# The Singapore Flyer

Experiencing Singaporean Modernity Through Architecture, Motion and Bergson

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### Abstract

This article explores the post-construction history of the Singapore Flyer observation wheel as an experiential symbol of Singaporean modernity. Using an interdisciplinary intersection of history, theory, interpretation and photography (specially commissioned from Singaporean photographer Christopher Cheng), the Flyer is disclosed as a mobile architecture by which the visitor is prompted to consider their position in relation to the wheel itself, to Singapore, and to the wider world. The ideas of Henri Bergson in particular are used as a speculative tool.

Keywords: Singapore, Singapore Flyer, observation wheel, modernity, Bergson, movement, experience.

How do we understand our visits to and experiences of fantastical pieces of architecture such as the Singapore Flyer observation wheel, overseeing the grandiose Marina Bay urban development in Singapore? The Singapore Flyer is not a building, does not stand still, has no recognised designer and resists interpretation through many of the conventional conceptual schema typically directed at the design and production of architecture rather than at its experience or postconstruction history. The Flyer is also, despite its evident size and engineering achievement, rather banal, possessing little of the sophisticated design quality and spectacular imagery of the London Eye (as explored by Mark Dorrian1) or indeed of many other observation wheel rivals around the world. In addition, the Flyer is immensely popular, visited by hundreds of thousands each year and frequently cited by the Singapore Tourism Board (STB) as one of the most visible symbols of Singapore's rapid modernisation. How then might we interpret the Singapore Flyer, through our experiences of it, as a way of perceiving Singaporean modernity?



Figure 1. Singapore Flyer, exterior. © Christopher Cheng, 2013.

In order to pursue these concerns, this speculative exploration takes its theoretical cue from many different trajectories, including

Fredric Jameson's contention that postmodern architectural space transcends our ability to locate ourselves in space, and can operate as symbols for the "incapacity of our minds [...] to map the great global multinational and decentered and communicational network in which we find ourselves caught."2 Also relevant here are Georg Simmel's exploration of spatial typologies such as the door and the bridge as aesthetic symbols of modernity, 3 Siegfried Kracauer's similar explorations of "exemplary instances" of modernity, and, from a more explicitly architectural perspective, Aldo Rossi's considerations of spatial archetypes and collective memory in the context of cities. 5 I also take into account Henri Lefebvre's theorisations of the social production of space and the importance of everyday life therein, 6 while equally inspirational have been Stephen Kern's explorations of culture, time and space, as well as David Nye's thoughtful reflections on the "technological sublime" nature of those "magnificent piece[s] of engineering - bridges, skyscrapers, factories, power installations, world's fairs, space rockets etc which cannot be comprehended through words and images alone" and which, when visited, "outstrip expectations" and help to create shared emotions through participation and collective experience.8

However, these theories or thematics are rarely explicit in my treatment of the Singapore Flyer. Somewhat more apparent is the work of Henri Bergson, although even here I refer to Bergson's considerations of knowledge, time and duration not as a detailed philosophical analysis of those terms but to speculatively open out the Singapore Flyer as an aesthetic, experiential, spatial and temporal encounter with modernity. In particular, I hope to show how, in Bergsonian terms, the "relative knowledge" by which we might comprehend the Flyer through symbols and words, as with the "intelligent knowledge" of objects and their systematic interconnections, are only partial ways of knowing, whereas "intuition" — a form of "intellectual sympathy" by which "one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible" — may provide an additional more intuitive or "absolute" knowledge.9

Through this process I hope to provide not an objective or comprehensive account of the Singapore Flyer, but a kind of intuitive placement — bringing objects, facts, places, views, thoughts, experiences, postulations and theories together in order to create a conjectural approximation as to what an intuitive knowing might be of this observation wheel and, also, by extension, of Singaporean modernity.

## Relative Knowledge

Whenever we visit a major piece of architecture like the Singapore Flyer we rarely do so without any prior knowledge. For the Singapore Flyer, most visitors will realise that it is hardly unique as an observation wheel, despite being the world's tallest at 165m on completion in 2008, and it therefore must be understood in the context of other similar creations — including the London Eye (2000), Melbourne Star (2009) and Seattle Great Wheel (2012) — as well as in the context of historically renowned examples such as the original Ferris Wheel at the Chicago World's Columbian Exposition (1893), Great Wheel at Earl's Court, London (1895), and Riesenrad at Vienna (1897). 10

### An admirable achievement

As a piece of engineering achievement, the Singapore Flyer rests roundly in this century-long tradition of Ferris wheels, and its current status as the world's tallest observation wheel undoubtedly deserves admiration, as has been noted in many professional magazines and media representations. As one Flyer visitor succinctly described their impression, "we marvelled at the engineering feat and the sheer scale of the wheel." 11

Yet the Singapore Flyer misses some of the magical qualities associated with many other observation wheels. Significantly, while renowned Japanese architect Kisho Kurokawa prepared initial architectural design concepts, this part of the Flyer's earliest history is rarely acknowledged. Indeed, the main part of the engineering work and design work up to tender stage was carried out by engineers Arup, with Mitsubishi Heavy Industries and DP Architects in Singapore doing the actual construction. Consequently the scheme has never attracted the design kudos garnered by the London Eye via its architects David Marks and Julia Barfield, 12 or the kind of critical acclaim of art-oriented Ferris wheels like John Körmeling's "Mobile Fun" in Toronto (2004). 13 It consequently lacks those more evidently sophisticated characteristics as the spider's web filigree construction of the Star of Nanchang (2006), the iconic light shows of the Diamond and Flower in Tokyo (2001), or the futuristic passenger pods of the London Eye (2000) and Melbourne Star (2009).

