Efficacy of Perspective: The Production of Transitoriness in 21st Century Public Space

Kenny Kim

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EFFICACY OF PERSPECTIVE

THE PRODUCTION OF TRANSITORINESS

IN 21ST CENTURY PUBLIC SPACE

KENNY KIM

Thesis Advisor: Prof. Anne Munly
Thesis Preparation | Fall 2014
Syracuse University
INTRODUCTION

Synopsis

Research proposal

[A] URBAN PERSPECTIVAL VIEW 17
strategic & purposeful distortion

Giovanni Battista Piranesi
Invenzioni capricci di carceri (1740s)

Camillo Sitte
City planning according to artistic principles (1889)

Gordon Cullen
Townscape (1961)

[B] RAISED PUBLIC PLAZAS 41
human flow and movement

Elevated
Piazza del Campidoglio, Rome IT
Metropolis, Fritz Lang

Framed
De Young Museum, San Fran. CA
Roman Ruins, G.B. Piranesi

Sunken
Beursplein, Rotterdam NL
Market Hall, Rotterdam NL
<table>
<thead>
<tr>
<th>[C] PROJECT TRAJECTORY</th>
<th>SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>analyses, design, and production</td>
<td>77</td>
</tr>
<tr>
<td>Site Selection</td>
<td>Outtakes</td>
</tr>
<tr>
<td>Walker Travel Itinerary</td>
<td>78</td>
</tr>
<tr>
<td>Possible Site Exploration</td>
<td>Annotated bibliography</td>
</tr>
<tr>
<td>71</td>
<td>84</td>
</tr>
<tr>
<td>72</td>
<td>Figure credits</td>
</tr>
<tr>
<td></td>
<td>87</td>
</tr>
</tbody>
</table>
This thesis considers the specific relationship between representation of cities and its capacity to promote and construct cities. In the last century, there has been a shift of theorizing in the position of the human eye to organize the new systems of the contemporary city. It has moved away from using these tools to imagine and polemically argue for or against the city.

Upon studying G. B. Piranesi of the 18th century, Camillo Sitte of 19th, and Gordon Cullen of the 20th, each delineated and provocatively polemicized the city through their distinctive representational techniques. However, these imaginations that are being argued for no longer exist in our cities. If not, it may not be what we need today. My interest lies in interrogating their techniques, but more importantly, their notion of distortions. With our new environments we are honing towards a lifestyle that is always on the move. The primary goal of my project is to adopt and develop methods of representation to explore and generate this ‘transitory’ place.

It is interesting to point out that these three individuals, while separated by 200 years in time, use a form of perspective in a precise manner to polemicize the city. Piranesi, who has created plates in his Carceri series (1740), expressed the city through layering multiple viewpoints that resulted in distortions of unexpected scales. Sitte and Cullen both viewed the city by ‘wayfinding’ which is defined by the act of seeing a value of sequential experience. Through this technique, Sitte constructed principles in his book City Planning According to Artistic Principles (1889) to theorize the diminishing ‘picturesque’ and the shift towards the Modern era. Half a century later, Cullen tested his technique of ‘serial vision’ in Townscape (1961), where he walked from one from end to another via a map which led him to a ‘sequence of revelations’. This process allowed him to highlight and manipulate the elements of the town so that an impact on emotions is achieved.

In turn of the 20th century, Alex Wall published his essay “Programming the Urban Surface”, speculating the contemporary metropolis as a “more
Fig. 1. Le Corbusier, Ville Contemporaine. 1924. Image.
Fig. 2. O.M. Ungers, City Metaphors
polycentric and web-like sprawl”, and initiated his theory on repurposing the institutional core to be surrounded by suburbs and the countryside. At a time when the ground plane and urban surface took a large presence in urban planning, he mentioned theories of the “networks of transportation, electronic communication, production and consumption”, which were in parallel with arguments of the present city, a topic speculated by urban theorists such as Thom Mayne in Combinatory Urbanism.

“...and Schouwburgplein are zones where the public appropriates and modifies the very surface of the city. These surfaces are extremely simple and spare, yet they are designed in such a way that many different events can be supported...”
(Wall, 242)

However, Wall makes an observation that there was a shift in urban design, from individually enclosed objects to the manipulation of larger urban surface as a whole. Thus he was implying that the designs of form pertaining to buildings were less important than the layout of the city fabric. Wall believed that contemporary squares such as Schouwburgplein are surfaces functioning on its own, allowing an elated public adoption.

