

G.H.'s Automated Home Reading List

By G.H. Hovagimyan

Author's note: I thought it might be interesting to share the research for a project I'm currently working on -- called Smart House / Dumb Interactivity -- in the form of an annotated reading list.

We are living in the first part of the 21st century. I am living in 21st century America. It's time to ask the age-old question, "Who are we, where are we going, and where have we been?" Most of us have a sense of self that could be described as a series of concentric circles or realms or spheres or layers. (The classic cliché likens ones' identity to the layers of an onion's skin.) These layers or realms are inter-penetrable; they define and influence one another. At one terminus, we have the social being, the person who functions in society; at the other, we have the individual, alone unto him- / herself. The progression from private to public and back constitutes the layers. One's home is thought to be a reflection of or an externalization of one's identity. Perhaps it can be best expressed by the phrase, "you are where you live."

Over the past year, I have researched the idea of 'home,' especially what it means for Americans. This interest may have been caused by the attack on our home or 'homeland.' What is the home of the future? Building, construction, engineering, design, decoration, and homemaking are major economic factors in America. None of these crafts are static but are constantly evolving with each technological advance. Each and every successive generation of people redefines their aesthetics, starting perhaps with making their way in the world and making their home. Entertainment has become a necessity for the American home, and information technology and digital networks are slowly being integrated into new house designs.

The general theme of my research has been surrounding the smart house, smart appliances, digital networks, and how they are changing the way humanity thinks, feels, and lives. I found that at the core of the debate about our 21st century networked global society is the notion of Utopia, which led me to read much of the earlier source material defining Utopia and to delve into the ways in which artists presented this vision of Utopia.

Many of the books, articles, films and videos I used as source material approach the social ramifications of technology with either total enthusiasm or, on the other hand, wide-reaching dismay. Since I live in a capitalist society, I wondered how much the Utopian vision was influenced by this particular social construct. I especially wanted to answer the nagging questions, what is 'the American Dream' and how do we, as Americans, make it manifest today?

Although we have entered the 21st century, most of our culture is an extension of 20th century (and earlier) ideals. Much of my reading looks at the previous century's concerns as they extend into this new era. Mass media and mass communication as well as the large-scale disruptions caused by industrialization form a thematic thread that is woven throughout this investigation.

Quite a bit of my reading caused me to be more than a tad pessimistic about the future. I tried to balance this by looking for intimate ways in which people preserve and cherish their humanity and express joy, freedom, and skepticism in their lives. This seems to occur in the heart of the home and to emanate outwards from the private to the public sphere.

Issues such as corporate marketing, government surveillance, social order, visionary reformist ideals, improving the human lot, individual freedom and right to privacy, the control of nature and private property are all part of an ongoing discourse about the home in America.

A person does not live in isolation but is part of a community. Their point of view, the way in which they interact with the rest of their community and the world is initially formed within the home and the family. America, in particular, seems to cherish the notion of the private home as a place to foster and reinforce American ideals and to embody the US Constitution's rights of Life, Liberty and the Pursuit of Happiness. The American home has become something of an archetype.

Oddly enough, a counterpoint to the ongoing formulation of the American Utopian ideal was first practiced on these shores by the early religious community of the Pilgrims at Plymouth. Their communitarian, dare I

say 'communist,' way of life is also a part of the American mythos. One may look at modern day corporations and planned suburban communities as the extension of the Plymouth ideals.

Another important concern in my research was the fact that the lives and homes of a significant group of Americans were at some point controlled either through the system of slavery or the necessity to live in a company-built town. In the first case, the plantation owner dictated the type of home and family life, for the slaves or indeed the whole society of the plantation; in the other, the company provided nurture for (and also exerted surveillance and control over) the workers. One only has to look at suburban sprawl and corporate parks to see the modern day equivalent. Surveillance and control have always been a part of America's home architecture.

What is the uniquely American Utopian vision? Utopia is envisioned as freedom from the vicissitudes of both nature and the human condition. It is often presented in the form of the model home or the home of the future. Indeed, Thomas Jefferson was one of the people who developed the idea of the model home. Mechanization, automation, labor saving devices and so on are all components that commingle with 19th century Boston's fascination with Charles Fournier's radical Utopian ideals.

It is safe to say that when Vice President Nixon visited Russian Premier Nikita Khrushchev in the 1950s, the ensuing 'kitchen debate' was the essence of the 'American Dream,' presented through the household products on display in Moscow.