Nor has the Singapore Flyer enjoyed the kind of iconic status as the London Eye for its home city. In part due to the design of the Flyer, this is also because of its somewhat aloof location — "out of the way, difficult to get to"  $^{14}$  — standing apart from more

individually distinctive projects like the Marina Bay Sands casino resort (2010) or Esplanade Theatres (2002). The London Eye, by comparison, alternatively seems to rub right up against the Edwardian baroque County Hall (1922-39), provide a contrasting foil to the elaborate gothic revival Big Ben and Palace of Westminster (1840-70), loom over the densely packed streets of central London, or just provide, through its elaborate three-dimensional truss and spacecraft pod-cabins, an eye-catching presence all of its own. 15



Figure 2. London Eye, three-dimensional truss and spacecraft pod-cabin. © lain Borden 2013.

This very lack of design or cultural acclaim for the Flyer suggests an unspoken concordance with a well-known quality of Singapore: the high degree of social and cultural control within a state notorious for being run by the monopolistic People's Action Party (PAP) and key institutions like the Housing Development Board (HDB) in a manner "like a giant corporation."  $^{16}$  Here, the very diversity, locality and individual creativity of its citizens is overtly managed under what has been called an eclectic combination of socialist spirit with capitalist practices. 17 The effects are felt in domestic and public realms, and, despite recent relaxations on gum chewing, bar dancing and gay rights, Singaporeans still expect to receive instructions on everything from family size, child birth and language to littering, courtesy and personal hygiene. As such, these citizens are encouraged by their government to be part of an "open and inclusive Singapore,"18 but one in which cosmopolitan is not so much a celebration of creative difference or identity diversity per se, but rather is a way of being comfortable in global contexts and

so becoming "world ready, able to plug-and-play with confidence in the global economy."  $^{19}$ 



Figure 3. Residential tower blocks, Singapore, as seen from the Singapore Flyer. © Christopher Cheng 2013.

If all of this means that Singapore is often considered to be "nice but slightly dull,"20 then it also equates with the Flyer being remarkable and admirable, and also predictable, unexciting and stolid. The Singapore Flyer, it seems, has been overtly planned and managed rather than inspirationally designed or imagined; it is located in Singapore, but always with a considered face to the wider global context; it attracts huge numbers of visitors, but has failed to meet optimistic visitor estimates of 2.5 million per year and has now entered troubled financial conditions. 21 In this context, then, the Singapore Flyer is revealed as predominantly being a great engineering achievement, and, as the world's largest observation wheel, standing quantitatively alongside Singapore's other recordbreaking features such the region's largest convention centre, largest fountain and longest underground mall. 22 "I get the feeling," one somewhat underwhelmed visitor explained, "they just wanted to build something bigger than the London Eye, just for the sake of it."23 As this comment suggests, the Flyer is worthy of huge respect, certainly, yet it is hardly of the kind of thrilling character which such expenditure, expertise and effort could surely have produced.

## From Relative to Intelligent Knowledge

As yet, we have only considered the Singapore Flyer as an object, as something to be understood factually, and in the manner which Bergson describes as instinctive or "relative knowledge," where we "move

round the object" and understand it from the outside, analytically via words and symbols, and do not "enter into it." But what happens if we do indeed move inside the Singapore Flyer, both literally and imaginatively, such that one might, following Bergson's exultations, "no longer grasp the movement from without, remaining where I am, but from where it is, from within, as it is in itself"?<sup>24</sup> What kind of Flyer might then begin to emerge?

## Riding into the past

Moving into the Flyer's interior, the dominance of engineering logic over design creativity is evident from the simple cylinders of the cabins, which lack the more elegant capsular quality of the London Eye pods. There are of course very good reasons for this, not least because midday temperatures of 35 degrees and a relative humidity of 80% determine against using full glass-house envelopes for the cabins, which instead incorporate air conditioning within an opaque ceiling void. Furthermore, the subtlety and sophistication of the engineering calculations and operational controls are largely hidden from view, being inexpressible or incomprehensible to any visitor who does not have advanced knowledge of how such an invention might work.



Figure 4. Singapore Flyer, cylindrical cabin. © Christopher Cheng 2013.

This is not, however, to say, that there is no creative imagination here. Far from it. This process begins on finding oneself within a giant contraption which appears to be hugely complex yet apparently simple (it is, after all, "just" a massive wheel). The visitor is confronted with a "first age" aerial view<sup>25</sup> looking down from a physical object, and more specifically with the over-riding

sense of partaking in the century-long tradition of those innumerable Ferris wheels which have been installed at fairgrounds, amusement parks and world fairs. As with nearly all observation wheels, including the London Eye, 26 The Singapore Flyer in this regard alludes to a kind of traditional mechanical entertainment, where a "ride" is offered as a thrill, not in terms of seeming technological impossibility or visceral drama, but in terms of sheer size and mass of the machine, and in terms of magnificence of view.

