all times and readies itself for the regularly occasional use it knows it shall receive. The most polite of the family and always willing to serve, it spends its days listening to the hustle and bustle of the street that lies just out of reach. Often it slips into daydreams of glamour but is swiftly brought back to reality by the drones of air-conditioning ducts and the flutter of pigeon wings - its only company in its dwelling.



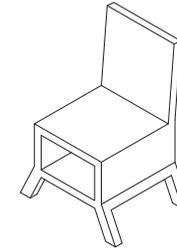
### Soft Squares

Guards its borders fiercely, holding onto the small collection of natural sounds it has hoarded. As such it is tremendously shifty and easily startled by unnatural noises, before brutally drowning out whatever has attempted to encroach upon its territory. It is almost impossible to approach directly, but can be snuck past carefully, as long as one doesn't bring anything artificial sounding into the space. When it isn't patrolling its territory, it sits quietly and indulges in the simple pleasure of listening to the sounds of birds, of the wind, of grass and flowers - content with this small collection of the natural in a city which has been overtaken by commerce and industry.



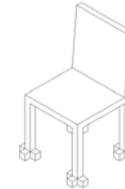
### The Greedy One

Makes its way slowly through the city, imperceptibly moving and slowly growing wider, bigger, fatter. It collects all the sounds it comes across and stores them away, breathing in everything to the point that, if one passes it, one perceives a change in volume of the surroundings. Snippets of conversation go missing and have to be repeated; sirens suddenly die down and flare up again; mating birds have to move as it crawls past causing their songs to disappear. Goodness knows what will happen if, one day, its seams burst and it releases a torrent of noises back into the city.



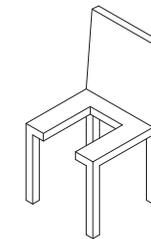
### Zoo

Was brought up in the zoo but escaped. It sneaks around the city projecting the sounds of its childhood: elephants, zebras, monkeys...



### The Wall-Listener

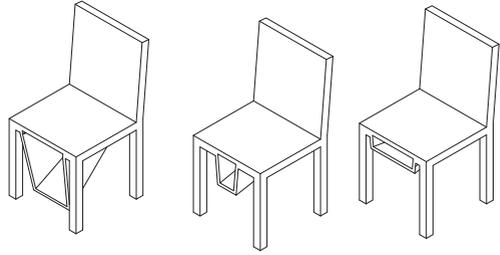
The Wall-Listener approaches walls, carefully at first, trying to hear if there are any faint echoes or reverberations still lurking in its material. If it picks up something, however faint, its mood changes, becoming far more bold. It latches on to, or around, and sucks in whatever it can, tasting conversations and noises from days gone past, soaking up the hidden stories of the city. It guards this knowledge jealously, keeping it to itself and quickly running on to the next possibly place where it can sit, listen and clean up acoustic residue.