Conventional wisdom throughout the world sees current rock music and the American lifestyle presented in the movies as more of a result of bringing down the 'Iron Curtain' than the military buildup of the Reagan era. American politicians are keenly aware that both housing and mass media are potent political tools. In his farewell address, President Eisenhower urged Americans to beware of the 'Military-Industrial Complex.' Recently that phrase has been updated by various cultural theorists to the 'Military-Entertainment Complex.'

Post-WW II prosperity in America has been tied to the massive amounts of government military spending. As a consequence of the effort to maintain a standing military equipped with the latest technology, much of that technology is computer-driven today and has found its way into the home. The Internet was originally developed by DARPA, a research department within the Department of Defense. The technologies developed for military uses, such as communications, surveillance, remote control, war gaming, covert operations,

etc. are now being included in the latest smart technologies for the home. The recent science fiction movie *Minority Report* presents these emerging technologies in a Dystopian vision of the future, where the networked home is no longer a refuge from government surveillance.

America is no longer the Utopian dream of the Pilgrims of the 1600s, or the Jeffersonian ideals of the 1700s, or the concepts developed by social reformists of the 1800s, or the 'land of plenty' created by mass production in the 1900s. Indeed, one can look at the New World Order of the 21st century as a battle of competing Utopian ideals waged across the networks.

Within this context, I ask the question, how does an artist look at, reflect, and critique 21st century themes? It is not enough to simply illustrate these ideas through a practice such as storytelling. One needs to follow McLuhan's dictum, "The Medium is the Message."

Art could be said to follow the same trajectory as, or rather mirror, the concentric layers of identity I have alluded to earlier in this essay. There can be intensely personal art, art for the home, public art etc. As a digital artist, I ask the question, "how will digital art be presented in the home?" I also ask the question, "how will the information-permeable home change humanity and thus change the meaning and content of art?"

The following is a list of the sources I have been researching, including some short thoughts on how they relate to my research. It's in alphabetical order. Assemble the narrative as you please. Can this be a hypertext of the mind?

Annotated Bibliography

Bateson, Mary Catherine. *Composing a Life*. Grove Press: New York, 1989.

This book looks at the changes in the domestic fabric, familial relationships and women's search to create new ways to interact.

You keep a house, but you make a home. The word "home" has many layers of meaning. The distinction in English, even though it is often abused by real estate brokers, is one of our greatest riches. ... As we free the ideas of home and homemaking from their links to gender roles, we can now also draw on metaphors of home to enrich our perceptions of the world. ... The homes we create for ourselves are far more than physical shelters; the homeless lack far more than homes. ... Being homeless means a break down of social ties and supports of all kinds. Page 118-119

With the mechanization of household tasks, we are facing a loss of intimacy within the family and the home that is the foundation of a society. Families often bond and reassure each other by doing household chores. The simplest of tasks, such as a husband and wife doing the dinner dishes together, can be a way to renew quiet love.

Marriages create work, far beyond the apparent practical need, in order that work may create marriage. Couples rely on real tasks and shared effort or, lacking these, they invent endless elaborations of unnecessary tasks to assure themselves that their relationship and their need for each other is real, to knit it together from day to day. Page 122

This goes to the heart of the matter. How do humans create all those instinctual bonds in light of an interposing technology, which, in the name of 'labor-saving,' disrupts our means of building relationships, trust and love. Another question in our looming technological future is, "are we better off?"

Many people have pointed out that the introduction of computers in offices, though it may increase productivity, does not tend to reduce labor. This is not news: the pattern has been obvious for over fifty years, ever since the mechanical washing machine was used not to reduce time spent doing laundry, but to make it possible to change sheets and clothing two or three times as often. Page 125

Independent French filmmaker Jacques Tati made two films that reflected the ideal of post-WW II life and home. Interestingly enough, he also critiques futurism and, in particular, the American lifestyle.

Bellos, David. *Jacques Tati*. The Harvill Press: London, 1999.