Leaving aside for the moment this question of view, the machinic nature of Singapore Flyer is, apart from its simple cabins, revealed by the very slowness of its rotation, at just 15% of walking speed. Audible creaks further strengthen the impression of being conveyed along by something analogical, being composed of gears, cables, stays, struts and steel; the wheel hence seems to be resolutely of the past rather than of the present or future. In this way, especially when peering inward towards the hub rather than outward from the rim, the visitor is transported backwards in time, into a fin de siècle world of expositions and fun fairs. An attuned visitor might recall the Viennese Riesenrad though its infamous appearance in the film noir The Third Man (dir. Carol Reed, 1949), or even go back to the very first 1893 Ferris wheel, constructed for the Chicago World's Columbian Exposition, and which still looms large in the popular imaginary of such contraptions. 27 The Singapore Flyer is here an experiential time machine, which, through its massive mechanics, transports us back to previous technologies, places and histories.



Figure 5. Singapore Flyer, steel hub, struts and stays. © Christopher Cheng 2013.

### Control

Because the more advanced and electronic operational controls for the Singapore Flyer are largely hidden from view, then a different aspect of control is far more evident when taking a journey on the wheel. The whole experience — as with any fairground ride or nineteenth century optical entertainment<sup>28</sup> but here to a much heightened degree — is entirely circumscribed in time, space and duration. First, the visitor must queue for their ticket, ideally having reserved one in advance for a scheduled time slot. The visitor then passes through an airport-style security check which scans bags and which also, during the 2009 influenza pandemic, screened for high body temperatures.<sup>29</sup> In the following "Journey of Dreams" exhibition, a snaking path through the displays provides orchestrated insights and "fun facts"<sup>30</sup> into the construction, mechanics and Singaporean context of the Flyer, and which for one overseas visitor was "a yawner from the beginning"<sup>31</sup> and for another just plain "cheesy."<sup>32</sup>



Figure 6. Singapore Flyer, pre-flight "Journey of Dreams" exhibition. © Christopher Cheng 2013.

Once aboard the wheel itself, the cabin is of course entirely sealed and operated by an external agency, so that the visitor fully yields to the journey, while the constancy, slowness and inevitability of the Flyer's rotation all serve to further enforce this condition of subservient immersal — and some visitors consequently feel trapped by both the cabin space and duration of their journey. This sense of subservience also helps explain the extensive media reporting following the Flyer's stoppage in December 2008 — when the power supply broke down, causing the wheel to seize

for several hours and some of those trapped on board having to be winched to safety<sup>34</sup> — for this incident represented a breakdown not only in mechanics but in the implicit contract by which visitors expect that such attractions should be exciting but also secure and expertly operated, and most definitely should not plunge the visitor into a nineteenth century world of accidents and risk.<sup>35</sup> At the Flyer, everyone agrees that time, space and technology should be all be wholly bounded, predictable, repeatable and scheduled. "At first we were a bit afraid — thinking it's like a Ferris wheel," said one visitor, "But this one is high tech and 100% safe."<sup>36</sup>

This condition of measured provision and accepting subservience is also particularly evident in terms of time. If, in James Joyce's terms, time is relative to the system by which it is determined, 37 then, when riding on the Flyer, time is created firstly by the steady progress of the wheel's movement, secondly by the definite limits of the 32 minute journey time around a single rotation, and thirdly by the wheel's unending rotation, even after the visitor has stepped off after their own journey. Time here, therefore, is steady, prescribed and seemingly eternal, and is apparently produced solely by the techno-organisational aspects of the Flyer's mechanics and management. These temporal conditions, of course, connote strongly with the condition of Singaporean modernity, where citizens and residents are explicitly encouraged to yield to the exigencies of the Singaporean economic, political and social project, that is to both participate and accept their own role within it, while also realising that this national project has a life, direction and energy which far outweighs any single individual. The experience may even connote repetition and constancy, the Flyer comforting the visitor that all is working, and will continue to do so. $^{38}$ 

Through such considerations of the present and of control, we are now beginning to reach beyond a relative knowledge of the Flyer as object and symbol, and further into the realms of Bergson's intelligent knowledge: "the faculty of constructing unorganized — that is to say artificial — instruments," wherein we may comprehend not only things as objects but also their systematic interconnection, as well as our own place within this system. I turn now to further consideration of these inter-connections, particularly through conditions of viewing.

## View

At 165m the Singapore Flyer is of course not high enough to offer the super-elevated view of airplanes or map-like projections. $^{40}$  It does

however act in part like a tall tower, which Michel de Certeau has famously characterised as replacing people's engagement with everyday streets with an "optical knowledge" of strategic urban organization. Here we observe Singapore as if it were an abstract map, where multitudes of buildings become a patterning of objects, where roads, waterways and neighbourhoods are read in terms of their relationship to each other, where speedy, criss-crossing movements become a slow and steady flow, where the whole city is rendered as if a giant model, where the messy, organic and conflictual appears to be controlled, planned and predictable, and where a masterly knowledge of all of this can, apparently, be provided by vision alone. This condition is what Nye calls a "geometrical sublime," and the Singapore Flyer offers it in abundance.

But what of the specifics of this view? Greater consideration shows that the particular view from the Flyer is quite different to that from a typical skyscraper, and, as we shall see, the kind of knowledge which it ultimately offers up is similarly distinct. From the Flyer, while there is nearby urban architecture to be seen — such as when looking north across the East Coast Parkway highway, Millenia Tower and Suntec City to serried ranks of HDB blocks — this is neither the dense locality of Wall Street seen from the World Trade Center nor the heart of London seen from the London Eye.



Figure 7. Singapore Flyer, view to the north. © Christopher Cheng 2013.

