# VISITING GOOGLE EARTH

## GPS Art and Subjective Cartography

by

### Esther Polak& Ivar van Bekkum

contact@polakvanbekkum.com
www.polakvanbekkum.com

A B S T R A C T

*Esther Polak and Ivar van Bekkum have been working with GPS data as artists since 2002. With this background, the program Google Earth, made available by Google without charge since 2005, is of interest to them. In this text the artists explore the visual and spatial characteristics and specific qualities of this medium. They particularly focus on the unique quality of the space that Google Earth represents and on the duality in Google Earth which arises from this: on the one hand it is a classic, objective cartographic medium, on the other a medium in which the presentation and development of very subjective stories is possible. The work that the artists make is oriented to the possibilities that Google Earth presents as a spatial platform and as a subjective "theater" in which narratives may be unfolded which have a unique relation to realty. Their works take the form of animations which can be seen as an investigation of the cinematographic possibilities of Google Earth. In this context the artists describe a number of experiments of this nature they have already done and list future work they hope to be able to carry out.*

## INTRODUCTION

**We were really pioneers when we began working with GPS in 2002.** We had to develop the software ourselves in order to visualize the data, or we relied on unusual methods of visualization, such as a wheeled, digitally controlled robot that traced GPS tracks by dropping a trail of sand. Out of the corner of our eye we noted that the popular Google Earth also offered increasing possibilities for visualizing GPS and other location data. About six years ago we began to work with it seriously. For us, the most fascinating thing about Google Earth is that it is a copy of the real world. The space in Google Earth is not abstract; every point refers one-to-one to a real point in the real world. As an extension of that, with its unique qualities Google Earth provides a stage where realism and objectivity can be mixed in a unique way with fiction and stories, or where the two can even flow into one another. For that reason we experience working in Google Earth as something like art in public space, or outdoor theater, or actually, and as a better comparison, as like filming in public space.

We have tried asking ourselves why Google Earth really exists, but that is not an easy question to answer.

Why did a firm like Google, which has grown to its present status with its search engine, one day decide to buy a small software company which had developed a basic application for visual cartography, [1] to use that as the foundation for developing a virtual globe? We have asked ourselves still more questions about Google Earth which surfaced as we were working with the medium. These are the questions which we will discuss here – sometimes reaching an answer, and sometimes not.

## MEDIA THEORY

In classic media theory as propounded by Marshall McLuhan (*The Medium is the Message*), [2] the old medium is always the content of a new medium. Thus, the content of a book is spoken language, the content of television is film, and the content of film was in turn theater. If you apply this to Google Earth, the content of Earth is the printed atlas or the three-dimensional globe. Recently there have been still more digital cartographic media created that you can argue are successors to the atlas, or to the globe. We are thinking of, for instance, the TomTom systems or smartphone

applications likes Everytrail, with which you can record your own achievements at sports and share them with others.

What is striking about Google Earth, if you compare it with these other digital cartographic tools, is that GE really has no unambiguous function for its users, other than coupling existing satellite images to one another and pasting them together into a virtual globe that precisely represents the existing world. Even if you remove the satellite images entirely – and that can easily be done by covering the earth with a uniform, image-filling color or bizarre pattern, every place on the earth remains accessible, and can be uniquely identified via the system of coordinates. Thus, even on the abstract sphere which this would create, every place continues to be related to a place in the real world, and by using the "time line" function one can even still couple it to an exact moment in time, or timespan. [3]

## VISUAL OR SPATIAL MEDIUM

The conclusion that we draw from this is that GE is not essentially a visual, but actually a spatial medium, because the unique properties of GE are primarily spatial. It is our contention that the crucial quality

of GE is that all the places that exist virtually in the program refer unambiguously to locations in the real world in their actual linear relationships – thus to real locations that exist but once at any moment. That distinguishes it from previous cartographies, but also, for instance, from 3D programs and/or mathematical spatial constructions that exist in abstract space, since in those the whole existence of real space and time, whether or not at one particular moment, are simply irrelevant.

GE is spatially interactive because it has no fixed scale; the users can themselves freely zoom in and out within the same cartography. The zoom factor is the height from which you look. Thus it is not the enlargement or reduction of the image; it is taking a certain position in space. This position is specified by the user, and not by the medium itself. In addition, through its 3D construction on a sphere Google Earth has no problems with the distortions that exist in a projection, something that has always caused a radical difference between the map and the real terrain in flat, paper cartography, and made the map a visual construct. [4] The paper map is thus a reproduction, in contrast to Google Earth, which is rather a sort of coordinated virtual space.