I am critical of this observation, intended toward the function of Schouwburgplein. The cities have become more attractive to the phenomena of concentrated activities, and its lack of identity is proving problematic. Insufficient communication between the urban system such as the streets and buildings within urban blocks are exacerbated by the invisible barriers that the plaza has with its adjacent streets. Our cities have become a place of transience – a transitory presence. The ultimate function of the public sphere has changed in the contemporary city.
Possibly, the root of the problem may not lie in Schouwburgplein and its new intervened square, but it may be a deeper one. I chose these three modern writers as they used drawing to understand, promote, and polemicize the city. Piranesi profoundly started a challenge to rethink the perspectival construction of Brunelleschi as a modern thinker. Through his drawings, Piranesi expressed an idea about the city that originally had numerous layers that were in complete ruin – in a dark, hidden past.

The deeper problem lies in how we moved away from the fundamental act of looking at the city; people do not theorize the city through perspective. The modernist approach of urban planning led to the creation of master and zoning plans – to ultimately organize and create a city of systems. The three figures had no interest in coordinating these systems, but rather through representation of distortion, they suggested a reorientation in order to focus back on urban perspectival views to speculate the city.
[A] Urban perspectival views of strategic and purposeful distortion

[B] Raised public plazas of human flow/movement
Fig. 3. The Euclidean Cone of Vision
This image is a drawing of the visual cone, from B. Taylor’s New Principles of Linear Perspective.

Fig. 4. Capitoline Hill - Piranesi
An etching of Capitoline Hill by G.B. Piranesi.
What are its relationships between these two urban observations?
How has or could perspective as a representational technique generate public space?
Spaces of concentrated activities
‘Conventional’ plazas
URBAN
PERSPECTIVAL VIEWS
of strategic and purposeful distortion

GIOVANNI BATTISTA PIRANESI 18th century
CAMILLO SITTE 19th century
GORDON CULLEN 20th century
Piranesi was extremely critical of the status quo, often in history perceived as a negative figure. During the “Golden Ages” of the Renaissance era, Piranesi was critical of his time, and composed Invenzioni Capricci di Carceri, a set of plates that depicted an imaginary world of prisons. His anti-established attitude towards the new city resulted in creation of distorted perspectival drawings that challenged the conventional, Brunelleschi’s way of constructing a perspective.

Beginning from the 18th century, Piranesi profoundly challenges the perspectival construction of Brunelleschi as a modern thinker. Through his drawings, Piranesi expresses an idea about the city that originally had numerous layers that was in complete ruin and is of a dark, hidden past.

“In Piranesi, the continuity of perspective is smashed by columns, arches, and bridges... After each such explosion or letting in of a layer of clouds, the successive representation of an element of landscape (a mountain mass) is once again not given in the scale which would be dictated by an effect that would produce a sense of real distance.”

(Eisenstein, 105)

In an article by a Russian film director Sergei Eisenstein, he elaborates on the plates of Invenzioni Capricci di Carceri and theorized Piranesi’s technique of illusion through breaking down of the perspective etchings and comparing them to his own cinematic works. Eisenstein acknowledges that the uniqueness of Piranesi’s etchings is their constant interruption and image of “leaping”. Through the interruptions, the subject ‘behind such a column or semicircle of an arch’ is not in the same perspective mode as the interruptions, but it is of a new one, often reduced in scale of representation than the ‘expected’ scale of the composition. This result in an effect of making the depth extremely remote, ultimately an explosion of scale is created.

His perspectives always had a polemic, an argument towards the time he was living in perhaps. Manfredo Tafuri writes that his drawings were a way to find what their cities were trying to promote. As a modern figure, he
Fig. 7. Invenzioni Capricci di Carceri
Etchings by G.B. Piranesi, selectively looking at Piranesi's technique of scale distortion.
Framing
Each time behind such a column or semicircle of an arch the perspective movement is caught up again.

Confounding the ground plane
Ground level perceived in Piranesi’s Carceri etchings were from below ground to allow an extreme vantage point above.

