SENSORY NOTATION
multimodal representation of urban space

Dr Ray Lucas
Senior Lecturer in Architecture
Manchester School of Architecture, MMU
Sensory Notation

AHRC/EPSRC Designing for the 21st Century
University of Strathclyde, 2007-2009

Ray Lucas
Ombretta Romice
Gordon Mair
Wolfgang Sonne
Observe the street, from time to time, with some concern for system perhaps.

Apply Yourself. Take your time.

Note down the place: the terrace of a café near the junction of the Rue de Bac and the Boulevard Saint-Germain

the time: seven o’clock in the evening

the date: 15 May 1973

the weather: set fair

Note down what you can see. Anything worthy of note going on. Do you know how to see what’s worthy of note? Is there anything that strikes you?

Nothing strikes you. You don’t know how to see.

You must write about out it more slowly, almost stupidly. Force yourself to write down what is of no interest, what is most obvious, most common, most colourless.

Georges Perec, *Species of Spaces*
<table>
<thead>
<tr>
<th>Name</th>
<th>Mode of Attention</th>
<th>Receptive Units</th>
<th>Anatomy of the Organ</th>
<th>Activity of the Organ</th>
<th>Stimuli Available</th>
<th>External Information Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>The basic orienting system</td>
<td>General orientation</td>
<td>Mechano-receptors</td>
<td>Vestibular organs</td>
<td>Body equilibrium</td>
<td>Forces of gravity and acceleration</td>
<td>Direction of gravity, being pushed</td>
</tr>
<tr>
<td>The auditory system</td>
<td>Listening</td>
<td>Mechano-receptors</td>
<td>Cochlear organs with middle ear and auricle</td>
<td>Orienting to sounds</td>
<td>Vibration in the air</td>
<td>Nature and location of vibratory events</td>
</tr>
<tr>
<td>The haptic system</td>
<td>Touching</td>
<td>Mechano-receptors and possibly thermo-receptors</td>
<td>Skin (including attachments and openings, joints (including ligaments), muscles (including tendons)</td>
<td>Exploring of many kinds</td>
<td>Deformation of tissues, configuration of joints, stretching of muscle fibres</td>
<td>Contact with the earth, mechanical encounters, object shapes, material states, solidity or viscosity</td>
</tr>
<tr>
<td>The taste-smell system</td>
<td>Smelling</td>
<td>Chemo-receptors</td>
<td>Nasal cavity (nose)</td>
<td>Sniffing</td>
<td>Composition of the medium</td>
<td>Nature of volatile sources</td>
</tr>
<tr>
<td></td>
<td>Tasting</td>
<td>Chemo- and mechano-receptors</td>
<td>Oral cavity (mouth)</td>
<td>Savouring</td>
<td>Composition of ingested objects</td>
<td>Nutritive and biochemical values</td>
</tr>
<tr>
<td>The visual system</td>
<td>Looking</td>
<td>Photo-receptors</td>
<td>Ocular mechanism (eyes with intrinsic and extrinsic muscles, as related to the vestibular organs, the head, and the whole body)</td>
<td>Accommodation, pupillary adjustment, fixation, convergence exploration</td>
<td>The variables of structures in ambient light</td>
<td>Everything that can be specified by the variables of optical structure (information about objects, animals, motions, events, and places)</td>
</tr>
</tbody>
</table>

*James J Gibson, The Senses Considered as Perceptual Systems*
basis in sensory notation

‘The channels of sense are not subject to modification by learning. The data of sense are given, by definition. The perceptual systems, however, are clearly amenable to learning. It would be expected that an individual, after practice, could orient more exactly, listen more carefully, touch more acutely, smell and taste more precisely, and look more perceptively than he could before practice.’

James J Gibson (1966:51).
organising perception

- **Location**: plot the site being recorded, whether a part of a route or a static position. Details such as time, date and weather may also be included.

- **Descriptor**: use a word from the list given to characterise each of the six perceptual systems: visual, aural, olfactory/gustatory, tactile, thermal, kinaesthetic.

- **Priority**: draw a line on the chart corresponding to the priority given to that perceptual system in this context.

- **Corroboration**: indicate how the senses overlap.

- **Temporality**: indicate the repetition, singularity, etc. of the observations.