Figure 1. Still from the Google Earth animation *BigBalloons,* Esther Polak and Ivar van Bekkum, 2011. © PolakVanBekkum, 2011. Used with permission. All animations can be found on http://www.polakvanbekkum.com/?p=729.
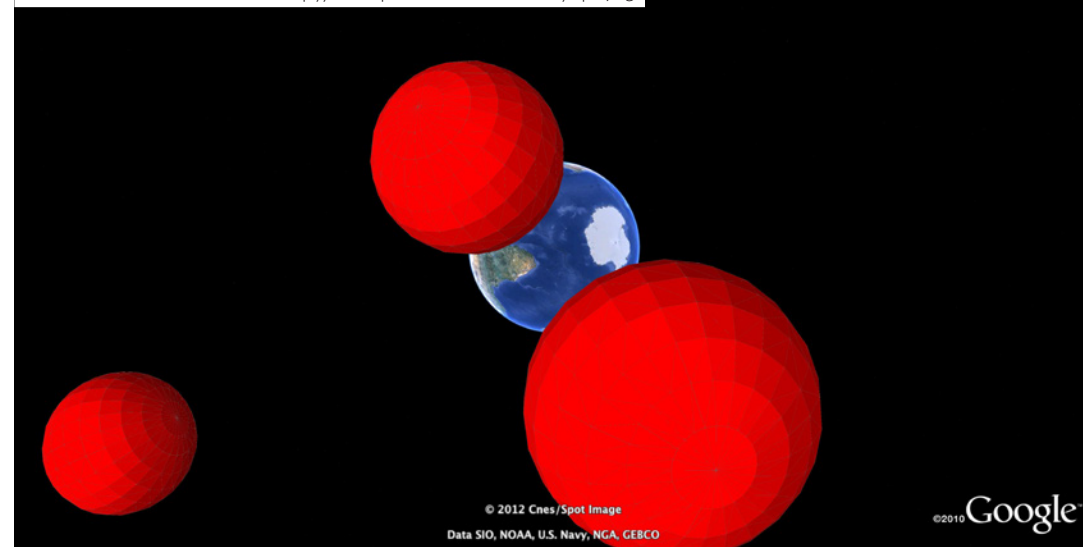


With this, the cartography of GE introduced a new relation between reality and the map, one that has somewhat the nature of a theater, where one can play out any story. The world, in this context, is an empty field on which qualities can be placed or created. On the one hand GE reflects the classic cartographic stance of apparent objective neutrality, which represents an absolute, almost divine power. On the other hand GE in fact offers room for the extremely subjective and extremely personal, in a way that that personal can always be turned on and off at will. The users of GE can allow themselves to be carried along by the personal (their own, or of others), but if it all becomes too much, or simply if boredom sets in, can also just switch it off and return to the bald neutrality of the basic functionality of Google Earth. In Google Earth there is a button for the personal, the networked and the subjective.

Fundamentally, Google Earth remains a sphere tiled with satellite images from various sources. Anything more, even that which is available through Earth itself, can be turned on and off by using the "sidebar," with boxes that you can tick. It then creates a new layer, active or not, on which new information again becomes visible. That, in itself, is not the most user-friendly design. It cost us a good deal of effort to arrive at an understanding of precisely what could be turned on and off – but it can be done. We wonder if that failure to be user-friendly was deliberate, or whether constructing digital cartography as a medium is so new even for Google itself, that it was simply difficult to find the most logical solution. After all, the classic atlas (or globe), the medium that is most often considered to be the predecessor of Google Earth, did not develop in all its logic in just ten years.

## SUBJECTIVE CONTENT

The tension between the objective and subjective experience in viewing the terrain has continued to fascinate us as we have worked more with Google Earth. For instance, if you activate the "3D buildings" layer in the program, there are multiple versions of three-dimensional constructions of existing buildings. These are precisely in the right places as they are made by people - volunteers from all over the world - who en-

joy doing this in their free time. [5] When you think your efforts are successful enough, and if you have not surreptitiously added something weird (in other words, if you have conformed to the pattern of proper objectivity) Google approves your building, and places it in this layer for everybody to see. But if you want to build an extremely strange building, you can do that too. And you can also place that building in Google Earth, but only in your own copy, on your own hard disk. You can share that with other people via websites and blogs and such, but not in Google Earth itself.

For example, we once made a number of extra worlds, spheres that are just as large as the earth, and positioned them around it (*Big Balloons*, PolakVanBekkum, 2010) that gave us a pleasant feeling of power. But Google never accepted these spheres as existing buildings or artworks. So we can only enjoy them ourselves, or show the work in exhibitions, or sell the code that generates these spheres to you as an artwork.