It is worth remembering here that although the Flyer itself is not a state-owned initiative but a private development-led project by Melchers Project Management and Orient & Pacific Management, it is nonetheless very much part of a government-controlled plan for

Singapore's economic and spatial development. This includes the initial land purchase being made by the STB and then leased back to the wheel's owners, Singapore Flyer Pte Ltd, as well as further support being provided by the state's Urban Redevelopment Authority, Land Transport Authority and National Parks Board (NTB). Fed by the MRT metro, the Flyer is thus an intrinsic element within Singapore's large-scale Marina Bay urban development, overseen by the Urban Redevelopment Authority (URA) and incorporating, besides the Marina Bay Sands casino and Esplanade Theatres already noted, the renovated Fullerton hotel, Waterfront Promenade, Promontory event space, ArtScience museum, Sail @ Marina Bay residential tower, Helix Bridge, and extensive Gardens by the Bay park.



Figure 8. Singapore Flyer, view east to Esplanade Theatres. © Christopher Cheng 2013.



Figure 9. Singapore Flyer, view south-west to Marina Bay Sands.

## © Christopher Cheng 2013.

The immediate view from the Flyer, therefore, directly equates with the Singaporean government's aims for the marina development, using aesthetic design and an amalgam of residential, business, financial and entertainment facilities to focus more on giving "global face" to strategic development imperatives, and less at the varied cultural needs of its diverse citizens. 45 It also accords with the same government's treatment of public space as a way of bolstering prevailing political ideology rather than meeting everyday public requirements for such spaces. 46 For example, since the late 1980s onwards, the government's increasingly place-marketing boosterism has included a desire to present Singapore as a "global city of the arts" and even a "Renaissance City" by providing high profile facilities such as the Esplanade's theatres. 47 This, however, has been done less to encourage local arts and more to strengthen Singapore's global economic position; as a result Singapore "runs the risk of offering a kind of global nothing," warns performance arts expert William Peterson, "a product that is as sleek, recognizable, and international as a lovely Gucci bag, but which offends no one and increasingly elides the particulars of culture, politics, and place."48

Moving back to the Singapore Flyer itself, the immediate view allows one to see all of these physical manifestations of Singapore's urban development as "writ large" on the landscape, 49 and so suggests the Flyer as a kind of strategic spatial disposition within the planned modernity of Singapore rather than, say, a more localised placement of a tower amongst the comparatively unplanned bustle of London or New York. This is further emphasised by the mid-distance view to the south and over the Gardens by the Bay project. Here, the aim is to present Singapore as "the world's premier tropical garden city,"50 and from the high-level perspective of the Flyer the deliberately utopian character of the project is emphasised by the expansive 101 hectare spread of landscaping, the sci-fi and ark-like Flower Dome and Cloud Forest conservatories, and by a series of unworldly 25-50m high "Supertree" vertical gardens.



Figure 10. Singapore Flyer, view south to the Gardens by the Bay (front right) and Singapore Strait (rear). © Christopher Cheng 2013.

But it is from the view beyond the mid-distance, in the broad 180 degree arc south of the Singapore Flyer, reaching east across the South China Sea and south and west across the Singapore Strait to Indonesia, that an even greater spatial expansivity emerges. Firstly, the viewer is faced with the skyscraper cluster of Singapore's Downtown Core to the west, including buildings such as the Overseas Union Bank Centre (1986), Republic Plaza (1995), and Ocean Financial Centre (2011). Once the viewer passes beyond the relative knowledge of simply recognising these buildings, then a more intelligent process of knowing - "a frame in which an infinity of objects find room in turn"51 - quickly reveals the presence of a major financial operation and its connectivity within networks of electronic communications and transaction, and more broadly within what Manuel Castells calls the "space of flows." 52 Hidden from explicit view, but nonetheless intimated at by the splendorous verticality and grand opulence of the towers, are the management of wealth assets totalling US\$1.4 trillion and the presence of over 600 financial institutions. 53



Figure 11. Singapore Flyer, panoramic view from Marina Bay Sands (left), Downtown Core (middle) and Esplanade Theatres (right).

© Christopher Cheng 2013.

Similarly, and secondly, the visitor is presented with the massive container ships and other hulking traffic plying their trade from Singapore's Brani, Keppel, Pasir Panjang, Sembawang and Tanjong Pagar terminals. <sup>54</sup> Compared to the relatively recent and immaterial nature of financial trade and the Downtown Core, these transporters disclose a more historic, geographic and physical form of globality, with 130,000 vessels conveying 30 million containers and 1 million passengers every year. <sup>55</sup> This immense shipping of goods around the world's interconnected supply routes also reveals Singapore's longheld position as a major entrepôt for international maritime trade. And if the visitor swivels to face north-east, the multitudinous aircraft serving Changi airport provide similar indications of global transportation: 106 airlines flying 51 million passengers to over 60 countries per year. <sup>56</sup>



Figure 12. Singapore Flyer, panoramic view from Millenia Tower (left), Singapore Strait (middle right) and Gardens by the Bay and Marina Sands (right).

© Christopher Cheng 2013.

Thirdly, and turning back towards the Singapore Strait, the visitor is confronted by something wholly new, something which cannot be seen from ground level: the horizon. This non-restrictive boundary, along which the deep blue Strait and azure Asian sky are conjoined by the gentle curvature of the earth, at once marks the limits of our vision but also tempts us into trying to see beyond it. In the words of philosopher O.F. Bollnow, the horizon "positively"

entices one into the distance"<sup>57</sup> and, as the "transcendental condition of the human being-in-the-world,"<sup>58</sup> serves to remind us of our place within a much larger and extensive space which we cannot reach but know to exist. In short, the view of the horizon does not distance us *from* global space, but encourages to realise our position within it.