- **Narrative**: write an account of the experience with closely cropped photographs of things described.
Step 1: Location
<table>
<thead>
<tr>
<th>VISUAL</th>
<th>AURAL</th>
<th>TACTILE</th>
<th>KINETIC</th>
<th>THERMAL</th>
<th>CHEMICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark</td>
<td>High Pitch</td>
<td>Static</td>
<td>Strong</td>
<td>Hot</td>
<td>Weak</td>
</tr>
<tr>
<td>Bright</td>
<td>Low Pitch</td>
<td>Mobile</td>
<td>Light</td>
<td>Cold</td>
<td>Intense</td>
</tr>
<tr>
<td>Saturated</td>
<td>Quiet</td>
<td>Rough</td>
<td>Free</td>
<td>Dry</td>
<td>Stagnant</td>
</tr>
<tr>
<td>Neutral</td>
<td>Loud</td>
<td>Smooth</td>
<td>Bound</td>
<td>Wet</td>
<td>Fresh</td>
</tr>
<tr>
<td>Perspectival</td>
<td>Clear</td>
<td>Light</td>
<td>Indirect</td>
<td>Natural</td>
<td>Musky</td>
</tr>
<tr>
<td>Flat</td>
<td>Reverberant</td>
<td>Heavy</td>
<td>Direct</td>
<td>Artificial</td>
<td>Putrid</td>
</tr>
<tr>
<td>Intimate</td>
<td>Vocal</td>
<td>Porous</td>
<td>Level</td>
<td>Ambient</td>
<td>Floral</td>
</tr>
<tr>
<td>Vast</td>
<td>Non-Vocal</td>
<td>Resistant</td>
<td>Graded</td>
<td>Source</td>
<td>Fruit</td>
</tr>
<tr>
<td>Solid</td>
<td>Natural</td>
<td>Hard</td>
<td>Sustained</td>
<td>Radiant</td>
<td>Spice</td>
</tr>
<tr>
<td>Void</td>
<td>Artificial</td>
<td>Soft</td>
<td>Quick</td>
<td>Convective</td>
<td>Resin</td>
</tr>
<tr>
<td>Detailed</td>
<td>Attack</td>
<td>Warm</td>
<td>Crowded</td>
<td>Constant</td>
<td>Meaty</td>
</tr>
<tr>
<td>Blank</td>
<td>Decay</td>
<td>Cold</td>
<td>Empty</td>
<td>Responsive</td>
<td>Oily</td>
</tr>
</tbody>
</table>
Step 3: Priority

Sensory Notation Radar Chart
Step 3: Priority

Standard 1-6 Priority Distribution
Step 3: Priority

Low Priority: Sensory Deficit
Step 3: Priority

High Priority: Over-Stimulated
Step 3: Priority

Spikes in Priority
Step 3: Priority

Multiple Priority
Step 4: Corroboration
Step 5: Temporality

Temporality

- Situated
- Singular
- Constant
- Directional
- Repetition
- Ambient
Step 5: Temporality

Temporality Modifiers

- Situated
- Singular
- Constant
- Directional
- Repetition
- Ambient
- Localised
Step 6: Narrative

SHIBUYA CROSSING
January 2006, evening, cold, dry.

Shibuya is a lively district full of marginal activities and young adults. While Harajuku serves the needs of teenagers, Shibuya has a slightly older demographic, while still falling into the younger age ranges. Several ‘tribes’ can be observed here, from the deeply tanned dayglo makeup of the ‘Yamanba’ and their male counterparts the ‘Sentaauai’. Biker gangs also operate in this area, wearing distinctive tin helmets and sporting powerful motorcycles. Other fashion conscious groups include the ‘Gyaru’, derived from the English word ‘gaff’, wearing mainly Westernised fashions.

Shibuya is dominated by the enormous station complex, which has train and subway lines intersecting on various axes and at a variety of heights. Tracks puncture this mass, delivering commuters directly into the heart of the department store occupying the site. This dissolves into tiny plots of land elsewhere in Shibuya, with the main streets of Center Gai winding its way uphill with irregularly shaped narrow buildings cheek by jowl with large impenetrable blocks. The architecture here varies widely, from the common functional shells to the wilder imaginations of architects such as Takanashi Shin, with his sinister science-fiction construction, or the theme park buildings of the love hotels crowding the North of the ward.

The square in front of Shibuya Station is an important social arena, providing a platform for buskers as well as being a popular meeting point. Particular attention is paid to the statue of Hachiko, a loyal Akita dog who met his owned from the train every day. After the professor who owned Hachiko died, he continued to return to the spot, and was adopted by commuters, who fed him and eventually commemorated him with a statue.

Beginning with the arrival into Shibuya, the subway train gradually leaves its underground tunnels, breaching the surface and climbing several stories, with busy highways below. This elevated railway pierces the Tokyo department store halfway up [1], delivering its cargo of keen shoppers into the heart of the massive store. This is the end of the Ginza line, so the station is always busy with people exiting the train and waiting to board it. The space here is cramped but bright and clean. The surfaces are blank and featureless barring the clutter of advertising and signposts. The crowds are severe, and a swarming instinct applies, with a heaving character to being swept along, there is little choice in how to move. Despite the proximity of the tunnel, the elevation and openness to fresh air dampens the oils and rust of the rails, giving a clean, sterile odour to the station.