▲ Fig. 281-287  
Fantastic chairs of Pretoria

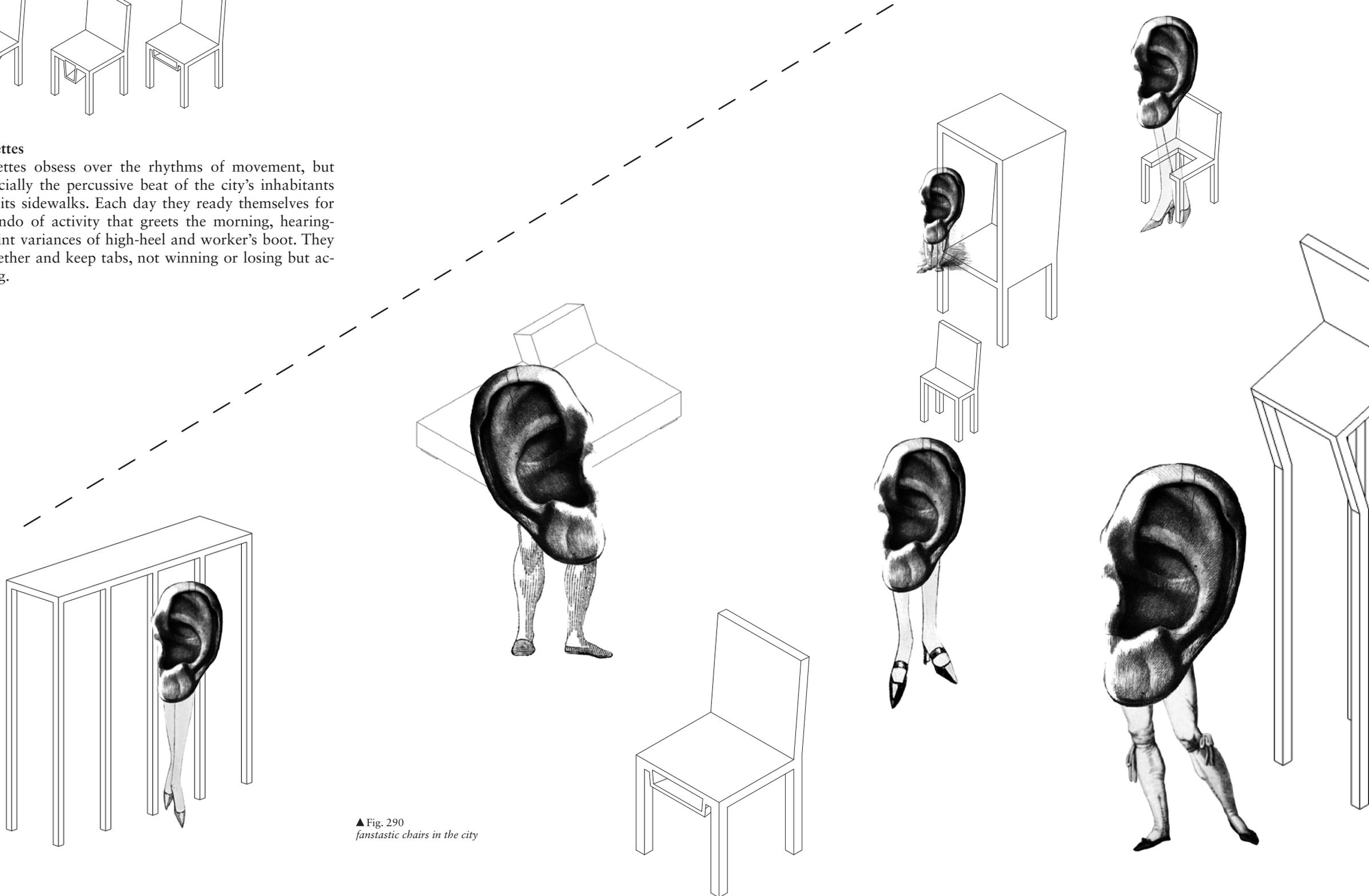


◀ Fig. 287-289  
*Fantastic chairs of Pretoria*

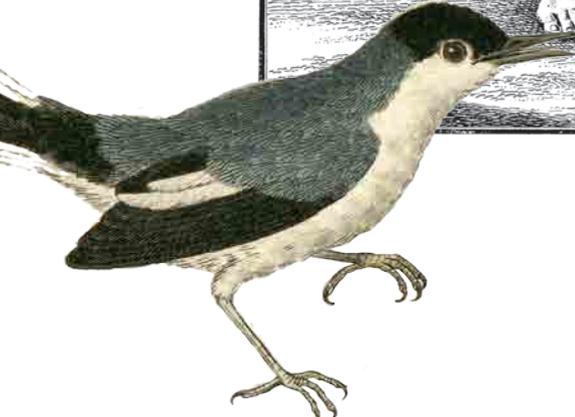
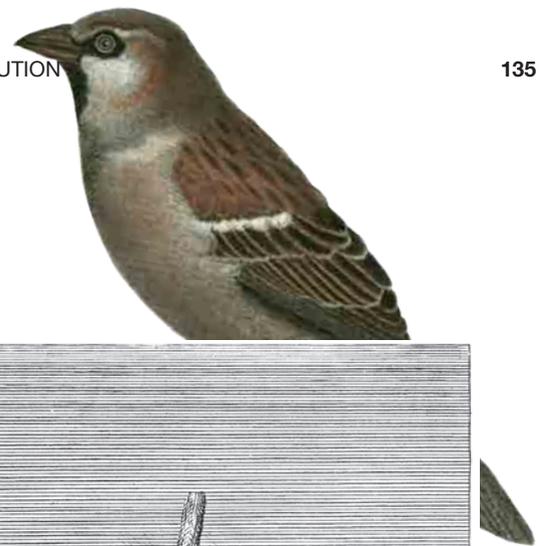
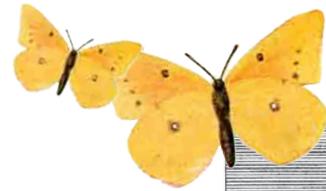
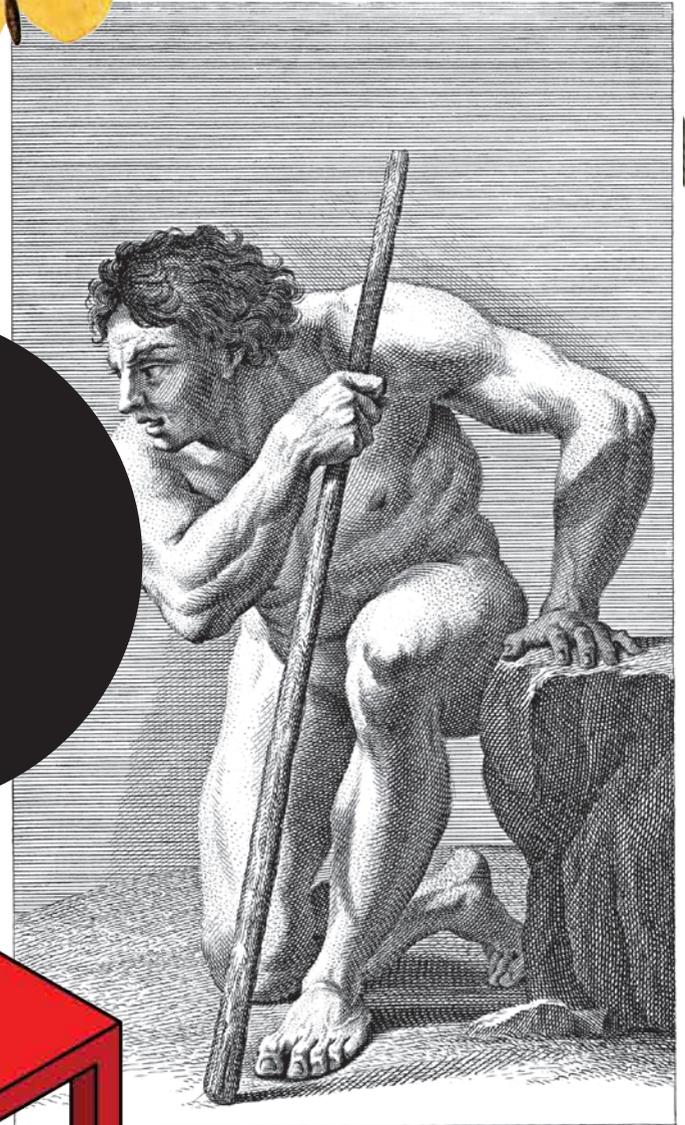
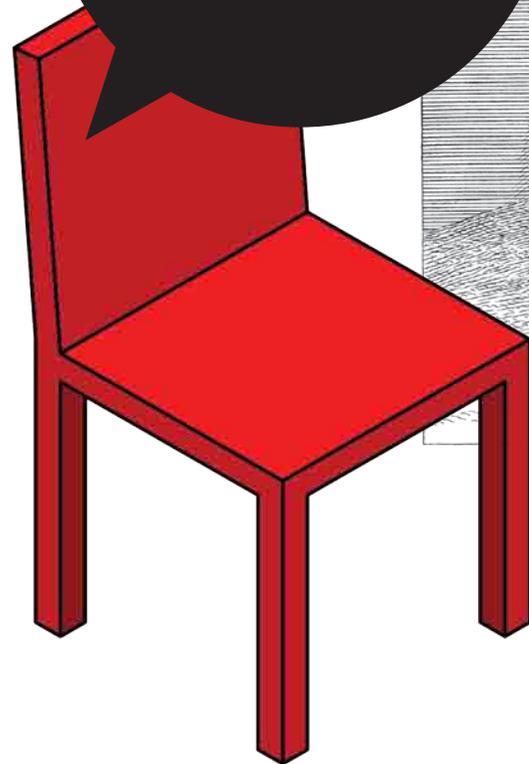


### The Triplettes

The Triplettes obsess over the rhythms of movement, but most especially the percussive beat of the city's inhabitants pounding its sidewalks. Each day they ready themselves for the crescendo of activity that greets the morning, hearing-out the faint variances of high-heel and worker's boot. They group together and keep tabs, not winning or losing but accumulating.



▲ Fig. 290  
*fantastic chairs in the city*



▲ Fig. 291-292  
Conceptual collages



## Chairs in Hiding

Although many chair types have been accounted for, some may have slipped through the notebooks of the intrepid chair-ologists that have recorded their existence. Some are believed to have camouflaged themselves so well as to go undetected and have morphed into the spaces that they once occupied.