There are also, however, layers in Google Earth itself that have content of considerable subjectivity supplied by users. The most notable of these is the YouTube layer. The video upload function in YouTube is owned by Google making an amalgamation of data in GE obvious enough. We are not yet entirely certain of this, but at first glance this layer does not appear to be censored. It seems to be more like a random selection of videos that have been given a location in YouTube (i.e., are geotagged) by the user, and are also available to be seen in the Google Earth layer. For instance, you can find a short clip of an anti-military demonstration held on the highest mountain on Mallorca, which, as a military zone, is not accessible for hikers. There are two different layers with GPS routes provided by individual users: Everytrail and Wikiloc. For example, you can use these to find hiking trails on the same island of Mallorca that do not appear on printed maps or in hikers' guides, but which have simply been made by those who use them, by repeatedly walking them.

With these tools anyone can make a route that he or she has recorded with a smartphone or GPS apparatus available for everyone else, doing so through Google Earth's own servers. In 2008 Google's blog proudly reported their collaboration with Wikiloc, a
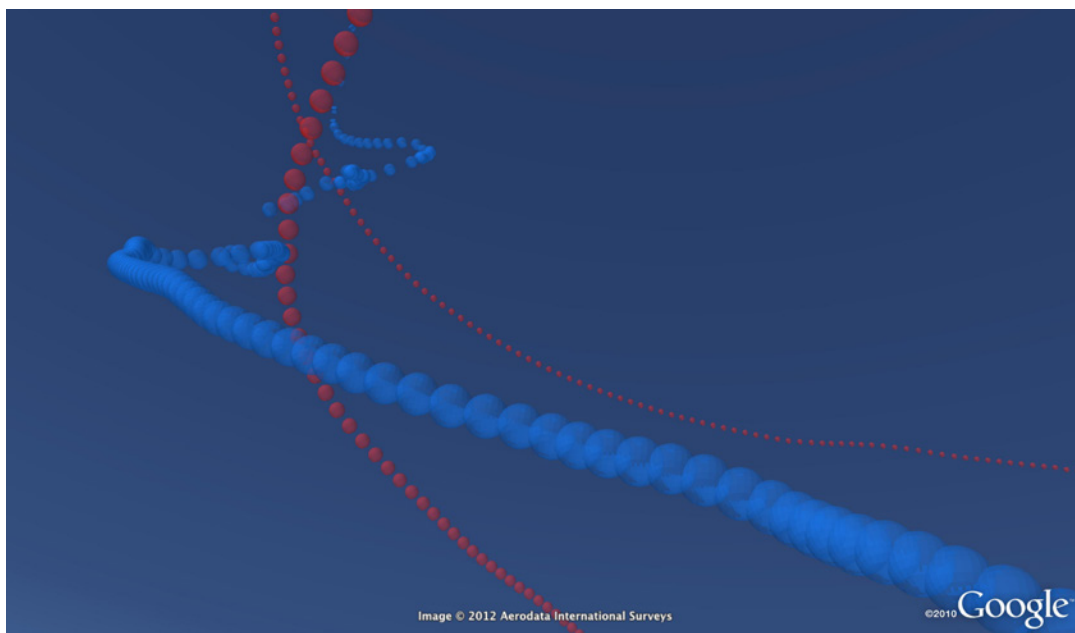
**Figure 2.** Still from the Google Earth animation **"***Airborne" Corinne van Egeraat,* Esther Polak and Ivar van Bekkum, 2011. © PolakVanBekkum, 2011. Used with permission.

small Spanish firm. [6] The corporate philosophy lying behind Google Earth's efforts to keep this tension between the objective and subjective elements in the Earth cartography in balance is not clear to us. Perhaps that is precisely the reason why Google Earth is a place for us to want to work: something is happening with this tension that we find extremely interesting. We ask ourselves whether Google Earth, after the World Wide Web itself, is not also an illusion of, or a real public space. After all, half of the Dutch population has GE installed on their computers, and almost no one really knows how it works and what you can do with it, and why and when – and *that* is artistically interesting.

As we have said, Google fosters (apparently deliberately) the notion of cartographic neutrality as a basis for Earth. The classic fundamental cartographic mentality (if you can call it that) of a sort of super-neutral rendering, an eye of God, albeit a God without opinions who simply reproduces the truth, seems to be honored by Google Earth. Subjective truths can have their place within Earth, so long as they can be switched off or restricted to the hard disks of users.

**CONTEXT**

What you can do in Earth, what you can visualize there, what you can build and how you can visualize that, is still subject to chance. Since we began our experiments we have steadily discovered new things. [7] In 2010 we made a first experiment with the re-editing of routes in time. We had a number of jogging routes that one of us had run on successive days start simultaneously, so that the jogger was retroactively running a race against himself. [8]

This was a first step toward creating a directed experience of suspense through the manipulation of cartographic data.