The smooth surfaces cause aural confusion, redacting echoes around corners, and the constant chatter of the area gives an overwhelming blanket of noise that is fairly unpleasant. A smooth transition is offered by the station barriers, passing the ticket through the machine, one comes into direct contact with the satin finish of the steel before entering tiled, incandescent corridors.

These corridors open out significantly adding height and volume to the spaces adjacent to the Tokyo department store [2]. Tokyu own several subway lines, and cement the economic importance of each station by installing a large department store there. This gives a particular pattern to Tokyo’s urban fabric that is wholly integrated with the transportation network. There are also more destinations open to the traveller here, some want to change lines, others want to enter the department store or other shops, and the last group are looking to exit the complex and get out to the street. Gauging these eddies of people is tricky, but important to giving one a smooth passage through the building. As I am looking to exit onto Hachiko Square, I try to find the right flow and, adopting the same calm demeanour, exit the building. The sterile antiseptic smell strengthens briefly before entering this set of corridors, the air is dry and hot, a slight catch is given to the throat by the subtly acrid smell, and the same featureless blank walls are adorned with advertising again, giving the effect (presumably desired) that this is the only visual interest.
I exit beneath a large element of the department store which bridges the highway [3]. The wall to the building is lined with coin lockers, and small tarpaulin structures housing fast food dot the pavement. Buskers play rock music, accompanied by friends and enthusiastic dancers. The crowds milling about give a wide berth these activities, respecting and responding to their right to be here. This is one of the few places in Tokyo where such activities are permissible.

The music is boisterous, the breakdancing energetic. Coin lockers offer a facility to school children who want to change clothes without their parents knowing: everything is kinetic and in motion. That movement is direct, with a destination firmly in mind. The octopus balls try in stale oil mixed with petrol fumes, the vendor stirring occasionally and hawking his wares against a background of cartoon octopus on red and white striped tarpaulin.

Moving on to Hachiko Square itself [4], the crowding becomes more pronounced as people waiting mix with those on their way somewhere. Several distinct channels of sound can be heard, voices chatting, vehicles on the road, neon display boards with speakers, and bands playing. People arrange themselves around a small, still pool of water giving places to sit around the edge. That same negotiation between hurried movement and relaxed waiting takes place, sometimes a happy exchange, sometimes a more awkward compromise. The main destination is Shibuya Crossing [5], a stereotypical image of Tokyo, all bright neon, moving images, noise, jingles, and jarring juxtaposition. An image of a brontosaurus moves across one screen while the latest pop music sensation sings on another. The visual sense, looking further into Center Gai, is overloaded with pile upon pile of neon light. The open area here is vast, bordered by enormous slabs of buildings on each edge.

Actually crossing the street is a spectacle in itself [6]. Waiting at the edge of the street are ever more people, keen to make it to their destination in what is a very important entertainment district awash with bars, restaurants, karaoke booths, love hotels, clubs and so on. As this queue backs up, the traffic eventually stops moving and the lights change. The crowd's expectation is palpable, and I am swept up with the movement of what seems like hundreds of pedestrians. The quality of this movement is so much more direct than anything experienced so far, despite there being many instances of direct, bound movements. There is an urgency to this movement: time is limited, and people want to cross the road safely. Complicating matters, the crossing has several entry points, so streams of people interact across a star formation as people from one point have a choice of two or three destinations. Nearing the neon wall ahead [7], the images above become pure effect, with no content at all as only those at ground level can be apprehended with the required fidelity. The aural element of this projection becomes much more important, and combines with the music pouring out of commercial establishments around the area.

I head underground at this point [8], into the packed shopping areas that connect the various strands of the transportation network. This is a close, tight space, with halogen spotlighting uncomfortably near to my face. It is a riot of colour and texture down here, the majority of the establishments selling fashionably outrageous clothes to trend-conscious teenagers and twenty-somethings. The neon above ground is replaced by spotlighting on these wares, showing them in their best aspect. A clash of smells announce the different flavours on offer, all with a hint of cooking oil playing off against scrupulously clean blank corridors of tile, steel and glass.
Step 7: Analysis of results

Route: Visual Priority
Step 7: Analysis of results

Route: Deficit
Step 7: Analysis of results

Route: Overload
Survey: Differing Opinions

Step 7: Analysis of results
AKIHABARA

January 2008, Evening, cold, light rain.

Akibahara is also known as ‘Electric Town’ or ‘Akiba’ and is the centre of electronics, duty free, comics and animation goods. The district around Chuo Dori is dominated by business and commerce, with very little by way of residential buildings. Akibahara’s signature visitor is the Otaku, which roughly translates as ‘fan’ or ‘geek’ – a term embraced as a positive marker of sub-cultural identity. The Otaku is typically, but not always, male – aging from his teens to mid thirties.