Thus far three such spaces have been discovered and will be briefly discussed here.

### Space 1: Andries Street

The chair that occupied this space preferred peace and quiet and thus snuggled into the quietest space it could find. Situated close to the previous premises of the National Library, this space is acoustically shielded from the cacophony of the surrounds.

### Space 2: Pretorius Street

This chair on the other hand revels in the reverberations of the modern city and simply loves the sounds of cars and buses and taxis and trucks as they whizz by. As such it has created an echoing chamber that amplifies the effect of the passing traffic and throws it back out into the streetscape.

### Space 3: State Theatre

The most recently discovered space was found to be masquerading as an air-conditioning duct. However, the tall metal section allows the sounds of nesting pigeons to ripple down to street level. In effect it is an acoustic periscope bringing the sounds of rooftops down into the street.

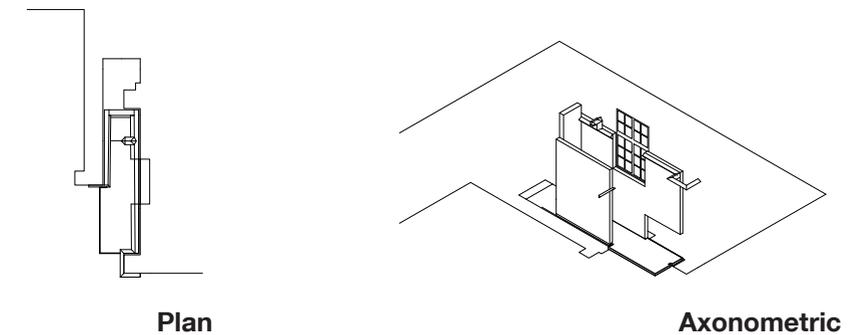
### Conclusion

These spaces occupy the inbetween spaces of the city and respond in form and material to the spaces and sounds around them. When used by the city-dweller they become oversized instruments and acoustic toys from which to project yourself into the city, sit back quietly and listen, or get a within earshot of the natural side of the city centre.