This book is particularly detailed in its look at Tati's oeuvre. Two films in particular, *Mon Oncle* and *Playtime* examine the future-now with a skepticism and wit that can only be accomplished by an independent 'auteur' such as Tati. In reading this book, I found a rather interesting generational viewpoint that shaped Tati -- the generation of my parents that lived through WW II and it's aftermath. Tati started as a mime in the Paris Bistros of the era and, like many of his generation, moved into film during and after the occupation of France. The vision of European modernism goes hand in hand with the Anglo-American victory and its subsequent thrust for corporate world hegemony. As a mime, Tati shares some affinity with earlier silent film comics such as Buster Keaton and Charlie Chaplin, yet he comes after them and is in a sense a continuation of the discourse on modernism and industrialization presented by the earlier comics.

Tati's independence from Hollywood corporate interests allowed him the freedom to observe and critique the implementation of modernist control mechanisms, including mass media representations. Architecture as a control mechanism and its smaller consumer items (home gadgetry) are featured in *Mon Oncle* (which was released in Paris in 1958 and went on to win the Emmy award for best foreign film in 1959). The main setting is the house of Mme Arpel.

The keyword for the design of the place is: tout communiqué, "everything communicates." With its open staircase and its plate glass sliding doors, the internal space of the Maison Arpel is ill defined. Since "everything communicates" in visual and spatial terms, the house requires constant tidying and cleaning throughout, since nothing can be hidden away. Page 212

Communication and transparency within architecture exert a control over a person's behavior that is both subtle and overt.

The second film, *Playtime*, released in December, 1967, is a remarkable construct of the future. Its set of modernist buildings was actually constructed by Tati to show the generic corporate façades being built all over Europe at the time.

*Playtime's first night at the Empire Cinema on the Avenue Wagram in December 1967 coincided with the publication of Guy Debord's *La société du spectacle*, a book Tati never read but which is linked to his films in curious ways. ... For Debord, what characterized modern society was its panoply of devices transforming authentic life into alienated spectacle ... Situationist recipes for resisting this disaster focused on both the physical environment and on mental disciplines. ... the German Members of the network for example, called for functional buildings to be replaced by "accidental architecture" in which emotion, not rationality, would be the determining criteria. ... to reconfigure the urban landscape, Situationists practiced the "drift" or *dérive* ... drifting is much the same thing as idling with an entirely open mind, and with heightened sensitivity to the reality and not just to the signs, of the city. ... To undermine the false surface of modern life, ... *détournement*,... in Situationist usage means twisting things into shapes and forms they were not meant to have ... And when Tati falls asleep at his desk in the *Plastac* factory in *Mon Oncle*, in response to the regular sighing-breathing noise of the machinery, he too ... is turning *détournement* into a comedy gag that can be seen by those with a revolutionary mind-set as an implicitly subversive act. ... *Mon Oncle* expresses quite a few of the theses of Situationist architectural thought. Hulot's House in the old town, with its illogically lengthy stairs and passageways, is a virtual demonstration of Feurstein's "accidental architecture,"*

and as Hulot keeps his door key in a roof-gutter clearly visible in a long shot from the village square, his "insecurity system" echoes some of the more political ideas of the IS (Situationiste International) too. But Playtime is imbued with Debord's critique of modern society in a more fundamental and pervasive way. The whole of the first part, from Hulot's arrival at the airport in the morning through to nightfall, when he visits Schneider's apartment, has the exact form of "drift" or derive; and the whole of the second part, in which a pretentious restaurant falls to pieces and generates a night of authentic enjoyment, is an elaborate exercise in détournement. Page 268-270

Forgive me for quoting the source at length but I find the relationship between Debord and Tati as drawn by Bellos to be remarkably insightful and something of which I had not thought when embarking on this project.

Bloch, Ernst. *The Utopian Function of Art and Literature*. MIT Press:Cambridge, MA, 1996.

This book is quite astonishing in the breadth of its scope. It is a collection of essays and a transcribed dialog between Theodore Adorno and Bloch. The book looks at the function and use of the Utopian ideal in Western discourse and is quite revelatory and concise. Bloch's assertion is that the Utopian ideal is a sort of goal or wish or "dream" that is part of the mythos of any culture and yet is unattainable in the present circumstances. One only has to think of the often repeated term "The American Dream" to understand Bloch's definition of dream. In the dialogue between Bloch and Adorno, Adorno asserts that because of death, Utopia cannot be fully realizable.