Arriving on Chuo Dori from the Subway [1], one is presented with a wide, straight avenue lined with tall buildings. There is a great deal of light from shop signs. The tall, narrow buildings on Chuo Dori often have different stores on each floor – this complexity reflected in the multitude of signs, a mix of Kanji characters, Kana syllables and Roman letters. Despite not being able to read Japanese, the signs read as text and draw the eye in this way: a special category of visual stimulus that demands attention and comprehension. The lights against the darkened sky present a strong contrast with rich and highly concentrated colours of blue, green, red, yellow and white set against the dark orange of the light-polluted sky.

The road is busy with traffic, smelling only faintly of petrol and fumes against the cold air. Surface water gently splashes as the cars and vans pass, stopping at each of the many crossing points, indicated by gantries over the road bearing lights and direction signs. The wide streets are still crowded with people, the pace is slow and steady – leisurely. The manner is also genial, with people taking their time either in large groups or individually. The voices of people talking are drowned out by the stores seeking attention, however. Many such shops employ large public address systems of varying quality pumping out theme tunes, adverts for the latest animated adventures, or other useful information to the shopper [2]. Some shops take this a step further, with groups of young women in matching costumes – often in the colours of the shop in question – handing out samples, fliers, or gifts such as paper handkerchiefs with a handy map to the establishment inserted into the packet. The tone here is shrill and excited, with enthusiastic body language to draw the shopper in. The entry to the shops are bright, white, hot, halogen. Glass doors are plastered with posters and fliers, packed with typography and cartoon characters.

Other entries take one up a short flight of steps before presenting narrow stairways leading down. These steps are again lined with posters and flyers of the latest products – cameras, mobile phones, computers. The low ceilings basements [4] are awash with technology products presented on waist height islands and benches along the walls. Sales assistants are on hand to help with any purchases, and they cry out repeatedly to announce their presence with a welcoming high pitched ‘irasshaimase!’ (literally ‘how may I help you’), but also signifies a general ‘welcome’ to a store or restaurant. Where the ground floor has the latest models or promotions, these floors display a variety of models arranged according to manufacturer. Whilst less crowded, the narrow space and low ceiling make the floor feel very cramped and hemmed in, the dry air circulated by a noisy fan contributes to the general stuffiness.

Taking a small, not entirely trustworthy elevator up to the Duty Free section of the store, one is presented with yet more posters and fliers. The upper floors [3] are much more spacious and airy, owing to the higher ceiling height and improved air quality. The musty smell of the basement is replaced with a freshness, neutral and unobtrusive. The sales assistants speak in low tones, drawing interested buyers close to them, so that they can hear despite the jingles and sales information being broadcast by the speakers all over the floor. The mix of items here is selected to appeal to the tourist, dominated by the electrical goods which are the speciality of the store, but also with t-shirts, postcards, traditional goods and dolls. Display models of export electronics are on show, allowing you to pick them up, play with the features and decide on the particular camera or gadget that is right for you. All the while, the cries of “irasshaimase!” are repeated and English speaking assistants check if I need help. The light is harsh, with bright spots illuminating the product. This gives off a great deal of dry heat.

The other side of Chuo Dori repeats the same pattern [5], with even larger establishments serving the electrical requirements of Tokyo. The larger stores have placards and sales assistants with personal loud-hailer systems strapped to their large quilted coats – once again reinforcing the corporate colour scheme. This address is all the more disturbing, as it combines the aural effect of a disembodied PA system with the actual presence of the source of that voice. This is set against the hot white light of the store entrance, a vast cavernous void [6]. This time, it is filled with white goods: refrigerators, air conditioning units, televisions, and other large household items. Being
such as the UDX building [8] are built much higher even than the customary 10 storeys, and occupies an island of land behind the main drag of Chuo Dori. This development is something of a gentrification of the area, providing corporate accommodations as well as more tourist-friendly restaurants. The urban fabric of the ward is broken by developments such as this, even where the ultra dense, deep-planned electronics superstores represent a typology that is difficult to defend – this development, with it's elevated walkways, and windswept open approach is not a significant improvement.

Further out from the main drag of Chuo Dori, the smaller stores dedicated to the hobbyist Otaku thrive [9]. Narro, tall buildings with different shops and facilities on each floor are the order of this area, as the monolithic buildings of Chuo Dori fragment the further one moves out. One extreme example is a shop which consists entirely of capsule vending machines. The machines dispense plastic spheres with toys or other items – a random item from a set described on the front of each machine, so that the fanatic might want to collect each example from a particular series. The items are typically tied in to recent movies, television shows or comics. The light is orange and hot, with lots of small spot lights hung from an overhead rail. Everything is plastic, warm and smooth to the touch. People linger here for some time, moving slowly around the racks of machines, selecting their vendor carefully, then examining the contents and disposing of the capsule. This slow movement is coupled with a gaze, deliberate and unhurried. There is very little conversation here, no sales assistants, and only the muffled noises from other nearby establishments to accompany the activity.