All of this serves as a simple yet hugely effective reminder both as to Singapore's position as a major global player and as to the Flyer viewer's positioning within that global context. These vertiginous towers and colossal ships placed within the expansivity of a global view provide no exact data or precise lessons, but they nonetheless serve as unmissable indicators of Singapore's role within both electro-magnetic and geopolitical networks, 59 operating as the seventh city in the 2012 Global Economic Power Index 60 and offering the world's second most open economy 61 and fourth most important financial centre. 62 Key Singaporean industries include "New Economy" high-tech manufacturing, information and communications technologies and knowledge-intensive business services (KIBS), 63 as well as gambling, higher education, oil rig production and petroleum refining, 64 and while not all of these are by any means explicitly legible from the buildings, vessels and horizon, their highly suggestive presence cannot help but be noticed by those viewing from the Flyer. If, as Bergson argues, "[t]he objects which surround my body reflect its possible action upon them,"65 then here, at the very top of the Flyer, viewers now find themselves inescapably faced with the imposing scale and extent of Singapore's economy, and by their own corresponding and seeming powerlessness. The effect is akin to the sublime, the visitor encountering the presence of a terrifying power of such magnitude and character that it cannot be readily quantified, and within which they nevertheless know themselves to be existing. The Flyer thus allows a jumping of scales between the self, wheel, city, nation and world, providing a glimpse of a global space in which we always live but do not often see or acknowledge.

## Intuition

So far we have moved from relative knowledge of the wheel as an object through words and symbols, and into an intelligent knowledge of the present through the Singapore Flyer, where, through view and movement, we might also know that wheel in relation to wider systems and inter-connections. But as the experience of riding on the wheel as described above shows, what begins also now to open up is

Bergson's third and final form of knowledge, that of intuition. Let us consider how this might be possible.

In Bergson's terms, while intelligent knowledge "bears on relations" and will "deliver up to us more and more completely the secrets of physical operations," it also has its limits, for "[p]recisely because it is always trying to reconstitute, and to reconstitute with what is given, the intellect lets what is new in each moment of a history escape." Furthermore, to rely solely on intelligence is to be confined by its own methods and precepts, for "[y]ou are inside your own thought; you cannot get out of it. In short, intelligence enables us to understand things, and particularly their inter-relation and our placement within them, but ultimately constrains us within its own mode of operations.

By contrast, intuition, as a more highly developed and attuned form of instinct, is more open to alternative ways of seeing, doing and creating. Where intellect is concerned with the "the secrets of physical operations," intuition goes in the inverse direction, "in the very direction of life," 69 a process which is "within the object" and "an immanent, temporal movement of part to whole, of phases of things to other phases, of parallel lives." Above all, the way out of the prison-house of intelligence is some kind of intuitive action, whether that be the kind of "sympathetic" engagement of artists with the inner life of their subjects 10 or the kind of seemingly irrational act of learning to swim, 20 such that "if the risk be frankly accepted, action will perhaps cut the knot that reasoning has tied and will not unloose." How then might we consider intuition or intuitive action at the Singapore Flyer?

## Architecture, movement and time

Of particular importance here is the specific architecture of the Singapore Flyer itself, and the way in which individuals encounter and intuitively know this wheel in motion. Most immediately obvious is the way the cabins frame the view into a series of pictorial compositions and separate the visitor from that view such that the overall sense is of disconnection, distance and unreality; it is as if Singapore is being disclosed as a cinematic representation of itself, viewable and understandable in new ways (the framed cameralike view from the cabin), but not knowable intimately.



Figure 13. Singapore Flyer, south-west view towards Downtown Core framed by cabin. © Christopher Cheng 2013.

More subtle yet pervasive, however, is the revolving movement of the Flyer. The wheel rotates slowly and majestically, like a huge clock, and in this sense, as an initial experiential reaction, it correlates with the precision, repeatability and constant measuring of artificial machine-measured time, with the time of timetables, diaries, appointments and meetings which Simmel and others have identified as one of the emergent conditions of urban modernity in the early years of the twentieth century, 4 such that [p]unctuality, calculability, exactness are forced upon life by the complexity and extension of metropolitan existence. 75

However, despite their superficial similarity, the spokes and cabins of the Singapore Flyer do not in fact move like the hands of many clocks, for they move in serene continuity, that is without jumps, chimes or ticks, and without any markers to indicate hours, minutes or seconds. This is not then after all, solely a Simmel-esque time of atomised dates, divisions or schedules, of "one instant replacing another," but, to use Bergson's distinction, also a time of duration, "the continuous progress of the past which gnaws into the future and which swells as it advances," that is of a more individual and subjective time by which we find ourselves in a continuous, lived condition. 76 In short, the Flyer's continuous rotation reveals not so much only the operational and apparent qualities of modern time at an urban scale - Simmel's stopwatches and schedules - but also the homogeneous, uniform abstract time of capitalism, whereby this kind of time, just as with Lefebvre's understanding of abstract space, is not only sub-divided, regulated and controlled but is simultaneously treated as homogenous and universal. 77

Furthermore, if, as Jameson has argued, postmodern architecture introduces a new category of urban space, a "complete world" exhibiting a "placeless dissociation" from its locality, 78 then the Flyer does this also for time, for, through its continuous and jump-free rotation, it signifies not so much only sub-divisions of or within time, but also the constant movement between and across sub-divisions of time, or, in other words, the unending advancing nature of global time zones, economic cycles, stages of technological progress and the lifetimes of individuals or, even, of entire cities or nation states.