To be sure, I believe that without the notion of an unfettered life, freed from death, the idea of utopia, the idea of the Utopia, cannot even be thought of at all.
Page 10

Bloch goes on to discuss how religions present the Utopian ideal, which overcomes death in a rosy after-life. This assumption gets stunningly creepy, in my opinion, when applied to the current political climate in the US and worldwide. Every country has a competing Utopian dream they are trying to assert. Interestingly enough, technology figures in every Utopia. Freedom, on the other hand, is marginalized. Bloch identifies three main types of Utopia -- Social Utopia, Technological Utopia, and Religious Utopia -- although the categories are not necessarily insular and exact. Technological Utopia in the real world can engender uncertain results. Here Bloch states:

There is a specific fear of the engineer going too far, penetrating too far in uncertainty. He does not know those forces with which he may have to contend. And

it is from such non-mediation that the most obvious effect of the omitted content is ultimately derived: the technological accident. Page 67

Indeed the machine age, the age of mass production, has many unintended consequences we are now just beginning to understand.

Big technology was to reign, an easing, cool, bright, democratic "luxury" for everybody, a reconstruction of the planet earth striving for the abolition of poverty, the hardship taken over by machines, centralized automation of the unessential, making leisure therefore possible. Page 85

This fits in quite nicely with the American ideal of an entrepreneurial life of plenty, first posited by Adam Smith in his 1776 book, *The Wealth of Nations*. Bloch surmises:

They were the characteristics of the conviction, of the good conscience of the respectable merchant and entrepreneur who, in fact, believed in honest gains. First of all, in the interplay of supply and demand, he thought of himself as a kind of benefactor of the consumers. ... But the good conscience gained strength by supposedly relating the Capitalist interest constantly to that of the consumer, making the customer satisfied.
Page 112

I can understand the depth of animosity and clashes between cultures as often being conflicting visions of Utopia.

Debord, Guy. *The Society of the Spectacle*. Zone Books: New York, 2002. (Originally published in French as *La société du Spectacle* by Buchet-Chastel, Paris, 1967)

Debord wrote at a time when it was becoming apparent that television and mass media could be viewed as an extension of capitalism insofar as the mass media promote consumer culture. The word spectacle in French has a slightly different connotation than in English, it means a show. The English "I'm watching the show" might be translated into "Je suis en regarder le spectacle." In any case, Debord's notion is that the spectacle of the bourgeois revolution is presented within the mass media. Debord's book is a series of short meditations on the subject, a form of presenting ideas often used by philosophers. Each meditation is numbered, and I will use the numbers here when quoting the original.

23. At the root of the spectacle lies that oldest of all social divisions of labor, the specialization of power ... Thus the most modern aspect of the spectacle is also at bottom the most archaic.

The root structure of capitalism has as its basis the separation of labor from the profit gained by selling its product. This is accomplished through mechanization and mass production. The capitalist model enters into a bargain where it purchases labor from a work force at a discounted rate. The difference between what a product costs to produce and the cost of labor is what creates wealth or more capital. The structure is one of separation and alienation.

28. *The reigning economic system is founded on isolation; at the same time, it is a circular process designed to produce isolation. Isolation underpins technology, and technology isolates in its turn; all goods proposed by the spectacular system, from cars to televisions, also serve as weapons for that system, as it strives to reinforce the isolation of the "lonely crowd." The spectacle is continually rediscovering its own basic assumptions -- and each time in a more concrete manner.*

42. *The spectacle corresponds to the historical moment at which the commodity completes its colonization of social life. It is not just that the relationship to commodities is now plain to see -- commodities are now all that there is to see; the world we see is the world of commodity...*

Indeed, the very notion of an automated house penetrates the only area left for private pursuits and the peaceful nurturing of the home environment. This penetration under the guise of labor-saving devices for the home imposes the structure of isolation upon the vestiges of family life. One might say that even before the industrial revolution, in 1700s America, Thomas Jefferson was practicing a form of architectural mechanization in his Monticello mansion. Although the clever clockwork-like inventions used for 'labor-saving' appear to be visionary at first glance, the underlying subtext is to separate the slave class from any direct contact with the owner of the estate. The Deus Ex Machina hides the system of slavery that sustains the household. What occurs to me is that the larger social systems of any époque shape the design and structure of the home. Therefore capitalism's spectacle implemented in the home via design and appliances (commodities), has as its underlying purpose to create separation / isolation and a tearing of the social fabric.

Deleuze, Gilles and Guattari, Felix. *Anti-Oedipus, Capitalism and Schizophrenia*. University of Minnesota Press: Minneapolis, 1983.