Similar establishments [10] dispense cup noodles, hot rice, coffee and soft drinks from vending machines. The common approach to such places is to remain there and eat on the benches provided rather than to take the food with you and eat on the move. These are, again, not social spaces, and people eat alone, in silence.

Traditional forms of fast food are in abundance [11], from octopus balls through to bean paste filled pancakes. Freshly prepared and hot, this food is expected to be eaten in situ, but a more social experience, mixing fully with the street. The cooking smells provide a relief from the dominant sterility of the district, and the warmth of natural ingredients a stark contrast to the abundance of smooth metal and plastic.
TYO-09
SHIBUYA CROSSING
January 2006, evening, cold, dry.
SHIBUYA CROSSING
January 2006, evening, cold, dry.

Shibuya is a lively district full of marginal activities and young adults. While Harajuku serves the needs of teenagers, Shibuya has a slightly older demographic, while still falling into the younger age ranges. Several ‘tribes’ can be observed here, from the deeply tanned dayglo makeup of the ‘Yamamba’ and their male counterparts the ‘Sentaagai’. Biker gangs also operate in this area, wearing distinctive tin helmets and sporting powerful motorbikes. Other fashion conscious groups include the ‘Gyaru’, derived from the English word ‘gal’, wearing mainly Westernised fashions.

Shibuya is dominated by the enormous station complex, which has train and subway lines intersecting it on various axes and at a variety of heights. Tracks puncture this mass, delivering commuters directly into the heart of the department store occupying the site. This dissolves into tiny plots of land elsewhere in Shibuya, with the main street of Center Gai winding its way uphill with irregularly shaped narrow buildings cheek by jowl with large impenetrable blocks. The architecture here varies widely, from the common functional shells to the wilder imaginations of architects such as Takamatsu Shin, with his sinister science-fiction construction, or the theme park buildings of the love hotels crowding the North of the ward.

The square in front of Shibuya Station is an important social arena, providing a platform for buskers as well as being a popular meeting point. Particular attention is paid to the statue of Hachiko, a loyal Akita dog who met his owner from the train every day. After the professor who owned Hachiko died, he continued to return to the spot, and was adopted by commuters, who fed him and eventually commemorated him with a statue.

Beginning with the arrival into Shibuya, the subway train gradually leaves its underground tunnels, breaching the surface and climbing several stories, with busy highways below. This elevated railway pierces the Tokyo department store halfway up [1], delivering its cargo of keen shoppers into the heart of the massive store. This is the end of the Ginza line, so the station is always busy with people exiting the train and waiting to board it. The space here is cramped but bright and clean. The surfaces are blank and featureless barring the clutter of advertising and signposts. The crowding is severe, and a swarming instinct applies, with a heaving character to being swept along, there is little choice in how to move. Despite the proximity of the tunnel, the elevation and openness to fresh air dampens the oils and rust of the rails, giving a clean, sterile odour to the station.

The smooth surfaces cause aural confusion, misdirecting echoes around corners, and the constant chatter of the area gives an overwhelming blanket of noise that is fairly unpleasant. A smooth transition is offered by the station barriers, passing the ticket through the machine, one comes into direct contact with the satin finish of the steel before entering tiled, incandescent corridors.

These corridors open out significantly adding height and volume to the spaces adjacent to the Tokyo department store [2]. Tokyo own several subway lines, and cement the economic importance of each station by installing a large department store there. This gives a particular pattern to Tokyo’s urban fabric that is wholly integrated with the transportation network. There are also more destinations open to the traveller here, some want to change lines, others want to enter the department store or other shops, and the last group are looking to exit the complex and get out to the street. Gauging these eddies of people is tricky, but important to giving one a smooth passage through the building. As I am looking to exit onto Hachiko Square, I try to find the right flow and, adopting the same calm demeanour, exit the building. The sterile antiseptic smell strengthens briefly before entering this set of corridors, the air is dry and hot, a slight catch is given to the throat by the subtly acrid smell, and the same featureless blank walls are adorned with advertising again, giving the effect (presumably desired) that this is the only visual interest.
I exit beneath a large element of the department store which bridges the highway [3]. The wall to the building is lined with coin lockers, and small tarpaulin structures housing fast food dot the pavement. Buskers play rock music, accompanied by friends and enthusiastic dancers. The crowds milling about give a wide berth to these activities, respecting and responding to their right to be here. This is one of the few places in Tokyo where such activities are permissible.

The music is boisterous, the breakdancing energetic. Coin lockers offer a facility to school children who want to change clothes without their parents knowing; everything is kinetic and in motion. That movement is direct, with a destination firmly in mind. The octopus balls fry in stale oil mixed with petrol fumes, the vendor stirring occasionally and hawking his wares against a background of cartoon octopus on red and white striped tarpaulin.