▲ Fig. 295-296  
Social Instruments

## Space 1: Andries St

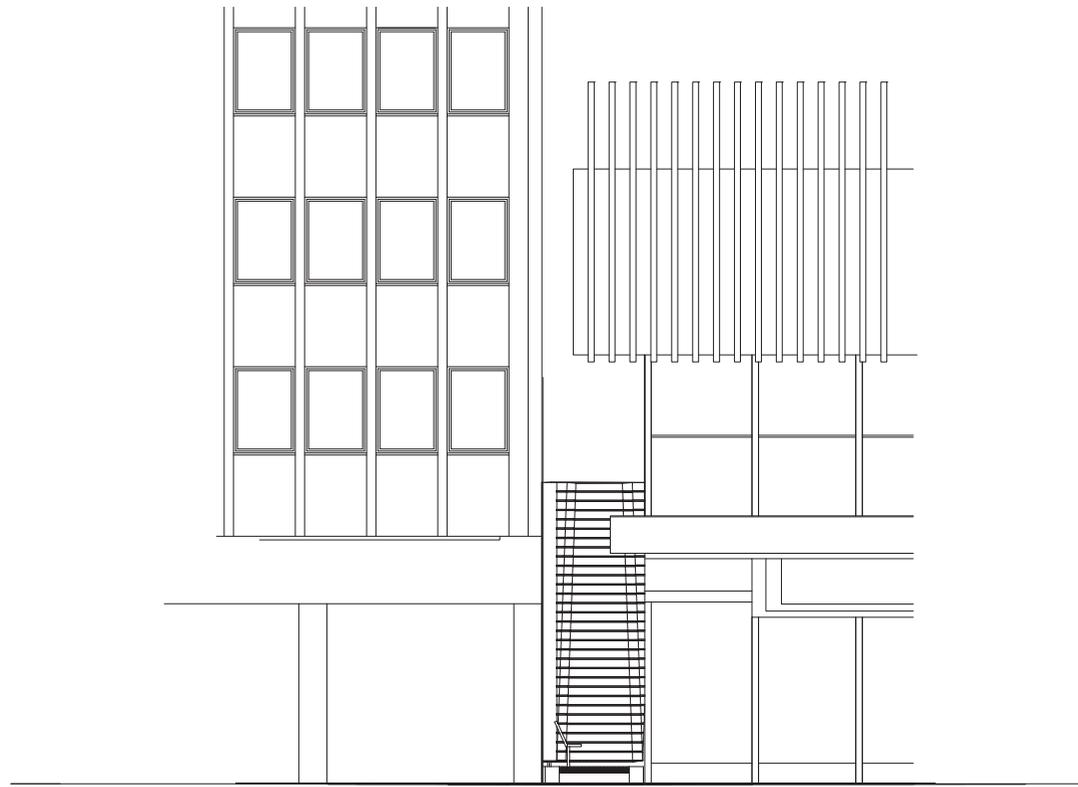


▲ Fig. 297-299  
Diagrams: Space 1

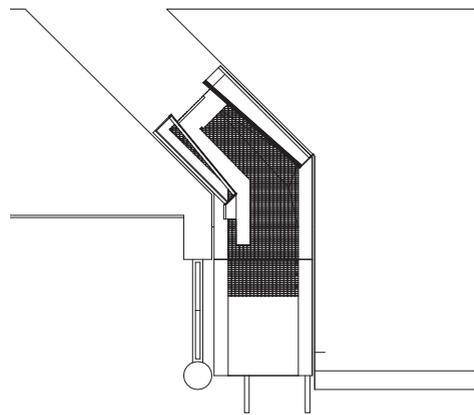


### Space 2: Pretorius St

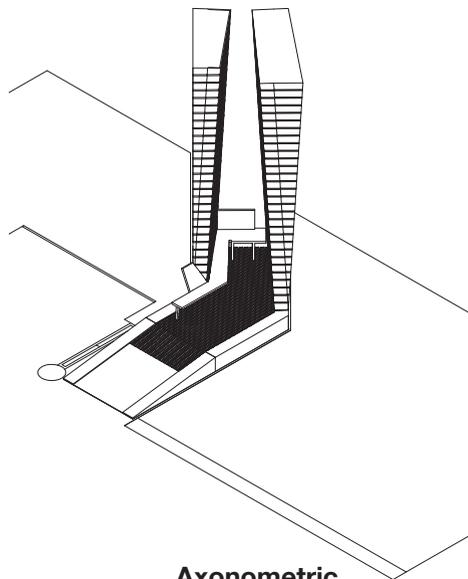
### Space 3: Acoustic Periscope



Elevation

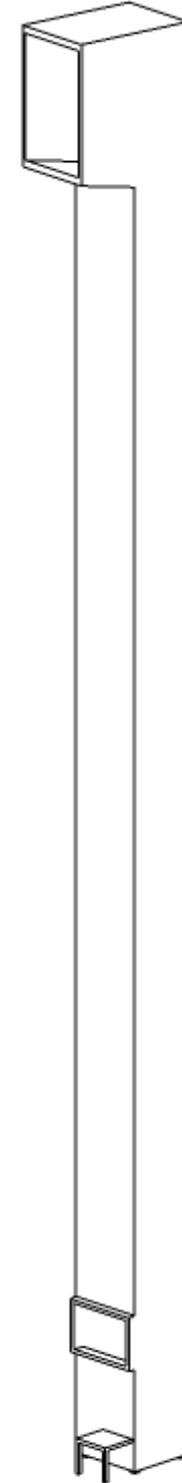


Plan



Axonometric

▲ Fig. 300-302  
Diagrams: Space 2



▲ Fig. 303  
Diagram: Space 3

## Part 3: Infill Typology and Festival

### Description

This part of the design proposes an infill building typology that can be used as a live/work space, office space or private studio. From such a building it would be possible to house the requirements for hosting a sonic festival – the infill providing a base and meeting point within the city centre.

### Choice of Site

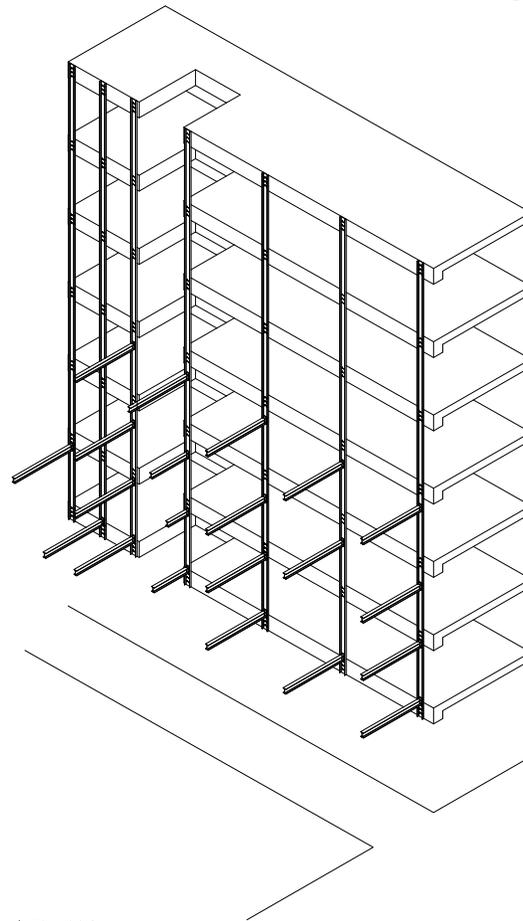
The choice of site was governed by its sonic qualities, but also by its dimensions and locale. Of the sites investigated it was felt that the proximity to Church Square, Cafe Riche, and other thesis proposals within the same block provided an ideal location.

### Chairs and the Festival

A festival framework allows the above mentioned hypothetical chairs to be re-situated within reality. The ‘little red chair’ now functions as a visual signpost to an acoustic quality or event.

### Elevated Structure

The proposed structure for the infill typology is to be suspended from the existing concrete-framed Poynton’s Building that borders the western edge of the service passage. The concrete structure of the building is typically over-engineered and therefore able to accommodate alterations and additions with relative ease. A second consideration is the heritage building that forms the eastern boundary. It was decided to design structure that would not impact upon this building. The third consideration is the network of services that run in the ground beneath the passage. These services eliminate the possibility of

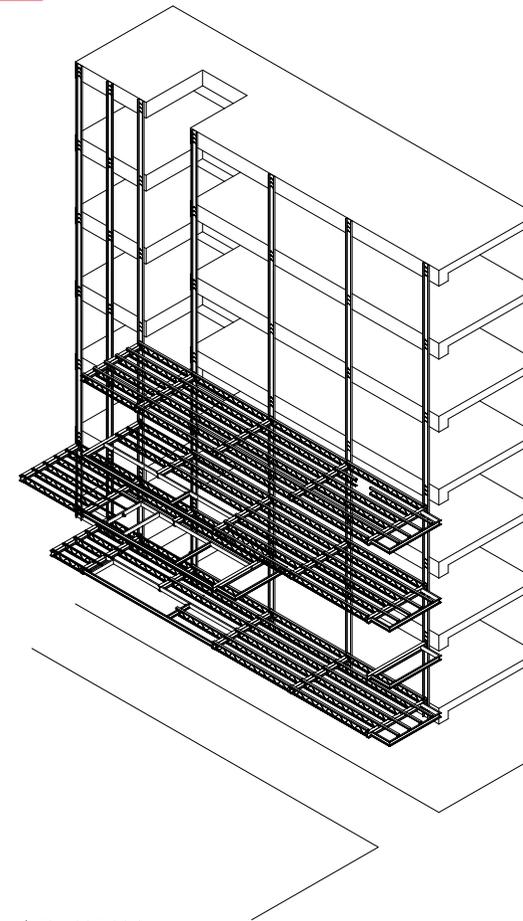


▲ Fig. 304  
Primary Structure

typical groundworks associated with a new building.

### Primary Structure

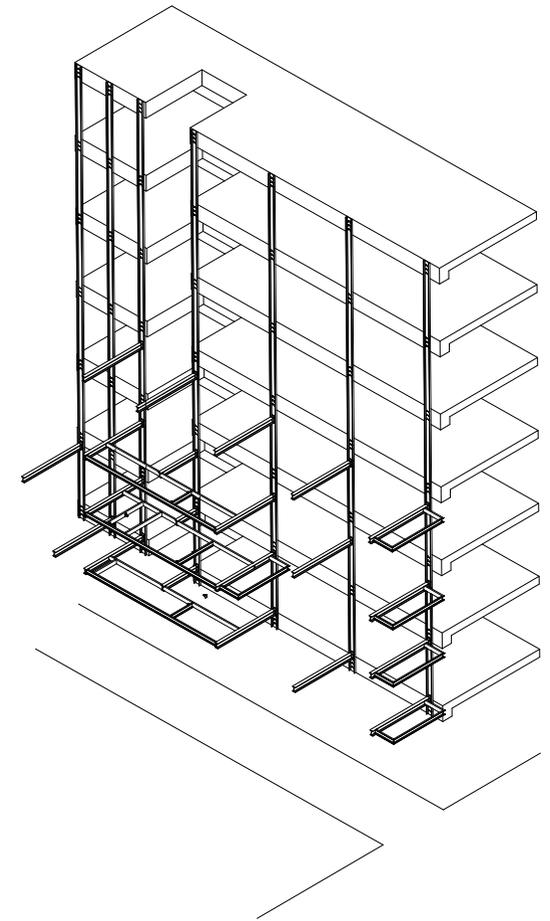
A series of steel channels is attached to the concrete floor slabs of the existing building. Welded to these are a number of steel beams, in essence forming a series of structural brackets.