Manipulations in scale
Piranesi manipulates the subjects size sporadically in his drawings, creating an atmosphere of a deep, dark space.
did not resemble the renaissance era, which was heavily involved with the human form and the formulaic geometries, he created rifts in his etchings. Tafuri says Piranesi is challenging what architecture can do, and that we are passed the moment of architecture being able to convey culturally understood messages. This resulted in his works as being not smooth, and plan of city that is entirely impossible to read without any breaks.
Envisioning a ‘picturesque’ kind of city, Sitte was interested in the city that was visually attractive and sophisticated. His perspectives and plan drawings presented a look out of a kind of thinking about the city. In 1899, Camillo Sitte’s opinions about the modern city were published in City planning according to artistic principles, and his analyses of the spatial elements of the city, including the urban public plazas, have heavily criticized the modernization of the new planning of the cities.

“We are well aware of the effect of an old plaza, but how to produce it under modern conditions is not understood because we are no longer cognizant of the relation between cause and effect in these matters.”
(Sitte, 221)

Despite his writing were done much before Modernism took off, Camillo Sitte wanted architects to understand that in order to design in the modern cities, one must understand the fundamentals of the past plaza spaces. The shifting of the importance in city planning to create a more hygienic and motor-friendly traffic purposes has become a necessity as the world moved towards a modern way of living.

Sitte took an interesting approach to the problem of the modern city, and instead he was optimistic. He sought for options before Corbusier came through with changing the city planning as we know of today. Sitte suggested that we in fact want the old city, despite the changing of the way we live and the industrialization. He believe that the way to solve the issue was to look and plan the city according to artistic principles, trying to preserve the conventional way of seeing the city.

“...nowadays in connection with genuine city plazas... the mistake is sometimes made that they are laid out in disproportionately vast dimensions. On such a square even the most monumental structures shrink to a seemingly ordinary size, for in the art of space the comparative relationship alone are important, the absolute size, on the contrary, counting for but little.”
(Sitte, 179)
Fig. 9. Lübeck, Breitestrasse

Fig. 10. Brussels, Marche aux poulets
Fig. 11. Sitte’s Plaza principles
Diagrams of the principles Sitte emphasized in his text: City planning according to artistic principles.
Around the time when Sitte was writing his book City planning according to artistic principles, there was a moment when cities suddenly had the capacity to understand and a new kind, different systems to keep it alive, such as water, plumbing, sewage, markets, and multiple alternative systems. A city that Sitte found ideal was Florence of Italy. In Florence, a hodgepodge of markets were systematized and controlled in the 19th century, putting up industrial sheds dispersed about in the city to control how food is sold in markets.

This happened at the time when Sitte was writing the book, and seeing the beginning to systematizing urban planning first hand influenced him to theorize the city in a picturesque view. With these new systems, the roads functioned more than just the pedestrians but required systematic sewage and drainage to live in a cleaner city, as well as vehicular traffic above. How were all of these organized and planned? It was through the master plan view drawings that organized and arranged the new city, and Sitte never compromised to let go of the ‘picturesque', and was constantly worried of the city becoming a type of a system.

There has been an argument that there is something valuable about how we move through cities from feet on the ground (also mentioned in Cullen’s thesis of the Townscape), and the fact that we are on the ground is radical to Sitte. His perspective of the new city did not imagine that the new city will be completely motorized, instead was against and afraid of the change. Possibly, Sitte may be in a similar agreement with Corbusier who may have not imagined the cities to be subsequently inundated, who designed roadways with only a few present on the streets.

Sitte’s subjective visions of an ideal plaza are illustrated and delineated through a set of principles in his text. He believes the city streets should be made up of curvy and organic shapes, in contrast to the new organized and guided streetscapes in the modern cities. The main circulation that drives through or around is a crucial key point to create a successful public plaza. It denotes a statement through the public flow.
"In short, we miss activity exactly where in antiquity it was most animated, that is around the great public buildings. So it..."
turns out that all that we have stressed so far as characteristic of the enchantment of old plaza is today absent.”

Fig. 12. Piranesi - Sitte - Cullen
Personal sketches of their perspectival methods
delineated through axonometric construction.
After Le Corbusier’s time, Gordon Cullen reacted to what he did with the Modern city, and he was extremely against it, proposing the complete opposite. Cullen was also anti-established towards the new city, who did not find it valuable of the organized city which lacked character, and he believed cities should return to that of the villages. Similar to Sitte, he believed cities should be experienced on foot, and the city should be composed of irregular spaces rather than that of the strict, modern planned cities.