Moving on to Hachiko Square itself [4], the crowding becomes more pronounced as people waiting mix with those on their way somewhere. Several distinct channels of sound can be heard, voices chatting, vehicles on the road, neon display boards with speakers, and bands playing. People arrange themselves around a small, still pool of water giving places to sit around the edge. That same negotiation between hurried movement and relaxed waiting takes place, sometimes a happy exchange, sometimes a more awkward compromise. The main destination is Shibuya Crossing [5], a stereotypical image of Tokyo, all bright neon, moving images, noise, jingles, and jarring juxtaposition. An image of a brontosaurus moves across one screen while the latest pop music sensation sings on another. The visual sense, looking further into Center Gai, is overloaded with pile upon pile of neon light. The open area here is vast, bordered by enormous slabs of buildings on each edge.

Actually crossing the street is a spectacle in itself [6]. Waiting at the edge of the street are even more people, keen to make it to their destination in what is a very important entertainment district awash with bars, restaurants, karaoke booths, love hotels, clubs and so on. As this queue backs up, the traffic eventually stops moving and the lights change. The crowd’s expectation is palpable, and I am swept up with the movement of what seems like hundreds of pedestrians. The quality of this movement is so much more direct than anything experienced so far, despite there being many instances of direct, bound movements. There is an urgency to this movement; time is limited, and people want to cross the road safely. Complicating matters, the crossing has several entry points, so streams of people interact across a star formation as people from one point have a choice of two or three destinations. Nearing the neon wall ahead [7], the images above become pure effect, with no content at all as only those at ground level can be apprehended with the required fidelity. The aural element of this projection becomes much more important, and combines with the music pouring out of commercial establishments around the area.

I head underground at this point [8], into the packed shopping areas that connect the various strands of the transportation network. This is a close, tight space, with halogen spotlighting uncomfortably near to my face. It is a riot of colour and texture down here, the majority of the establishments selling fashionably outrageous clothes to trend-conscious teenagers and twenty-somethings. The neon above ground is replaced by spotlighting on these wares, showing them in their best aspect. A clash of smells announce the different flavours on offer, all with a hint of cooking oil playing off against scrupulously clean blank corridors of tile, steel and glass.
MEIJI SHRINE

January 2008, morning, cold, dry.

The Meiji Shrine is the main Shinto shrine in Tokyo, and is an important place of worship, celebrating the life of the Emperor Meiji and Empress Shoken, dating from 1920 and rebuilt in 1958. The shrine is set in a large forested area that once made up the hunting grounds of the emperor and his court. The precinct lies at the edge of Harajuku, and next to the more accessible Yoyogi park.

The entrance to the shrine is marked by an enormous cypress Torii gate and wide crunchy gravel paths wind their way through the dense forest [7]. The forest surrounding the path has tall, lush, green trees. Speakers are set into the trees, on occasion these play traditional atonal Japanese flute music, giving an eerie effect to this walk in the woods. Stone lanterns line the path, and the gravel gives way every now and then for a slight stone arch as a stream is crossed.

On the way to the shrine is a small garden [8], this is renowned in summer for its carefully tended iris bloom, but I am visiting at the wrong time of year. Simple paths meander through this hilly wood, carpeted by fallen needles and firm soil. A small teahouse pavilion sits just off the path on the way down to the lake. The lake is frozen over in parts, small birds are skating around on it, whilst others look like they are stuck in place. Nearer the edge, a small jetty juts out and the ice dissipates. Large curious carp stare up from under the glassy black water in a variety of colours from black through gold and even one pure white one. The park is very quiet, and offers a real departure from the crowds treading gravel towards the shrine. A slower pace is also in evidence here, as there is no definite destination and the visual pleasures are to be taken in over a longer duration. The iris garden itself is low, with irrigation channels cut into the soil and a path running around. Small thatched pavilions dot the landscape, and acorns and other seed pods spill out onto the path. The frequent changes in level are announced with irregular steps, stripped logs being used to retain the ground and large square stones set in. There is detail everywhere in the garden, set against a texture of foliage. Small strips of bamboo arch across the edge of the path, providing an insubstantial but clear demarkation of the path, while trees are trained into shape with scaffolds of more bamboo and twine.

Returning to the path, a large wall of sake
barrels announces the proximity of the shrine complex itself, through another Torii gate. The ground covering is now flagstones, rounded and worn, with beautiful, low rise timber buildings capped with green copper.

The main part of the complex is surrounded by a covered walkway [1], screened off in places and open in others. The satin finish of the timber is warm to the touch, and large boards with bold black calligraphy line the walls, picking up the rhythm set by the whitewashed ends of the roof timbers. A slight shade is given by the overhanging roof, giving a gloaming quality to the light. People speak quietly here, but there is a clarity due to the open space. The level of voice drifts up and down as I move around the space, tuning in and out of conversations. The smell of the forest lingers in the air here, fresh, clean and a hint of resinous sap.

The vast open square feels all the more so for its container, looking up to that big sky heightened by the presence of the forest elsewhere in the shrine.