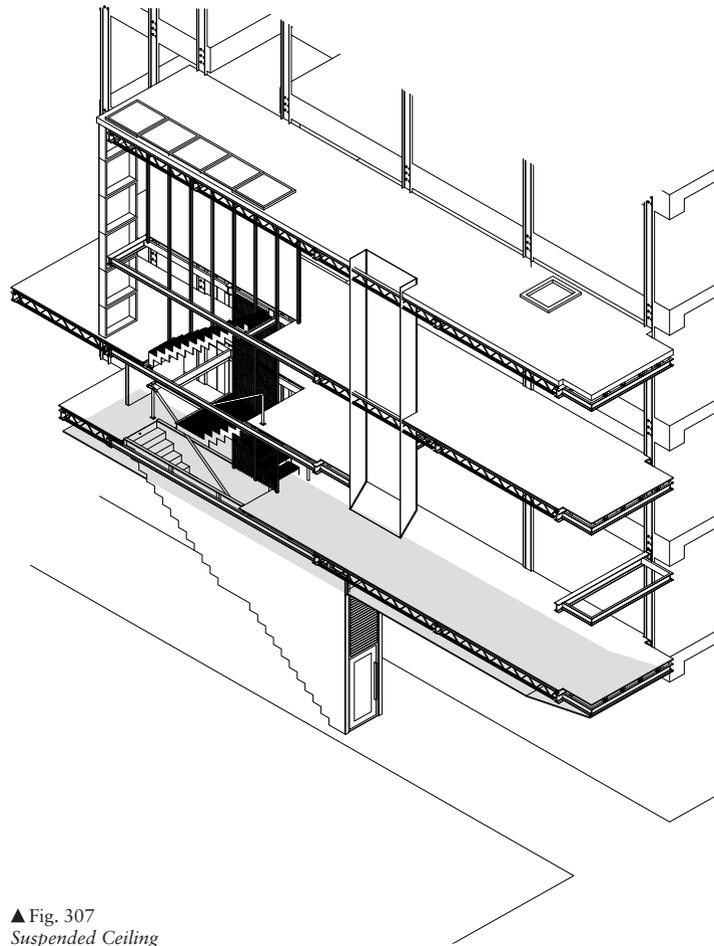


▲ Fig. 305-306  
Secondary Structure

### Secondary Structure

The latitudinal rigidity between the brackets is created by a series of open-web joists. The joists are lightweight and spaced so as to accommodate the internal floor structure. Where openings are necessary, for circulation and glazing for example, steel channels are used to brace the structure. These channels also form the members to which internal staircases are attached.



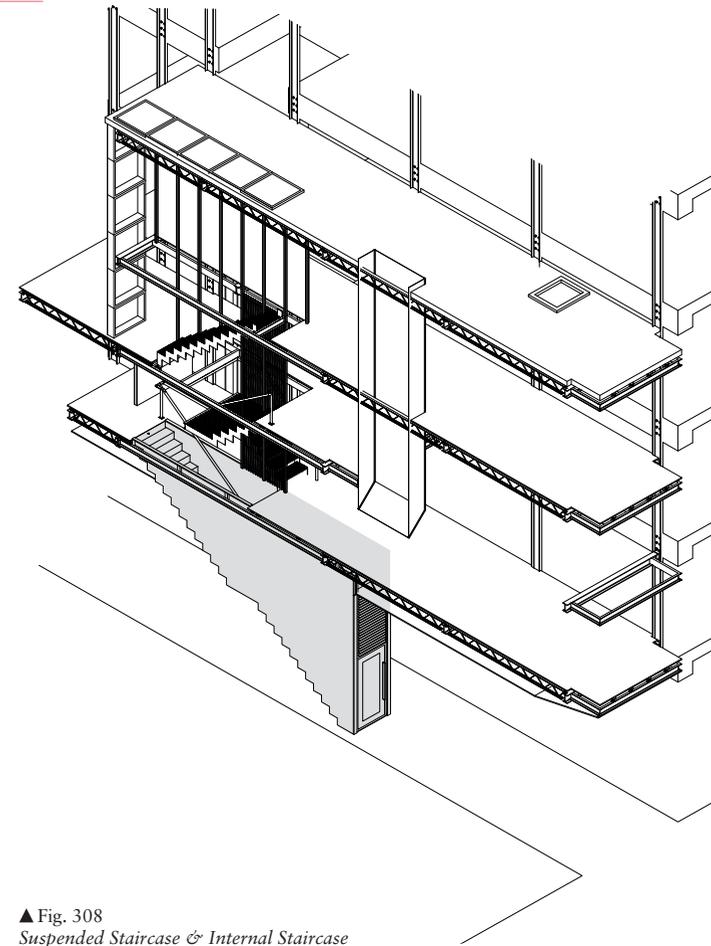


▲ Fig. 307  
*Suspended Ceiling*

## Arcade/Suspended Ceiling

The elevated structure creates a covered walkway that connects Church Street to the exterior spaces outside the Capitol Theatre and behind the Gauteng Tourism Office (previously the Old Nederlandsche Bank). The passage links to other thesis projects by Jason Wiggin and Carien Theart, who propose new uses for the Capitol Theatre and TPA Building respectively.

The suspended ceiling contains lighting and audio that allows the atmosphere of the passage to be manipulated depending on the event. The ceiling is angled upwards at the northern side and functions as a sound-reflective board. This allows sounds to be projected into the street and can be used for performances of music, poetry readings, or for people wanting to project their own thoughts and sounds into the streetscape.