In a following step we began to experiment with the combination of animated GPS routes with sound. We have made an animated cartography of the GPS data from a flock of sheep in Scotland and that of the sheepdog that drove these sheep from one pasture to another, and provided it with an audio track recorded on the spot. This created a new narrative with an excitement curve. In still another following step we have investigated the potential of Google Earth for the 3D visualization of GPS data, for example in the work

"Airborne," which tells the story of someone making a parachute jump for the first time. [9]

In these examples the curve of tension in the narrative was borne by the feeling of suspense. In the work *What is done cannot be undone* we abandoned this. Here, on the contrary, we opted for a dreamy, meditative narrative structure, in which the development of a park in Amsterdam unfolds like poetic choreography. The narrative element is here supported by a cinematic soundtrack, done by the composer Huba de Graaff. [10] [11]

In all new work, new approaches arise step by step. We try very deliberately to take only one step in any work, so that the cinematographic possibilities are laid down like tiles that form a new path. In our present and future work we are not seeking to convince the viewers of the realism of the cartography or of GPS recordings, nor do we wish to immerse them in the cinematographic experience that we create. We merely want to use the medium to permit the objective cartographic quality of Google Earth as a space, and the narrative quality of Google Earth as a theater to flow into each other. What presently fascinates us the most is that in Google Earth we can tell stories that have a whole new relationship with reality. What we are doing is looking to see where the reality stops and the fiction begins. That is not a boundary, it is a border zone. We operate in that border zone, to explore its scope and to see whether viewers get carried along by the sense of reality, or whether the fiction gets the upper hand. ∎

REFERENCES AND NOTES

1. From the Google history site: "2004: We acquire Keyhole, a digital mapping company whose technology will later become Google Earth." See http://www.google.com/about/company/history/#2004 (accessed May 6, 2013).
2. Marshall McLuhan, *Understanding Media: The Extensions of Man* (1964; repr. Cambridge, MA: MIT Press, 1994).
3. Although it has a whole range of implications of its own, in this article we will not be devoting any attention to the search function in Google Earth.
4. *Wikipedia*, s.v. "Map Projection," last modified February 5, 2015, http://en.wikipedia.org/wiki/Map_projection.
5. Making use of a special set of photographs of the buildings and the sketch-up program produced by Google.
6. This week we've added another layer to the Gallery in Google Earth. Spain-based Wikiloc aggregates thousands of GPS tracks for various outdoor activities provided by its growing user community.
7. See the official website of Elasticmapping (2009), http://www.elasticmapping.net/ (accessed May 6, 2013). This small website is dedicated to Esther Polak's idea of developing an editing software for GPS data.
8. See the website of Simon Faithfull, http://www.simon-faithfull.org/MobileResearch1/blog/category/1/estherpolak (accessed May 6, 2013).
9. PolakVanBekkum, "Airborne," Vimeo video, 4:38, 2013, http://vimeo.com/polakvanbekkum/airborne.
10. PolakVanBekkum, "What Is Done Cannot Be Undone," Vimeo video, 6:16, 2013, http://vimeo.com/polakvanbekkum/what-is-done-cannot-be-undone.
11. Update per 2015: This year PolakVanBekkum completed a new exploration of Google Earth in Philadelphia. See the official website of 250 Miles Crossing Philadephia, http://www.250miles.net.

# I-5 PASSING …
## 2002–2007

*by*

## Christiane Robbins & Katherine Lambert

CHRISTIANE ROBBINS
Director /Artist/Professor
Founding Director, Matrix Program for Inter-Arts, Digital Media
University of Southern California, Los Angeles, CA

KATHERINE LAMBERT
Architect / Associate Professor, Architecture Division
California College of the Arts; San Francisco, CA

*To go nowhere,*
*even to ride around in a deserted quarter or in a*
*crowded freeway,*
*now seems natural* [1]

**I-5 Passing, an experimental cross-disciplinary digital media project, examines the ways in which speed alters one's experience of space, time and environment.** The title references vehicular motion and locative technologies that interrogate notions of mobility, its induction of mind travel and the yearnings of an overexposed telematic imaginary. Our databanks of memory, themselves transport devices, destabilize and reposition notions of linear time and fixed identities. The earlier phases of *I-5 Passing* (2002-2005) spoke of a hybrid digital media and locative project utilizing the intersections and commonalities of physical and virtual spaces created along Interstate 5, known as I-5, in California. In 2005-2007 (a pre-smartphone App world) we developed a proprietary software program offering a live sensor-based tracking of increasing levels of air and water pollution along the four-hundred mile stretch of I-5. It depicted an evolution of hyper-urbanism through rethinking



**Figure 1.** *107° Series*, Christiane Robbins, 2002-2003. Video still. © Christiane Robbins, Jetztzeit, 2002-2003. Used with permission.