We could even postulate that, under one temporal register at least, the Flyer provides a counter-balance to the "maelstrom of modern life" and the general speed-up which Marshall Berman and others have identified as one of the essential conditions of modernity. Thus where, in our everyday lives, we often feel the need to nervously and psychologically synchronise ourselves with the modern world through ever more intensive work patterns and fast-paced communications, the Singapore Flyer suggests another form of synchronicity, one in which we must yield in time in a longer and more permanent sense, just as we do in space, to the larger patterns and operations of capitalist modernity; during the ride on the Singapore Flyer, for a few brief minutes, the visitor's body keeps in time with that of a utopian planned city, where all is at once constantly moving and eternal, where everything synchronises beautifully and without error.

Except, of course, as the visitor also well knows, while the Singapore Flyer is seemingly endless in its rotation, for those riding on the wheel the journey lasts for just half an hour. Even as the visitor might begin to feel a synchronicity with global capitalist time — perhaps during the middle of their journey — the impending finality to their ride awakens them out of that reverie, and into a realisation that Singapore, and the global context in which it resolutely frames itself, will always out—last any single citizen or quest.

To return to the comparison with the tower noted above, where the tower in effect tantalises, promising a view of everything but actually delivering very little, the Singapore Flyer initially promises much less (a fairground-derived entertainment ride), but, once experienced, discloses much more, revealing the systematic nature of Singapore — as both the city's plans, extent and reach, and also our own position within that system. Unlike the tower, the Flyer never pretends to be about locality, and instead is a much more

revelatory disclosure of the nature of capitalist and global spacetime, and, by implication, of how we are bound up in this modern condition.

## Moving condition of viewing

Despite the Flyer being marketed as a platform from which to view Singapore, "the view" here is not that from of a static tower, and instead is a constant moving condition of viewing, one which emphasises change, relative position and the intuitive knowledge of things which are no longer comprehensible solely through the intelligent knowledge of objects and systems.

Indeed, much of the idiosyncrasy of any Ferris wheel comes from the seeming immobility of the viewer (who is stationary relative to the moving apparatus), the effect being that it is the view, and not viewer, which appears to move. 80 At the Flyer, because of the removed distance of the Marina Bay, Downtown Core and other parts of the view, along with the wheel moving so slowly, the viewer is then surprised that, having turned away for a few seconds, on turning back again a view has apparently changed of its own accord. Movement here de-stabilises intelligence, making it more temporal and dynamic, and seems to disrupt what it is that we know. In short, movement surprises and unsettles that part of us which relies on our intellect.



Figure 14. Singapore Flyer, view positioned within the architecture of the wheel, Singapore and wider world. © Christopher Cheng 2013.

So what is it that we come to know or un-know through this moving condition of viewing? If we remember that Bergson considers that through intuition "one places oneself within an object in order

to coincide with what is unique in it and consequently inexpressible,"81 clearly there will be no exact thoughts or associations which we might be identified, for we are dealing with the ineffable. Nonetheless, the Singapore Flyer opens out certain qualities, the realisation of which, by intuitive knowledge, might even be encouraged. Here we should also remember the point that is not so much that "the" view changes during the ride as that the Flyer offers an ever-changing condition of viewing, the emphasis here here not on what-can-be-seen, but on the viewer's state of viewing. Thus, literally, there is no single view, for the rotating wheel imparts a dynamic quality via its ever-shifting movement in vertical and horizontal axes. The viewing condition is not then one of modernist montage — or contrasting or juxtaposed frames — but is anti-montage, anti-dialectic and anti-discordance, having instead a gradually morphing and constantly evolving character.

In this sense, we could say that the moving viewing condition invokes Zygmunt Bauman's "liquid modernity" of constant flux in which "change is the only permanence" and "uncertainty the only certainty", and in which there is no ideal end in sight.82 Whereas, as noted above, repeated rotations understood through relative knowledge (observing that the turning wheel) might suggest comforting endurance and a repetitive condition, and repeated rotations understood through intelligent knowledge (riding, looking at views and sensing of time) might allow a greater sense of our positioning with Singapore as capitalist city, nation and global player, the same repeated rotations but now understood through intuitive experience (an immersal within the ever-changing and altering condition of viewing) suggests a pervasive situation in which everything is always changing and mutating. More specifically in terms of Singapore, this is reflected in an official ideology which consistently emphasises "the need for agile and incessant transformation," as with the sustained campaign by the HDB to rehouse almost the entire population.83 In short, in Singapore almost everything seems to be under 50 years old, such that the intuitive Flyer visitor may read the wheel's - and their own — constant movement and viewing as a correlation with this recent and liquid modernity, in which everything and everybody are forever subject to unstable, fluctuating change. Riding the Flyer in this way is to be intuitively "world ready."84

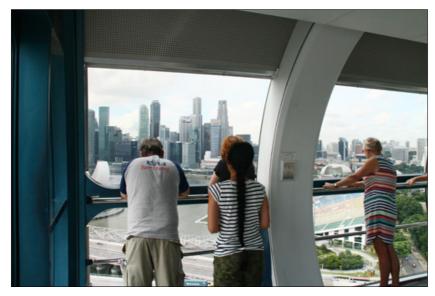


Figure 15. Singapore Flyer, constant movement and changing view. © Christopher Cheng 2013.