Cullen took the experience of walking and meandering through the streets seriously, and his vignettes of perspective drawings showed his ideas of wayfinding. Cullen describes the optical division of such a line into ‘here and there’ should be done by bisecting the angle of vision into two roughly equal parts and not by dividing the line into two equal lengths.

In result, his drawings were composed of drawings that showed a sequence of the city, in a promenade of walking through structures. His approach was to look at the city as a serial vision with a sequence of revelations. He quotes that ‘the slightest deviation in alignment’ has disproportionally powerful effect in the third dimension. The distinguished closures he mentions discuss the squares and plazas as a part of the town sequence.

“Enclosure is the end product of traffic, this is the place to which traffic brings you. Without enclosure traffic becomes nonsense”. (Cullen, 106)

His aerial perspective describes the public activation in the irregular public spaces looking at it in a view of perspective. His depiction of the ‘town’ that he envisions, the attitudes towards a new kind of city, is smooth and continuous. He sees a positive value in a smaller, village-like composition of the streets, and he sees danger in the growing and expanding of the city in a critical way.
Fig. 13. Serial Vision - Cullen
Human scale
Piraneş manipulates the subjects size sporadically in his drawings, creating an atmosphere of a deep, dark space.

Narrow streets
Cullen manipulates the subjects size sporadically in his drawings, creating an atmosphere of a deep, dark space.
Cullen's answer to his perspectival technique was done through the sequence of wayfinding, meandering through the city.

Piranesi manipulates the subjects' size sporadically in his drawings, creating an atmosphere of a deep, dark space.

This diagram investigates Cullen's methods of perspective construction in a collective form.

Fig. 14. Diagram - Townscape
“And yet... if at the end of it all the city appears dull, uninteresting and soulless, then it is not fulfilling itself. It has failed. The fire has been laid but nobody has put a match to it."

Fig. 15. Perspective geometries - Cullen

Fig. 16. Public movement - Cullen
G. B. Piranesi

C. Sitte

G. Cullen
Perspectival techniques

G. B. Piranesi

smashing, explosion, leaping

C. Sitte

‘picturesque’

G. Cullen

serial vision
Towards ___
kind of city

“Attitudes”
towards new city

Anti-established, negative;
Antagonist.

“...the continuity of perspective is smashed by columns, arches, and bridges... After each such explosion or letting in of a layer of clouds, the successive representation of an element of landscape is once again not given in the scale which would be dictated by an effect that would produce a sense of real distance.” (Eisenstein, 105)

In denial, but positive;
Anxious toward new city;
Smooth, sequence.

“...nowadays in connection with genuine city plazas, ...the mistake is sometimes made that they are laid out in disproportionately vast dimensions... in the art of space the comparative relationship alone are important...” (Sitte, 179)

Anti-established, negative;
Anti-modern urbanism;
Smooth, sequence.

“Enclosure is the end product of traffic, this is the place to which traffic brings you. Without enclosure traffic becomes nonsense”. (Cullen, 106)
Raised Public Plazas of strategic and purposeful distortion

Elevated Plaza del Campidoglio, Rome IT; Metropolis*
Framed de Young Museum, San Francisco, CA; Roman ruins*
Sunken Bviersplein, Rotterdam NL; Market Hall, Rotterdam NL
Fig. 17. Capitoline Hill
Fig. 18. Plate Ia - Capitoline Hill
Mixed media montage. Incl. photography of Basilico, Gabriele, etching of G. B. Piranesi, and screenshots of Metropolis.
ELEVATED
Fig. 19. Plate Ib - Capitoline Hill