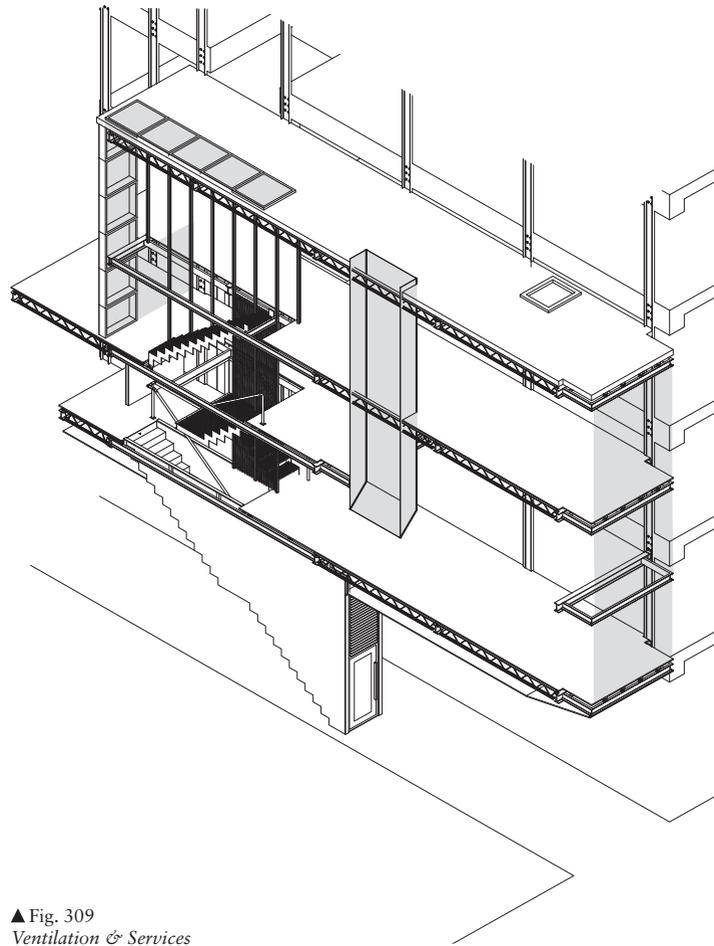
▲ Fig. 308  
*Suspended Staircase & Internal Staircase*

## Suspended Staircase

Access to the new structure is provided by a suspended staircase. The staircase, as with the structure, does not touch the ground. The cladding provides an opportunity for branding depending on the occupants of the work space.

## Internal Staircase

The internal circulation is provided by a staircase that connects the three levels. Its design features open risers that allow light to permeate down from the skylights. This effect is further enhanced by the use of steel gratings as the treads.

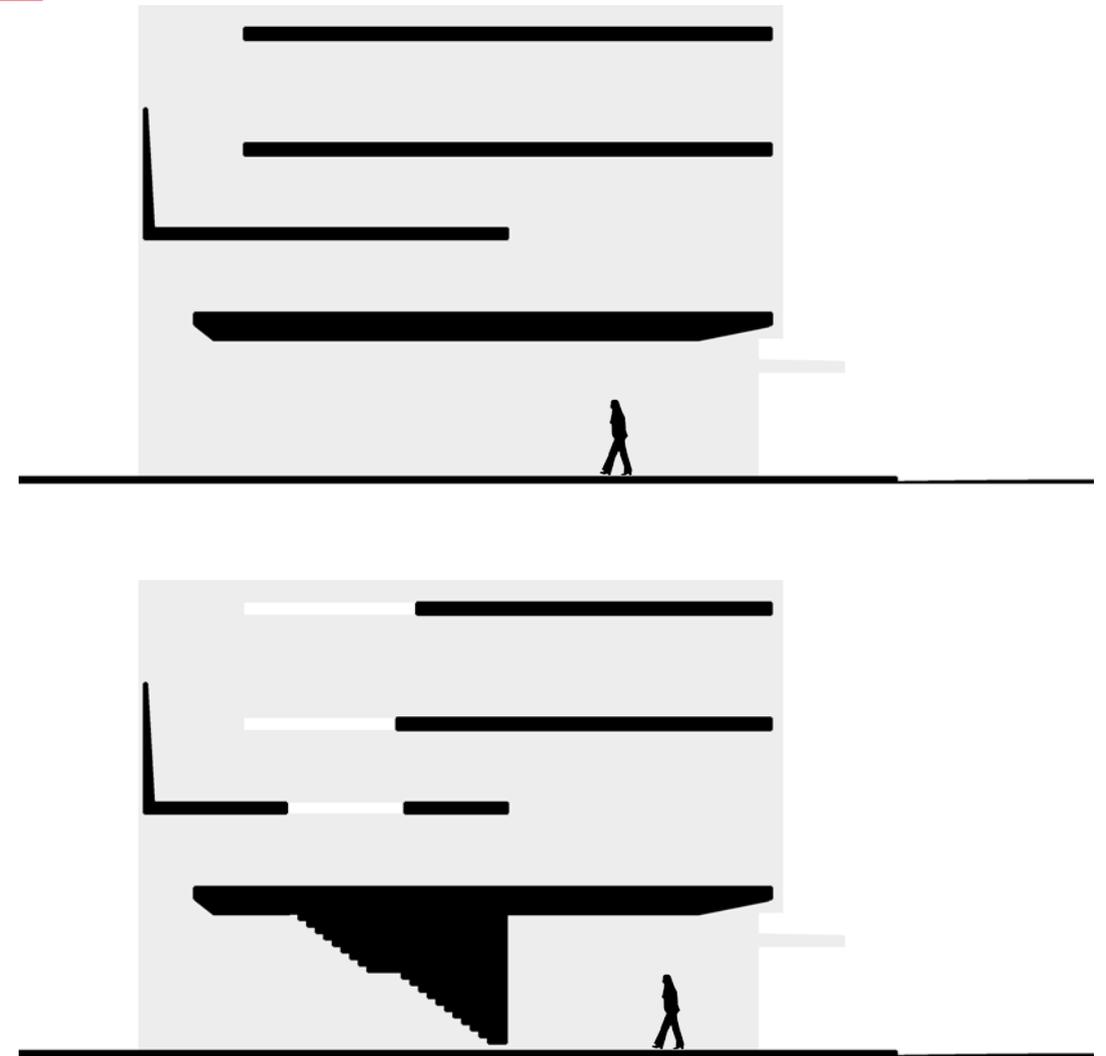


▲ Fig. 309  
Ventilation & Services

## Ventilation & Services

Natural ventilation is provided by openings in the front (northern) and rear (southern) facades, as well as by ventilated skylights above the staircase.

Water supply and sewerage connections rely on the existing connections of the Poynton's building. Electricity is provided through solar panels placed on the roof. Services are placed on the western side of the proposal, allowing them to be grouped together neatly and carried to connection points at ground level.