## Private time

In The Elementary Forms of the Religious Life (1912), sociologist Émile Durkheim explores the relationship between time and social organization, and makes the distinction between "time in general" and private time, or "my time." Est We have already explored the former in relation to the Singapore Flyer, and particularly in terms of the correlations between its rotational continuity, the abstract time of global capitalism and ever-changing modernity. But what of the latter, or, more correctly, what of the relationship between the two?

During the journey on the Flyer, one complete rotation does not signify the "present" as a discernible moment at which time stands still, but rather underlines how the past (where the wheel has been), the present (wherever the wheel is at any one instant) and the future (where the wheel is going) are all part of one continuum. All of this is readily visible to the visitor, who literally sees this longer duration of past-present-future whenever they turn towards other cabins, which give visible form to the realisation in the visitor's mind of "that is where I have been, this is where I am, and there is where I shall be."



Figure 16. Singapore Flyer, sequence of cabins. © Christopher Cheng 2013.

Furthermore, this is not a timeline, a kind of scheduled linear temporality divided by distinct intervals and markers, but a condition where time is thickened out into an amalgam of that which has occurred, is occurring and will occur, and even, allowing for more than one rotation, that which will occur again. The way the Flyer seems to move faster at its base (where the ground-level architecture provides a static contrast to the rotation) and much slower at this top (where there are no such nearby points of reference) adds to the sense of a morphing continuum, the seemingly differential speed imparting a sense of the magical. Similarly strange effects occur when looking from the Flyer down upon the construction sites below: during one ride I took in July 2011, the building work on the Gardens in the Bay looked, from the height of the wheel, to be proceeding at snail's pace and so gave the impression, to my mind at least, that I was watching the slowness of historical time from a vantage point within the future. That the Singapore Flyer is a modern day interpretation of a century-long tradition of Ferris wheels adds yet another layer, for the overtly mechanical nature of its "gear and girder"86 aesthetic of motors, spokes, trusses and creaking rotation is subtly brought into the twenty-first century by its white frame and air-conditioned silvered cabins, completing the impression that past and present are being extended into a single duration and, in Bergson's terms, making "of its past a reality which endures and is prolonged into the present."87 In short, the Flyer is a series of durations of past, present and future, these durations being of different lengths and configurations.

### Personal identities

The personal identity of each visitor is also caught up in this process. The sense of enclosure, of being at once thrust into yet held apart from the (liquid) modernity of Singapore, creates a dreamlike state wherein the visitor, further intoxicated by sensations of detachment, vertigo and the sublime, may find contemplative thoughts being nurtured. The Flyer is not, of course, a scrapbook or photo album, and it would be an unlikely place for Proustian moments triggered by paving stones or Madeleine cakes.88 The wheel does not, then, tend to provoke specific memories, but our experience of it nonetheless reminds us of the fluid nature of memory and time, that is for people personally as well as for modernity as a whole. This is particularly engendered by the wheel's curious sense of nondirectionality, for when riding on the Flyer one has the strange sensation of moving backward as much as forward. Once again, then, it is a duration of past and present that is being tilted at, a duration which is not static or established but is constantly being reevaluated.

It is into pure duration that we plunge back, a duration in which the past, always moving on, is swelling unceasingly with a present that is absolutely new [...] We must, by a strong recoil of our personality on itself, gather up our past which is slipping away, in order to thrust it, compact and undivided, into a present which it will create by entering. Rare indeed are the moments when we are self-possessed to this extent: it is then that our actions are truly free.<sup>89</sup>

As this last remark by Bergson makes clear, such immersion in duration can be a way to find freedom, and this is perhaps why the Singapore Flyer (and other modern Ferris wheels) are frequently favoured for engagement proposals or marriages, helping to conjoin past, present and future relationships within a peculiarly appropriate space-time. Similar associations with free and healthy futures can also be discerned in events like one in 2011 when the Flyer was illuminated in pink to mark Breast Awareness Month, or in other local events to promote everything from children's reading, Diwali, nurses and teachers to rainforest conservation, yoga fitness, community bonding and racial harmony. Local Singaporeans also often

interpret the Flyer as a symbol of a prosperous life and source of good luck, for with 28 capsules, 28 maximum passengers per capsule, 28 rotations per day, and 8 being a lucky number in Chinese culture, the Flyer signifies "double prosperity." Indeed, the rotational direction of the Flyer was also changed on the advice of feng shui experts so that it would bring fortune and good qi (energy) into Singapore.  $^{94}$ 

As these connotations with marriage, fortune and prosperity suggest, there is also a strong sense of the future at the Flyer. But this is not a future in which the individual makes all the running, determining through decisions and actions a world that is wholly of their own construction. Rather, as the visitor moves slowly around the wheel, they see the future moving towards them, gather themselves within the duration of their journey, before then getting off the wheel, moving once again into their own immediate present and future.

As Kern notes after psychiatrist Eugène Minkowski's Lived Time, this kind of experience of the future is a conflation both of activity, where individuals move purposefully towards the future while in control of their lives, and of expectation, where the future comes towards the same individuals, who consequently steel themselves against it. 95 At the Singapore Flyer we enter into both of these states, wherein riding on the wheel tends to not only create, as already noted, an acquiescence to the oncoming future of Singapore, but to also provide a space-time for visitors to galvanise themselves towards that modern future. This is particularly evident in the change which frequently occurs in visitors as they prepare to depart. Few visitors, except those suffering from vertigo, are anxious to depart while experiencing the main journey, remaining quite calm during the steady progress. Yet once the rotation comes close to completion, a change in mood often appears, the sense of otherworldly time begins to melt away, and the Flyer's thickened present becomes replaced by the normal time of the city - faster, more segmented, more impatient, more atomised. People become quick to leave, determined to re-enter the normal world, eager to face the future.