Through the distorted perspective, a new architectural drawing is constructed, showing the process and method of line drawing.
A platform plate has been elevated, dividing the perspective of the Metropolis. The top perspective is reminiscent of an elevational perspective, while the bottom, steep aerial perspective disguised as a plan view.
Fig. 21. de Young Museum
The floor and the ceiling, as well as the perforated sheets, are a device of framing, where the landscape begins to dismiss the notion of the middle, and only perceive the near and the far.
Fig. 23. Plate IIIb - de Young Museum
Through the distorted perspective, a new architectural drawing is constructed, showing the process and method of line drawing.
Depicting the Roman ruins, Piranesi’s arches are borrowed to frame the lifted concrete floor, the form placing an emphasis on the top part of the Roman structure from the Ruins.
Fig. 25. Bürsplein
This extreme perspective’s goal is to delineate a space of concentrated activities, and through the etchings of via Appia replaces the commercialized storefronts that are the driving stimulant of human movement in our contemporary cities.
The ‘black hole’ in Market Hall is emphasized and exacerbated, creating a delusion of an infinite pairing of escalators and vertical circulations. This montage uses tools of framing and distortions, to draw the excess of circulation, thus, the human flow.
Fig. 30. Plate VIb - Market Hall, Rotterdam

Through the distorted perspective, a new architectural drawing is constructed, showing the process and method of line drawing.
This perspective montage annotates the extending of the public movement, and the relationships of the staircases of old and new. Own.
The pyramid of vision... the Euclidean cone of vision, demonstrating an awareness of the dimensional distortions brought about by the position of an observer. The issue, however, was to how to avoid distorted perception. Architects were expected to correct certain visual aspects in order to convey an experience of perfect adjustment or regularity to synaesthetic perception... Renaissance architectural theory and practice never questioned this aim.
Site Selection  Walker Travel Itinerary
Program  Train station, Sports stadium
Conclusion  Thesis trajectory
Attempting to research its effect of the human vision in conceiving architectural spaces, I began to hit walls of limitations of Google and its Street Views. My initial readings of Camillo Sitte, Gordon Cullen and their stances on experiencing the spaces on foot became an important principle to follow during my process of design.

Through this opportunity to travel, I would like to test this method first hand and document them to enrich my argument of the perspectival perception from the human eye. My strategy on producing and working to design would be through the ‘perspectives’ that I will construct through editing and adding the synthetic elements of perspectives, almost as one would filter what they would or want to see in their vision.

Just as Piranesi attempted through his drawings of the Carceri (prisons) and the play on scales and vantage points have influenced me to look at its roots of the Roman city. Also my fascination on the elevating apparatus that he portrays, such as the stairs or ramps, are elements I would like to further study through visiting projects which speculate on that architectural effect of bring the actor from one level to another.

I have listed out the places of interests in four themes: public plazas, elevating apparatus, speculations (of my own interests), and streets. I hope to take usage of the voyage to gain a new layer of information to guide my design proposals that I will present in the next semester.
Travel Itinerary

* This preliminary itinerary is organized by themes, the specificity of the travel route will be fully honed through a logistical route geographically.

1. Travel and Documentation : 10 days

Cities:
These cities were chosen to be at the cities where each figure have studied and documented in their texts. By travelling to each individual sites, I will document each city and sites, looking for newer adjacencies through my own observations.

Rome IT, document with Piranesi’s
Vienna AS, document with Sitte’s
Brussels BE, document with Cullen’s ‘Serial Vision’, the emerging views

Projects to visit:
Speculations
- Market Hall – Rotterdam, the Netherlands
- Piazza del Campidoglio – Rome, Italy
- Vittorio Emanuele II Monument – Rome, Italy
- Isola Tiberina – Rome, Italy
- Magna Plaza – Amsterdam, the Netherlands
- Sky Elevator – Rome, Italy
- Spanish Steps – Rome, Italy
- (the stairs of) Palais Garnier – Paris, France

2. Analysis, Design, and Production: 15 weeks

The majority of the Spring 2015 semester will be used to continue the analysis of a specific site [not concrete as of current state of this submission] and produce design speculative proposal that speak to stimulate discussion of the stimulation of public movement in public spaces.
December 31st, 2014
[NYC – PARIS]
New York NY -> Paris FR

January 1st, 2015
[PARIS]
Père Lachaise Cemetery
Place de la Nation
Promenade Plantée
Parc de Bercy
Passerelle Simone-de-Beauvoir
Bibliothèque Nationale de France
Jardin Brassai (Gare Montparnasse)
Jardin Atlantique

January 2nd, 2015
[PARIS]
Villa Savoye
La Défense
Arc de Triomphe

January 3rd, 2015
[PARIS]
Montmartre
Parc de la Villette
Parc des Buttes-Chaumont
Bassin de la Villette
Canal Saint-Martin
Place de la Contrescarpe
Marché Saint-Germain
Pont Neuf (Square du Vert-Galant)
Les Halles
Galerie Vivienne