(and representing) our relationship to the swarming dynamics of (auto)mobilized psychogeographies. The strategies inherent in *I-5 Passing* (re)imagined a public realm of passing-through culture(s), a kind of passing productive of frictions and fictions. This project summoned perspectives of mobility via a cross-disciplinary platform. Its underpinnings lie with cinematic practices, photographic imaging, digital media and locative technologies. Mobility, itself, serves as a sectional sequence transgressing the boundaries of cultural practices, urbanism and the psychogeography of the state of California itself.

Interstate 5 is the central artery running through central California – the connective tissue linking Los Angeles and the San Francisco Bay Area. A six-hour drive along this freeway offers an opportunity to rethink our presumed mobility and our movements; and in so doing to take a drive through the recent past and the near future. We ventured into food marts, foreclosures, parking lots, feedlots... scanning the ever-present Aqueduct system that bisects the state, as well as earth-toned Big Box distribution centers and outposts of Google, Apple, and Oracle – all amidst the cul-de-sacs of time and space.

It has been said that our 21st century global existence is one of perpetual motion. Certainly that notion mirrors our own lives in California today. The ability to be mobile – to possess the mobility, if you will, of people, commodities, information, and services – confronts, permeates, saturates, and defines our daily existence. The degree of our mobility is the measure by which we value our place in contemporary society. Mobility is thus an indicator of the quality of life and links with broader concepts of social theory and environmental practices. [2]

Our prosthetic capacities to relocate 'wherever,' 'whatever,' 'whenever,' 'whomever,' suggest that mobility forms a doppelgänger of contemporary society. For many in California, mobility remains more than a privileged vista – a 'buena- vista point' alongside the freeway. The all-pervasiveness of contemporary mobility is one that is perched on a crescendo of Western impetus and sited within the mythic poetic narratives

**Figure 2.** *Pacheco*, Christiane Robbins, 2005. Digital image, 48" × 60". © Christiane Robbins, Jetztzeit, 2005.



**Figure 3.** *Last West|Kern Co., Calif – Lettuce Strike*, Dorothea Lange, 1938. Silver print, 8" × 10". © The Dorothea Lange Collection, Oakland Museum of California, City of Oakland; gift of Paul S. Taylor. Used with permission.

that have embellished the 20th century. As such, in *I-5 Passing*, the contemporary is realized as only intelligible when viewed from the conditions and praxis of mobility. Within this context, one must keep in mind that to roam is to travel over or through a broad space. However, to commute is to travel within a vortex of an externally compressed and urgent interiorized bandwidth of time and space. 3

Arguably, more than any other form of transportation, the automobile is the modus operandi that has shaped the modern city. 'Central casting' has provided us with the penultimate sampling of Los Angeles, universally recognized as the city of asphalt: the surface area of its street network surpasses that of its actual city area. Its landscape is one of intersections, guardrails, by-passes, commuter lanes, toll-roads and overpasses – it is an artificial, continually cultivated and reconfigured topography.

The dialectic space between pressing environmental concerns and cultural practices is constantly invoked,

riffed and (re)created within the presence of this project. With a nod toward artist Dorothea Lange's *US 99*, an iconic photographic series of California's Central Valley during the 1930's and Ed Ruscha's *Twenty-six Gasoline Stations*, 4 this project re-imagines cultural, urban and environmental concerns. These are envisioned via specific legacies of experimental narrative and documentary media practice associated with art-

**Figure 4.** *Bonsai America*, Christiane Robbins, 2005. Digital image, 48" × 60". © Christiane Robbins, Jetztzeit, 2005. Used with permission.



**Figure 6.** *Westley*, Christiane Robbins, 2004. Digital Image, 48"× 60". © Christiane Robbins, Jetztzeit, 2004.

ists such as Robert Frank's *America* and Sophie Calle's *No Sex Last Night*.

I-5 Passing embraces issues endemic to historical land-use and its representations; contemporary land remediation, nomadic conditions and the market/exchange values of commuting. These are positioned in direct, and at times contradictory, relation to personal narratives and subjectivities unfolding through the real-time experiences of travel and commuting.

There have been numerous cultural legacies invoked in the creation of *I-5 Passing*, primarily Ed Ruscha, Mike Davis and Reyner Banham. The 52 Food Marts segment comprises a proprietary software program, digital images series and video installation. This title, which riffs and doubles back on Ruscha's *26 Gas Stations* (1963), addresses the deteriorating 20th century myth and promise of the great American road trip which has now been supplanted by the quotidian nature of the round trip and the commute/commuter.