Figure 17. Singapore Flyer, preparing for the journey's end. © Christopher Cheng 2013.

## Leaving the Flyer

Bergson contends that one can never pass fully from intellect and onwards into intuition, <sup>96</sup> and perhaps as analytical or scholarly method this is true. We can, however, use intellect and intuition alongside another, and this exploration of the Singapore Flyer suggests that, in one particular kind of architecture at least, it might just be possible to find intellect and intuition in complementary co-existence, and that, additionally, such an architecture as the Flyer could even be a catalyst to this dual process of consciousness.

Having journeyed on the Singapore Flyer, this is also the case when leaving it. Departing the Flyer, one is reintroduced to a world of variegated rhythms, whether they be those of the "Rainforest Discovery" tropical micro-park, "Singapore Food Trail" hawker-style food court, the surrounding streets and metro, or even rare instances of Singaporean counterculture such as the illegal street-racers who sometimes congregate around the base of the wheel. 97 Through this engagement with some of Singapore's more everyday features, the visitor's recent journey on the Flyer is reconnected to the same city which they have just been viewing and contemplating. At the base of the Flyer one experiences a fluxed encounter with a new Singapore which is inflected by the previous-yet-different experience of the city seen from the Flyer. To use Bergson's terms, the city now becomes part of a longer yet recent duration, a connected experience now seen from both within and outside of the wheel.



Figure 18. Singapore Flyer, "Singapore Food Trail". © Christopher Cheng 2013.

This re-engagement with the urban realm is also a realisation that we live in time as much as we do in space. Above all, leaving the Singapore Flyer is also a comprehension that time, as perceived in Simmel's terms and through Bergsonian intelligence is indeed a matter of schedules, diaries and appointments (the time of streets, and of sometimes of the wheel), but is also, when approached through Bergsonian intuition, a matter of duration, continuity and flux (some of the other times of the wheel). In particular, Bergson argues that when acting in the present, the body chooses from its store of useful memories in order to "illuminate the present" and so form a "view to ultimate action."

Evidently then, for riders on the Flyer, present day Singapore is now infused with their experiences of it from the wheel. There is also that aforementioned sense of freedom here. Bergson argues that freedom occurs when we feel motivated against the future, and the act of leaving the Singapore Flyer seems to me to be encouraging of exactly this attitude, combining Minkowski's activity and expectation, such that we let "our whole personality concentrate itself in a point, or rather a sharp edge, pressed against the future and cutting into it unceasingly." The Singapore Flyer is then now, at the moment of leaving it, part of the past — not, however, as forgotten entity, but as an active memory ready to be recalled and mobilised within an on-coming future.



Figure 19. Singapore Flyer, contemplating one's position in the modern world. © Christopher Cheng 2013.

It is therefore as a whole, as a complete experience of arriving-riding-leaving, of encountering and knowing different kinds of time, that the Singapore Flyer provides a peculiarly distinctive contribution: as a reminder of, and catalyst to think about, one's position in the modern world, and within the duration of past, present and future. And, to return to one of my opening remarks regarding Jameson's contention that a new form of cognitive mapping might allow individuals to gain some kind of "heightened sense of its place in the global system," the Singapore Flyer provides a small glimpse as to how that cognitive mapping might be entered into, through time as well as in space.

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[7,700 words]

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## Figure captions

- Figure 1. Singapore Flyer, exterior. © Christopher Cheng, 2013.
- Figure 2. London Eye, three-dimensional truss and spacecraft podcabin. © Iain Borden 2013.
- Figure 3. Residential tower blocks, Singapore, as seen from the Singapore Flyer. © Christopher Cheng 2013.
- Figure 4. Singapore Flyer, cylindrical cabin. © Christopher Cheng 2013.
- Figure 5. Singapore Flyer, steel hub, struts and stays. © Christopher Cheng 2013.
- Figure 6. Singapore Flyer, pre-flight "Journey of Dreams" exhibition. © Christopher Cheng 2013.
- Figure 8. Singapore Flyer, view east to Esplanade Theatres. © Christopher Cheng 2013.
- Figure 9. Singapore Flyer, view south-west to Marina Bay Sands. © Christopher Cheng 2013.
- Figure 10. Singapore Flyer, view south to the Gardens by the Bay (front right) and Singapore Strait (rear). © Christopher Cheng 2013.
- Figure 11. Singapore Flyer, panoramic view from Marina Bay Sands (left), Downtown Core (middle) and Esplanade Theatres (right). © Christopher Cheng 2013.
- Figure 12. Singapore Flyer, panoramic view from Millenia Tower (left), Singapore Strait (middle right) and Gardens by the Bay and Marina Sands (right). © Christopher Cheng 2013.
- Figure 13. Singapore Flyer, south-west view towards Downtown Core framed by cabin. © Christopher Cheng 2013.

Figure 14. Singapore Flyer, view positioned within the architecture of the wheel, Singapore and wider world. © Christopher Cheng 2013.

Figure 15. Singapore Flyer, constant movement and changing view.  $\mbox{@}$  Christopher Cheng 2013.

Figure 16. Singapore Flyer, sequence of cabins. © Christopher Cheng 2013.

Figure 17. Singapore Flyer, preparing for the journey's end. © Christopher Cheng 2013.

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