January 4th, 2015
[PARIS]
Parc André Citroën
Petite Ceinture du 15e
Parc monsouris
Le Centquatre

January 5th, 2015
[PARIS]
Parc Monceau
Jardin des Tuileries
Jardin du Palais-Royal
Jardin du Luxembourg
Centre Pompidou
Jardins du Trocadéro

January 6th, 2015
[PARIS-ROTTERDAM]
Paris FR -> Rotterdam NL

January 7th, 2015
[ROTTERDAM-ROME]
Schouwburgplein
Museumpark
Rotterdam NL -> Rome IT
January 8th, 2015  
[ROME]

Pont Sant’Angelo  
Castel Sant’Angelo  
Ponte Umberto I (Palazzo di Giustizia)  
Piazza Navona  
Campo de’ Fiori  
Piazza Della Rotonda  
Piazza di Spagna

January 9th, 2015  
[ROME]

Viale Trastevere  
Area Sacra  
Piazza del (Church of the )Gesù  
Monumento a Vittorio Emanuele II  
Piazza Campidoglio  
Ara Coeli  
Sky Elevator  
Piazza del Colosseo

January 11th, 2015  
[ROME]

San Carlo Quattro Fontane  
Giardini del Quirinale  
Piazza del Quirinale  
Piazza della Repubblica  
Piazza del Popolo

January 12th, 2015  
[ROME-OSLO]

Piazza Pio XII (Basilica S. Pietro)  
Pyramid of Cestius  
Chiostro del Bramante  
Pont Umberto I  
Via della Conciliazione  
Rome IT -> Oslo NO

January 13th, 2015  
[OSLO-NYC]

Aker Brygge  
Oslo Opera House (Snohetta)  
Oslo NO -> New York NY

* This trip followed a strict schedule of visiting places of interest for the thesis research purposes. My initial goal and hypothesis for this trip was to further solidify my argument of transitoriness, and through experience from the perspective of the moving person I was able to relate the argument I was advocating for toward the contemporary cities we live today.
Outtakes
Bibliography
Figure credits
Image study of the relationship between the institution versus the urban fabric of public squares.
Piazza San Marco
Venice, Italy
11th century

Union Square
San Francisco, CA, USA
1850

Piazza del Duomo
Florence, Italy
13th century

Rockefeller Center
New York, NY, USA
1939

Piazza del Campo
Siena, Italy
14th century

Segrums Building
New York, NY, USA
1958
Initial studies of the public plaza, and their role in stimulating human interactions and public usages within city squares / plazas. Matrix of public plazas are drawn in chronological order.
These studies were the start of the plate montages that I have created in chapter B. The research was heavily based on the study and scale differentiation of public plazas, and these diagrams began to think about the relationship between the surface of the square to the institutional building within the public space.


Figure credits
Fig. 1. Le Corbusier.
Fig. 2. O.M. Ungers.
Fig. 3. Brook Taylor.
Fig. 4. G.B. Piranesi.
Fig. 5. Roel Dijkstra.
Fig. 6. Luc Groosman.
Fig. 7. G.B. Piranesi.
Fig. 8. Kenny Kim.
Fig. 9. Camillo Sitte.
Fig. 10. Camillo Sitte.
Fig. 11. Maurits Voorhorst.
Fig. 12. Kenny Kim.
Fig. 13. Gordon Cullen.
Fig. 14. Kenny Kim.
Fig. 15. Gordon Cullen.
Fig. 16. Gordon Cullen.
Fig. 17. Gabriele Basilico.
Fig. 18. Kenny Kim.
Fig. 19. Kenny Kim.
Fig. 20. Kenny Kim.
Fig. 21. Herzog & de Meuron.
Fig. 22. Kenny Kim.
Fig. 23. Kenny Kim.
Fig. 24. Kenny Kim.
Fig. 25. Roel Dijkstra.
Fig. 26. Kenny Kim.
Fig. 27. instagram.com, @rozamatveeva.
Fig. 28. instagram.com, @rozamatveeva.
Fig. 29. Kenny Kim.
Fig. 30. Kenny Kim.