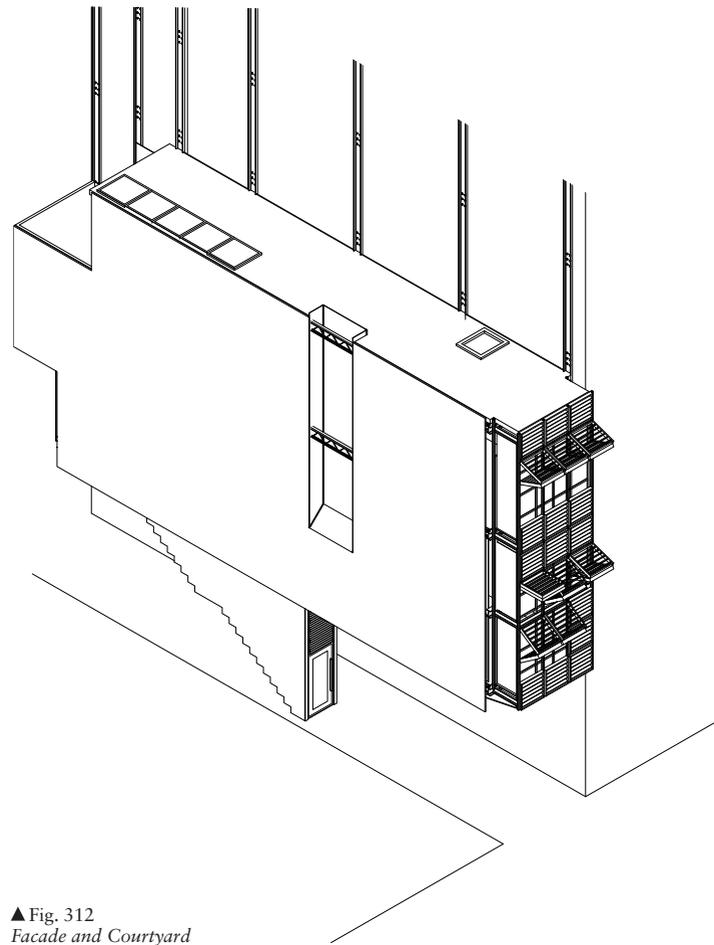


▲ Fig. 310  
Diagrammatic section showing floor levels

▲ Fig. 311  
Diagrammatic section showing floor cuts and entrance

## Floor Levels

The internal volume of the building is divided into three levels that denote various uses. The first level is an open work space. The second is a mezzanine that provides access to an internal courtyard and creates a double volume above the workspace below. The third level is a more private living/studio space.



▲ Fig. 312  
*Facade and Courtyard*

## Facade

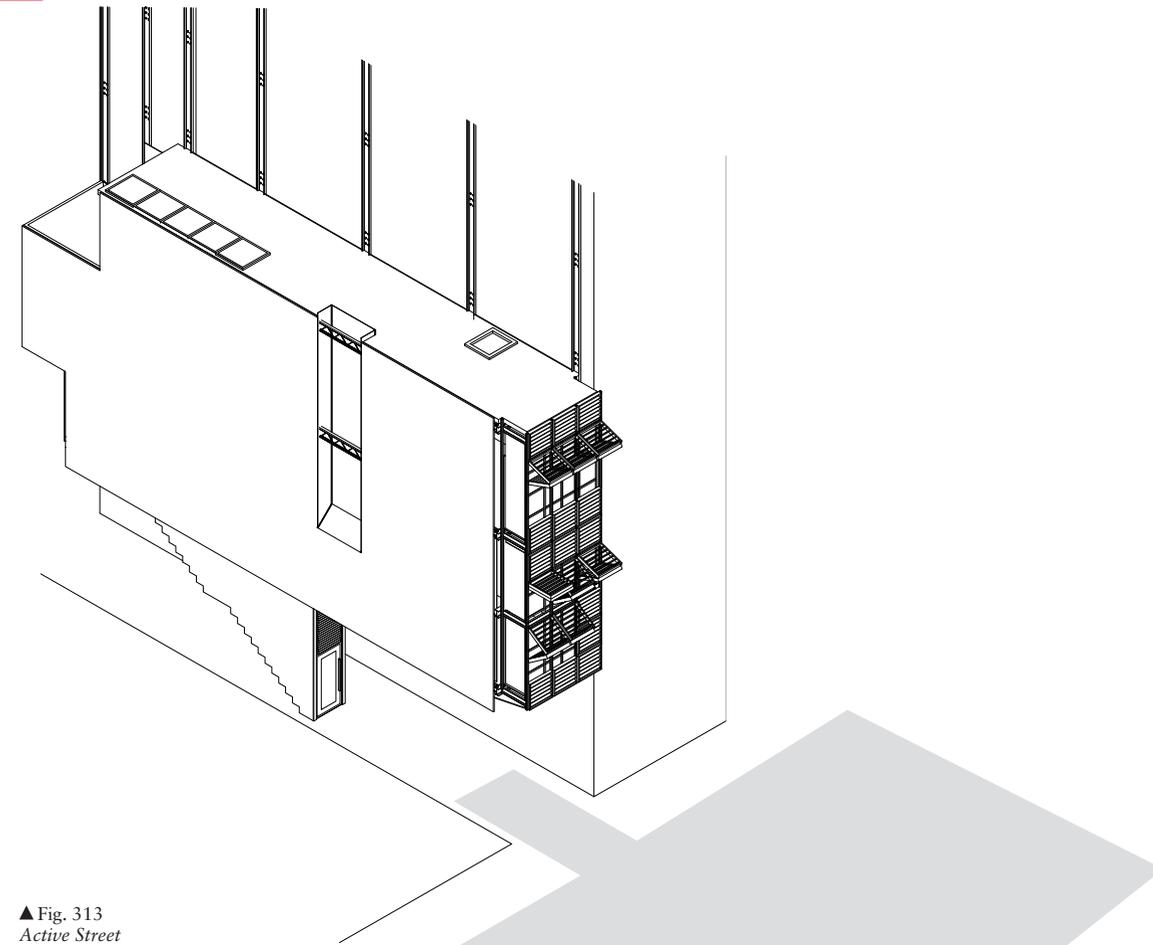
The northern facade serves as a sun screen and external projection surface. It consists of a glazed internal curtain wall and an external system of louvred panels.

## Courtyard

The internal courtyard provides a private, quiet area that is open to the sky. It also allows additional southern light to penetrate the building.