**Figure 5.** From *Twenty-six Gas Stations*, Ed Ruscha, 1963. Texaco, Vega, Texas. © Ed Ruscha. Courtesy of the artist and Gagosian Gallery. Used with permission.



**Figure 7.** Reynar Banham Loves Los Angeles, 1972, BBC, Video still.



To this day, the residents along I-5 remain overlooked and undervalued – existing within an ever increasingly arid landscape that inexplicably reveals a beguiling presence.

As Ruscha did with Rt. 66, we mapped the route along the I-5 with a series of photographs documenting the Food Marts sited along the freeway, thereby creating an alternative portrait of the highway, titled *52 Food Marts*.

Perhaps known to many from his 1971 text, British Architectural theorist Reyner Banham famously accepted a challenge posed to him by architectural iconoclast Cedric Price to write a treatise on Los Angeles. Within this text, *Los Angeles: The Architecture of Four Ecologies*, Banham schematizes Los Angeles as a field generated by the superimposition of transportation networks, electronic infrastructure, and landscape. [5]

An underpinning of Banham's reading of Los Angeles,

**Heading South On Interstate 5**

*Don't try this at home, I'm a trained professional! There is no trick photography involved here. This has not been photoshopped. I really am sitting in the middle of Interstate 5, somewhere in the San Joaquin Valley. I'm not sure of the exact location but I believe it is somewhere between Kettleman City and Los Baños. The year was 1971 and Interstate 5 was under construction. There were 20 or 30 mile stretches like this that were open to the public but they would suddenly end in the middle of nowhere. Because the freeway wasn't completed all the way, hardly anyone drove on it. This photo demonstates how little used it was. Photo by Homer From Springfield. [film, possibly a Kodak Instamatic]*

a key point that distinguishes his interpretation of that city from a metropolis such as New York City, is the principle that mobility takes precedence over monumentality. Banham quipped that as earlier generations of English thinkers had become fluent in Italian in order to read Dante, he now learned to drive in order to read Los Angeles. Taking his cue, driving is also the means by which *I-5 Passing* reveals the same convergence of mobility, networks and vehicular prosthetics that were of interest to Banham.

There is an inverse effect of the predominance of mobility in California that is an over-abundance of negative space. By definition a void is an absence. The most concrete example of absence in Los Angeles – in much of urbanized California, for that matter – would be the omnipresent, stereotypic proliferation of parking lots and pervasive freeway infrastructure. Many of the digital images of the I-5 Project concisely encapsulate this rather frictionless spatiality. These images feature the freeway, the stops, and little else. The protagonists in this project are the freeway, the food marts, the vast consumable inventories embed-

**Figure 9.** *Bobby in Lost Hills*, Christiane Robbins, 2005. Digital Image, 24" × 30". © Christiane Robbins, Jetztzeit, 2005. Used with permission.

**Figure 8.** *Somewhere Between*, Christiane Robbins, 2005. Digital composite image, 11" × 14". © Christiane Robbins, Jetztzeit + Homer From Springfield, 2005. Used with permission.

ded in permanent transit, the off-ramps, the exit and brand-scape signage are the only operational fictions and navigational gestures represented, save empty static fields that serve as nostalgic alibis for this convergence.

Each signifier enables the reader a rather idiosyncratic focal point upon which to construct a body of individuated and collective pertinent references of urban, cinematic and mobile spatialities. This hybrid indexing results in a dynamic collision of data-driven particles representing speed, visual kinetics and narrative fictions situated within the passage of locative and augmented realities. Accordingly, I-5 offers discrete narrative spaces; an archive of California's fleeting realities. Considering the homogenous nature of the built environment in much of California, these freeways could be any freeway, anywhere. These images are constructed within a binary frame – an almost oppositional elucidation of mapping – articulating the vacuum-like, vampiric, unrelenting character of Southern California's infamous 'noir' space.





**Figure 10.** *I-5 Passing*, Christiane Robbins and Katherina Lambert, 2007. Media installation, within the exhibition *Edge Conditions*, San Jose Museum of Art, 2007. © Christiane Robbins, Katherina Lambert, 2007. Used with permission.

Topographical space has been truncated to that of a reductive landscape with no real landmarks and no real frame of reference, save the freeway. I-5 exploits the contestations resulting from our own intimacy with, and alienation from, these shared locative spaces and re-positions them as variables informing a media analysis of locative, mobile and temporal space in 21st century California.