Moving towards the steps of the shrine [2] gives a clear indication of the scale of the site, which has an intimacy despite the large scale and openness. This is due in part to the long, low nature of the architecture, which defines a horizontality, drawing the eye along. There is a lot of space to move here, and no determination on how to move around, so a free drift seems appropriate, seeing what spectacle draws the eye or other senses.

In the middle of the square precinct [3], it is bright and clear, the gloom of the arcaded sections supplanted by a squint into the sunlight. Movement remains free, and it is noticeable that people tend to visit here in groups. There are some couples, but the majority are families or groups of friends. Space is defined around and by each gathering, different for those who remain in place and those
who are on the move. The drifting in and out of quiet chatter is replaced here by an ambient level of vocal noise, indistinct, and made up of the contributions of many hushed conversations.

Next to the covered walkway [4], a series of tables are set out, and people write, their bodies bowed from the waist almost in a right angle. This poise is so uniform across those writing at the tables as to be particularly striking. Tablets and paper inscribed with prayers are being amended or signed before being attached wooden frames situated around the precinct. More discussions can be heard about the nature of these prayers and aspirations, my visit in January preceding some important university entrance examinations.

A series of steps leads down to an open area [5], bound by forest on all sides and ultimately leading back into the park. As with other parts of the Meiji Shrine, the sense of corroboration between senses is strong. Any scent is the result of something visible; the trees moving is understood aurally, the relative heat related to covered areas rather than exposed plazas.

Passing through another gate, I return to the forest, as the plaza narrows to a winding path once again, with dense forest all around. The gravel is hard work, requiring real effort to move through, as it feels soft like walking through sand on a beach. Dappled light filters through the tree cover, bright greens and yellows giving hints of sky above [6]. The fresh pine smell apparent throughout the site is much stronger here, and the path winds round to some facilities arranged around a circular plaza. Food, souvenirs and rest stops are provided before exiting the site and moving towards the bridge at Harajuku Station.
SENSO-JI, ASAKUSA

January 2008, afternoon, cold, dry.

Arriving from the Nakamise Dori, the market stalls selling goods and wares for pilgrims and tourists give way to more and more food outlets. This in turn gives over to prayer-related items – beads, yarrow stalks, Daruma dolls, and so on.

The threshold to the temple precinct itself is marked by the massive, weighty, Hozomon Gate [1] flanked by fierce deities representing thunder and lightning, the gate is bright scarlet in colour – a hue so often associated with sacred sites in Japan, it is presented here in overwhelming abundance. The weight of the gate is offset by another large paper lantern, but the mass remains tangible as one passes under the opening. The gate has symbolic significance as a marker, and is easily circumvented, yet the ritual of passing through the gate lends an appealing importance to this part of the journey.

The street opens out here [2], with supporting structures to the temple and shrine (Senso-Ji is both, but most famous for its Buddhist temple rather than Shinto shrine), notably the five-storey pagoda, one of the tallest such structures in Japan, given greater visibility by the low-rise nature of the Asakusa ward. This introduction to the precinct is packed with people, the air is fresh, and a destination clear. The overwhelming palette of the Hozomon gives way to aged, desaturated browns and greys alongside some red columns. The decorated timber buildings are strewn with ropes, banners and paper streamers.

Ahead, a large incense burner is the focus of the crowd’s attention [3]. The burner is cast bronze – dark and matte, filled with hot coals and incense – powders are complemented by burning incense sticks planted into the ashes by worshippers. Movements become incredibly important here, and a series of gestures are associated with the incense. Clapping is intermittent – to chase malign spirits away – a single or double clap followed by holding the hands together in their final position to pause. The most common gesture here is to wash or bathe oneself with the fragrant smoke, using both hands to waft it over the body and head. The curative properties of the smoke are often directed towards any health problems with the movement of the hands. The burner gives off some heat, and more is breathed in as the hot incense smoke fills the air. This presents a strong contrast with the cold, crisp January air. This is an extremely busy part
of the complex, particularly as people take pause here, making their way to the burner and standing for a while, presumably composing and resting the mind before approaching the temple itself.

A similar structure lies ahead, but instead of burning incense, there is a constantly overflowing basin of water and several bamboo ladles [4]. This is another purifying performance – to be conducted before entering the temple. Here, the hands are washed and the ladle carries water to the mouth – filling the mouth with cool, clear water before spitting it carefully into the gully of the fountain. This water is icy cold on the hands, and no towel is provided (many residents of Tokyo carry a small hand towel called tengui for such occasions). Being unprepared, I am left with rather cold, wet hands. These two preparatory stations are examples of urban spaces with a thermal and chemical nature – the open-air interaction with water and incense gives a strong character to the space and activities there. This strong memory is reinforced by the set of gestures and movements associated with the place: such overlapping combinations of non-visual stimuli bed the experience firmly in the psyche.