## Other Facilities

To function as a festival base, additional facilities can easily be housed within the structure including wi-fi access, Bluetooth, and FM radio transmission. These facilities allow

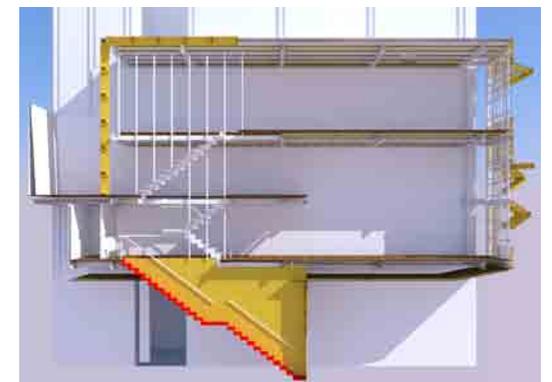
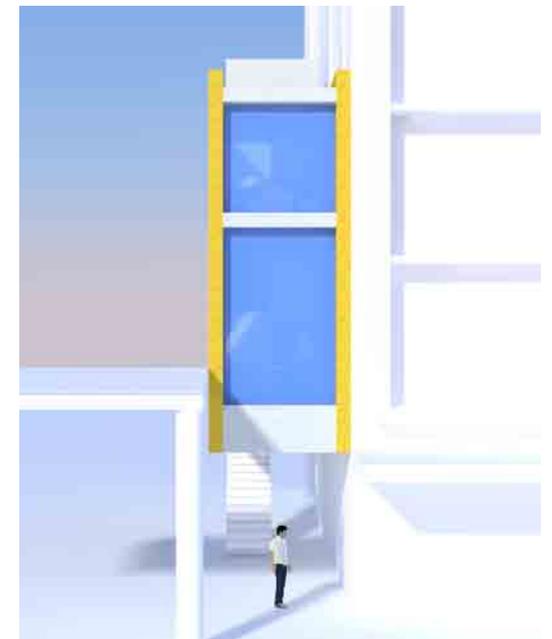
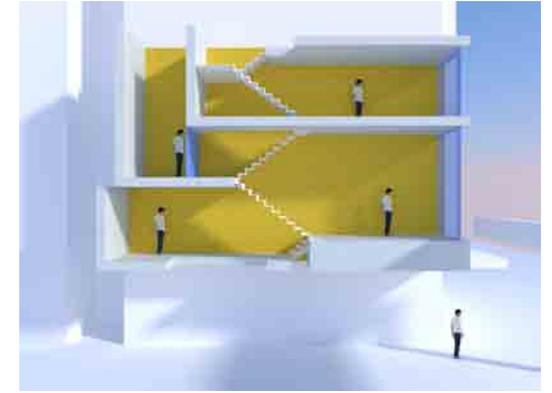
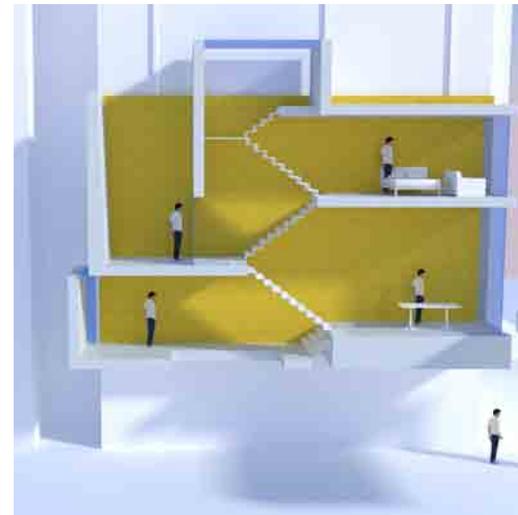
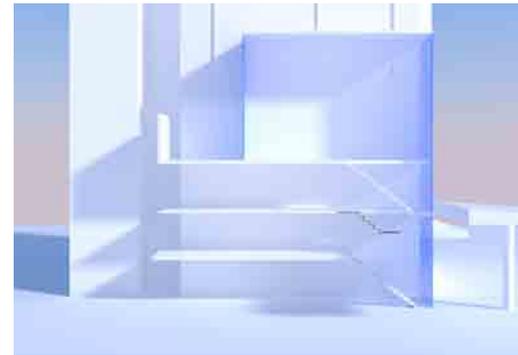
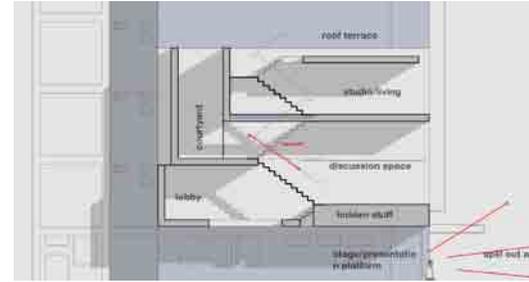
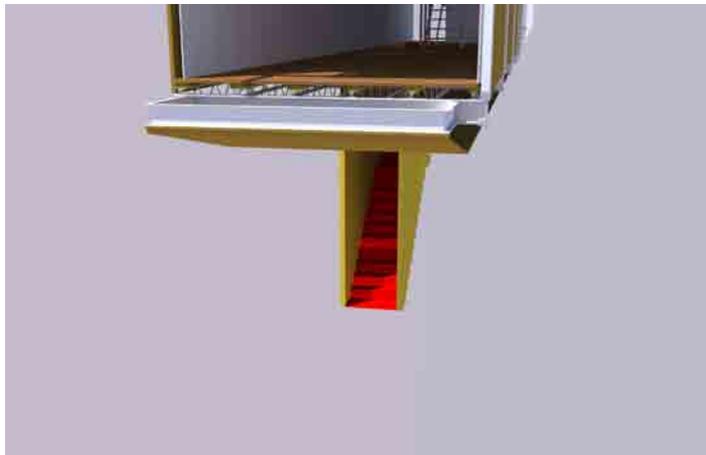
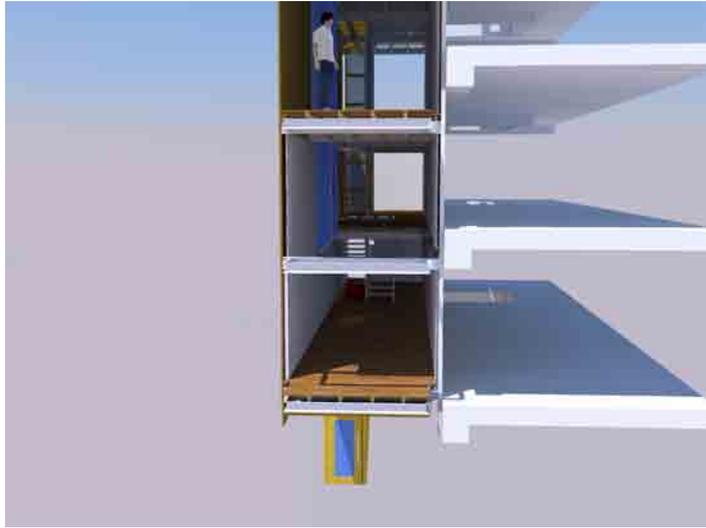


▲ Fig. 313  
*Active Street*

the activities of the festival to covertly penetrate the digital communications network of the city.

## Active Street

The positioning of the site next to Church Square and looking out onto a relatively quiet portion of Church Street provides a space for activities external to the building itself. This active street can be occupied for meetings, exhibitions, performances and the like. The facade of the building can then be used as a projection surface on which films and images can be displayed.



▲ Fig. 314-316  
*Three-dimensional development*

▲ Fig. 317-322  
*Three-dimensional development*



▲ Fig. 323  
Three-dimensional section