It is worth noting here that the lynchpin of Californians' very existence rests upon an uneasy and often

contested alliance between urban and natural systems. Urban centers were built in the midst of desert terrain, over geological formations prone to seismic activity and that are solely reliant on a water supply redirected from the Owens Valley or buried in the now privatized, corporatized aquifers, deep underground. Much to its dismay, Southern California has found itself incapable of suppressing the natural. The infinite horizon is often depicted as the signifier of California's manifest destiny. As represented in Julius Shulman's iconic mid-20th century portrait of LA, it is just as illusionary as

**Figure 11.** *107° Series*, Christiane Robbins, 2002-2003. Video still. © Christiane Robbins, Jetztzeit, 2002-2003. Used with permission.
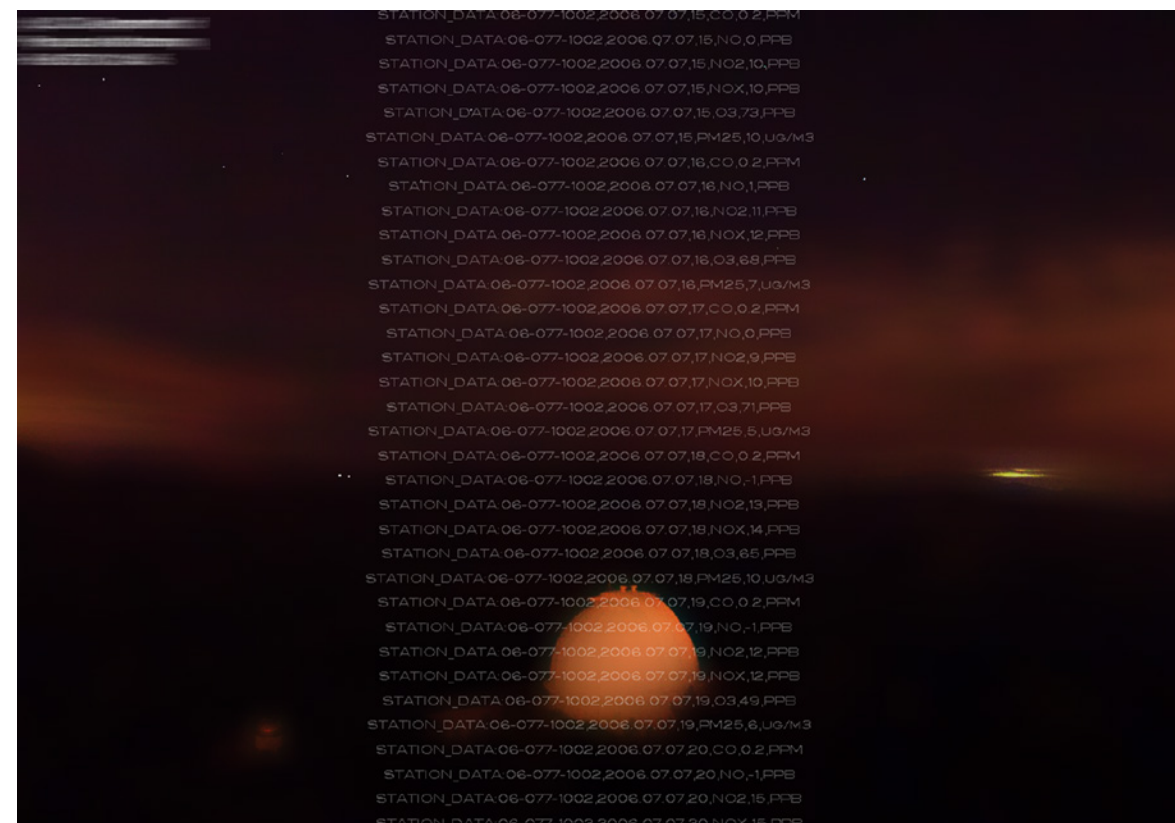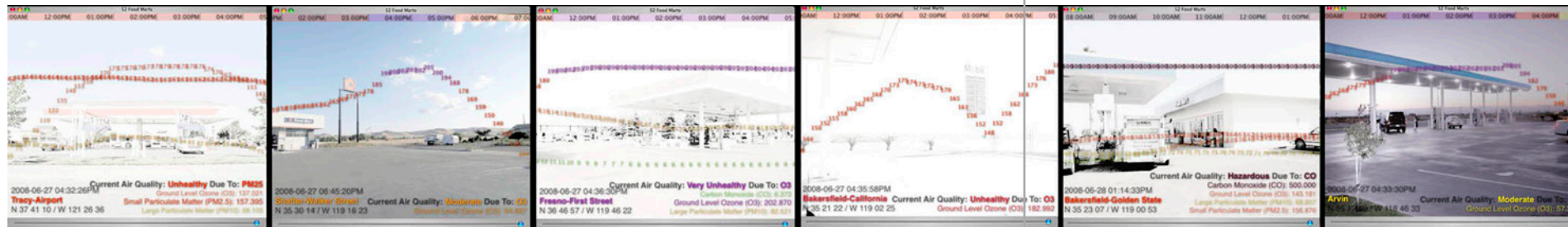
Figure 12. Visualization composite, *52 Food Marts*, AQ Monitoring Stations Data: 06.27.08; Proprietary Mobile App, 2005-2007. © Jetztzeit Studios. Used with permission.

is the suggestion that Los Angeles is a complete total-ized urban system.