A broad, grand processional stair leads us inside the temple itself [5]. The effort of climbing such stairs, whilst far from exhausting for the average healthy person, is still significant, and presents another threshold to this series of experiences. The steps take us past lanterns and an enormous pile of sake barrels. The elevation offered by the steps brings the visual to the fore, giving a prospect over the site, it is hard to resist looking down the Nakamise Dori through the gates with its rigorous perspective. This has the effect of giving an appreciation for just how packed and crowded it is down there. The jubilant and celebratory atmosphere is retained even this close to the serenity of the temple, but the chatter is hushing gradually, the closer one gets to the heavy brass doors.

Turning away from the processional street and back to the temple [6], the quality of the sound changes, with a hush taking the reverberant dark space of the temple itself. The air is thick and musty, stale. The idol of Kannon, Goddess of mercy, is enshrined here, and placed behind a large wire grating. In front of the grating is a pit with a grid over the top. This rattles with coins thrown from a distance, often over the shoulder, and worshippers clap several times quickly before returning to silent contemplation.

The jostling of the crowds from the precinct
is absent here, and a slowness of movement is observed. This allows masses of people to move close to one another without ever actually touching.

The temple grounds extend even further out, containing small platforms with statues to different deities and holy figures [7]. These are open to the air and in cold, hard stone. Small, carefully arranged gardens decorate these dais, with a small amount of room for quiet solitude away from the crowds of the main temple. Bright red banners decorate these shrines, and the statues themselves are often decorated with fabric in the form of scarves, bibs or aprons. The frenetic quality of the main precinct is challenged by these spaces, as they are islands of complete solitude within the flux of the crowds.

The grounds also contain a small garden combining pavilions, banners, topiary and rocks [8]. Narrow wynds direct the path taken here, rather than the open free-for-all of the sacred precinct, the designers had an aim of encouraging the visitor to take their time and enjoy the tiny details of flowers and foliage set against stone lanterns and timber structures. A rich variety of visual experiences can be had here, with accompanying smells and movements. Throughout the entire site, conurbation between the senses is strong; we always know the source of a sensation through more than one sensory modality.

A festival atmosphere surrounds the food stalls of the West bound street [9], lined with temporary structures of red and white tarpaulin purveying a wide variety of foods seemingly united by their presentation skewered on wooden sticks. This presentation of food as part of the experience only adds to the richness of the site, with pungent oils and frying noises accompanied by the savoury meat, fish and vegetables on offer.
Sensory Notation Key

<table>
<thead>
<tr>
<th>VISUAL</th>
<th>AURAL</th>
<th>TACTILE</th>
<th>KINETIC</th>
<th>THERMAL</th>
<th>CHEMICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark</td>
<td>High Pitch</td>
<td>Static</td>
<td>Strong</td>
<td>Hot</td>
<td>Weak</td>
</tr>
<tr>
<td>Bright</td>
<td>Low Pitch</td>
<td>Mobile</td>
<td>Light</td>
<td>Cold</td>
<td>Intense</td>
</tr>
<tr>
<td>Saturated</td>
<td>Quiet</td>
<td>Rough</td>
<td>Free</td>
<td>Dry</td>
<td>Stagnant</td>
</tr>
<tr>
<td>Neutral</td>
<td>Loud</td>
<td>Smooth</td>
<td>Bound</td>
<td>Wet</td>
<td>Fresh</td>
</tr>
<tr>
<td>Perspectival</td>
<td>Clear</td>
<td>Light</td>
<td>Indirect</td>
<td>Natural</td>
<td>Musky</td>
</tr>
<tr>
<td>Flat</td>
<td>Reverberant</td>
<td>Heavy</td>
<td>Direct</td>
<td>Artificial</td>
<td>Putrid</td>
</tr>
<tr>
<td>Intimate</td>
<td>Vocal</td>
<td>Porous</td>
<td>Level</td>
<td>Ambient</td>
<td>Floral</td>
</tr>
<tr>
<td>Vast</td>
<td>Non-Vocal</td>
<td>Resistant</td>
<td>Graded</td>
<td>Source</td>
<td>Fruit</td>
</tr>
<tr>
<td>Solid</td>
<td>Natural</td>
<td>Hard</td>
<td>Sustained</td>
<td>Radiant</td>
<td>Spice</td>
</tr>
<tr>
<td>Void</td>
<td>Artificial</td>
<td>Soft</td>
<td>Quick</td>
<td>Convective</td>
<td>Resin</td>
</tr>
<tr>
<td>Detailed</td>
<td>Attack</td>
<td>Warm</td>
<td>Crowded</td>
<td>Constant</td>
<td>Meaty</td>
</tr>
<tr>
<td>Blank</td>
<td>Decay</td>
<td>Cold</td>
<td>Empty</td>
<td>Responsive</td>
<td>Oily</td>
</tr>
</tbody>
</table>