Conversely, the northern boundary of *I-5 Passing* is the San Francisco Bay Area. The Bay Area is a 19th century nostalgic nod toward European neo-traditional, Victo-rian architecture and city planning; one that gave birth to a rather twisted late 20th century Walden-Pond-on-LSD populated by libertarian, deadhead hackers who cultivate capital and logarithmically re-inscribe the financial vortex of the West Coast. Ironically, the Bay Area has also long been considered the laboratory from which the future – at least the digital future – has been launched … and re-launched … and re-launched once again.

Driving along I-5 (as do thousands of commuters) it is not immediately obvious that the car has been re-placed by another machine as the instrument and icon-ic presence of notions of progress. But the evidence is there if you only look, or hear the once familiar "Can you hear me now?" branded by Verizon Wireless in 2002. It is possible to drive south along this, if you will, "information highway," and be tethered to the space of the "digital," a continuous virtual interior (and inte-riority), a micro-world of flexible work times and user friendly sociability (you have the whole network behind you …). A whole host of pseudo freedoms converge in the scenario of satiated commuters driving 2-3 hour one-way commutes, attached to wireless networks, hurriedly consuming ethnically diverse prefabricated happy meals at the ubiquitous 24-Hour Food Marts and espresso drive-thru's – all in the interest of total integration into today's "CA lifestyle." It becomes read-ily apparent to this new generation of migrant workers that there is no outside to this lifestyle, only a range of pre-determined choices within it. One may easily draw analogies to the virtual realm of online interaction.

*As a technology of space, cities galvanize both human and non-human metabolisms, channeling them, amplifying them, concentrating them into centers, domesticating them into suburbs. The question that would animate much of Virilio's subsequent work is:*
*how have these core functions of the city been as-sumed by other dromological media?* [6]

What we have come to find is that a new kind of (edge) city is being incubated within this scattering, and is projected back into the two hubs: the metropolis of the Bay Area and the Los Angeles Basin, accelerating their tendency towards entropy while also multiplying their density.

A familiar strangeness and a dense emptiness are their greatest assets. It is not that ex-urban sprawl and to-day's lifestyle are that alienating; it is simply that they are not alienating enough. To manage their disloca-tions, both actively seek out integration into the great-er whole of what has been called a village – suburban or global – in the interest of maximum performance and output with a minimum of dissent.

In California we find ourselves now living in a "flat-space" where 20th century notions of living have taken on wholly different and contested meanings. Whereas "flat space" once evinced a topographical description of the Central Valley, it now references an intensified agglomeration of big box stores, high-way infrastructure and parking lots in which space is corporate, a Tyvek wrapped sophistic self-image of hyper-efficiency. It is a space now teeming with power centers, car-cooning, dashboard dining and fast-food clusters, which vainly impersonate the edges of quaint 20th century towns and clusters along Highway 99.

The question soon becomes, "Where does one find oneself amidst the multi-channel, hermetically sealed, and wired living fueled by such an existence?" This "Main Street of California " [7] finds itself in a cultural moment hinged on the precipice of an unprecedented and dramatic, almost carnivalistic, upheaval. One could easily state that it is a moment which may become unrecognizable in the next; a future that houses resi-dents alien to themselves; a moment from which the future has been launched; and a future that remains strangely familiar, almost as if it had been scripted for our consumption. Hovering in the cloud is a promise of a counter-future to that which has been projected by the values of consumer confidence and technological progress.com. As we pass through miles of over-fed Tyvek Home-wrapped structures amidst pastoral fields of cotton, almonds, oranges and grapevines, we've seen flashes of a new form of urbanity that gazes back on the modern metropolis – the city of strang-ers – with a fond respect, all the while looking toward this strangely familiar future that remains a work-in-progress. It has been one hundred years since the archetypal subject of that metropolis was discovered: "the Stranger," cousin of the aimless streetwalker, the Flaneur. Now, with the eclipse of the modern period and attendant to these changes, a dialectical tension has arisen between modernism and early 21st century critical practices. It is possible that the archetypal sub-ject of the new post-metropolis is the Resident Alien, a subject on the run but stuck in traffic, going nowhere in particular, but not quite standing still. ∎

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