... talks about human instinct mechanisms disrupted or altered by the thrust of capitalism's need for expanding markets and 'trained' consumers. Deleuze and Guattari state,

everywhere it is machines -- real ones, not figurative ones; machines driving other machines, machines being driven by other machines, with all the necessary couplings and connections. An organ machine is plugged into an energy source machine: the one produces a flow that the other interrupts. The breast is a machine that produces milk, and the mouth a machine coupled to it. The mouth of the anorexic wavers between several functions; its possessor is uncertain as to whether it is an eating machine, an anal machine, a talking machine, or a breathing machine (asthma attacks). Hence we are all handymen; each with his little machines. For every organ machine, an energy machine: all the time, flows and interruptions.
Page 1

Fogg, B.J. *Persuasive Technology, Using Computers to Change What We Think and Do*. Morgan-Kaufman Publishers: New York, 2003.

Fogg talks about his notion of "Captology" or the study of the use of computers as a persuasive technology. Captology takes a behaviorist approach to modifying human activities.

Persuasive technology is a fast growing area of research and development. Computing systems of many types, from Web sites to productivity applications to mobile devices, are becoming increasingly focused on motivating and influencing users. From the Preface

Clearly, humanity and in particular the capitalist system are using technology to penetrate even the most private depths of the family, the human spirit, and alter it. How will we change?

Fourier, Charles. *The Social Destiny of Man or The Theory of the Four Movements*. Gordon Press: New York, 1972. (Originally published in 1808)

Charles Fourier analyzed the excesses of the French Revolution and the modernization of the infrastructure in France by Napoleon and assumed that human society was engaged in a process of evolution. He also realized the continuing inequities caused by the enslavement of women, as well as the monopolistic stranglehold of capitalism and the British merchant marine. I have read many other treatises written around the same time, and all envision a better world just within reach. Fourier's Four Movements are treatises or the beginnings of a desire to map or apply scientific measurement and techniques to the organizing principles of society. The book is also deeply informed by religious beliefs, often citing God's master plan for the Universe.

Thus the analogy of the Four Movements -- the Material, the Organic, the Animal and the Social; in other words, the Analogy between the Modification of Matter and the Development of the Passions of Men and of Animals. Page 16

Fourier seemed to assume that there was a harmony to the universe and that all of mankind's ills were a consequence of not paying attention to the passions of people and animals. Several of his views were quite radical. He proposed organizing agricultural associations or groups of families numbering 1,000 or more. These associations would pool their grain and their labor. Indeed he envisions a communal living arrangement with more or less open marriages. I cannot help but wonder if Fourier's ideas of agricultural association had any influence on the Grange movement in America. The principles are almost exactly as Fourier had described, farmers banding together to increase their bargaining power with the people who sold them the seeds and then later purchasing the harvested grain. Ten years after the publication of Fourier's book, Oliver Hudson Kelly, in 1867, started the National Grange of the Patrons of Husbandry. Perhaps more to the point is this brief account of Brook Farm retrieved from the Internet:

*Throughout the 1830s and 40s, there was much talk among Boston's intellectuals of reform and communal experiment. In 1840, Ripley read Albert Brisbane's *The Social Destiny of Man*, an exposition of the theories of the French utopian social theorist, Charles Fourier. At a meeting of the Transcendental Club in October, 1840, he announced his plan for the commune that would be called Brook Farm. Writing to Emerson on November 9, 1840, in hopes of persuading him to join the experiment, Ripley described Brook Farm as a cooperative enterprise founded on Associationist principles, to be based on a small farm and incorporating "a school or college, in which the most complete instruction shall be given, from the first rudiments to the highest culture." This rearrangement of social life would "insure a more natural union between intellectual and manual labor" and "guarantee the highest mental freedom, by providing all with labor, adapted to their tastes and talents, and securing to them the fruits of their industry.*

As Ripley's description indicates, the underlying assumption of the experiment, and of Fourierist philosophy, was that work necessary to support a community could be distributed in such a way as to match people's tasks with their individual desires and ability to do them. A classless, non-competitive society would result. Every individual would both find personal fulfillment and contribute to the well-being of the group.
From <http://www.uua.org/uuhs/duub/articles/georgeripley.html>

And furthermore:

*Brook Farm, 1841-47, an experimental farm at West Roxbury, Mass., based on cooperative living. Founded by George Ripley, a Unitarian minister, the farm was initially financed by a joint-stock company with 24 shares of stock at \$500 per share. Each member was to take part in the manual labor in an attempt to make the group self-sufficient. Intellectual life was stimulating, with such members as Nathaniel Hawthorne, John S. Dwight, Charles A. Dana, and Isaac Hecker, and such visitors as Ralph Waldo Emerson, W. E. Channing, Margaret Fuller, Horace Greeley, and Orestes Brownson. Brook Farm was mainly an outgrowth of Unitarianism, although most of the members had left that church and were advocates of the literary and philosophical movement known as transcendentalism. Economically, the community's excellent school was the most successful part of the venture (anticipating John Dewey's progressive-education ideas of learning from experience); agriculture showed little profit because of the sandy soil and the inexperience of the farmers. The popularity of the doctrines of Charles Fourier led, especially through the efforts of Albert Brisbane, to Brook Farm's conversion to a phalanx in 1844. The group, however, did not long survive the financial disaster of the burning (1846) of the uncompleted central building. *The Harbinger* (1845-49), printed at Brook Farm and edited by Ripley, was rather a Fourierist weekly newspaper than the organ of Brook Farm and was continued in New York City with Parke Godwin as editor after 1847.*

From

<http://reference.allrefer.com/encyclopedia/B/BrookFar.html>

Most remarkable to me was the fact that Fourier argued for equality for the sexes and the emancipation of women. In his treatise on the household he advocates communal living and communal sex.

In the Combined Household, men and women will enjoy an existence so agreeable and so free of vexations, that it will become impossible to decide any one of them to adopt the permanent marriage relation required by our isolated households. Page 103

He claims that women are more competent than men citing eight queens and kings who reigned and their comparative accomplishments.

Gleick, James. "The Way We Nest Now: When the House Starts Talking to Itself." *New York Times Magazine*. November 16, 2003.

<http://www.nytimes.com/2003/11/16/magazine/16TECH.html>

This piece looks at the actualities of living in a smart house. Gleick sees home automation as an already established and growing business. He can't help but talk about some of the humorous parts of the human machine interface. For instance:

"I'm not allowed near any of the electrical fixtures," he says. "She's got most of the lights in the house on a timer. Lights go on at various times -- I guess, in sync with darkness. I mean, when the world gets dark, a light materializes. Most of the time the system works out, but there are times when it doesn't, and I want to do the most natural thing, which is to turn on a light manually. It turns out that this is not the right thing to do, because I screw up the programming."

Hardt, Michael and Negri, Antonio. *Empire*. Harvard University Press: Cambridge, MA, 2000.

A Marxist discourse on the changing landscape of global capitalism. The main theme of the book is 'hyper-capitalism' and its move into a capitalistic empire. One of the underlying mechanisms here is machinic transformation of people and societies into parts for the global capitalist empire. What is particularly interesting is the authors' examination of population nomadism in contemporary society. Hardt is a Californian Marxist academic and Negri an Italian philosopher and writer who, after nearly 14 years of exile in France, returned to Italy in 1996 to serve out the remainder of an extensive prison sentence for extra-parliamentary political activities during the 1970s. Who they are has obviously framed their approach. The book has been translated into Arabic and is widely read in the Middle East. There is a wide consensus that the contents of this book have captured the overall state of the world at this time.

Hardyman, Christina. *Behind the Scenes - domestic arrangements in historic houses*. Harry Abrams: New York, 1997.

Hardyman details not only the practical issues of organizing the household duties but more importantly the social structure that allowed for a large staff of domestic help within historic houses. On page 13 of *Behind the Scenes*, Hardyman says:

In a house like Speke Hall, there was no distinct geographical division between masters and servants. It is important to realize that a good position in a noble household was an honorable profession in itself. Upper servants such as stewards, ushers and ladies-in-waiting are better thought of as courtiers than inferiors...

What I find intensely interesting here are the methods employed for facilitating activities such as growing food, preparing or preserving it, and of course serving it. This process engendered forms of architecture that were task-specific, one example being an Ice House:

the standard design for an English ice house -- a conical pit, brick-lined and at least 12 ft in diameter ... In a

well built, well managed icehouse of this sort, ice could be kept for two years or more. Page 126

Other structures, such as the dovecote, the dairy, the fish pond, the bake house etc. all reflect two phenomena or basic human attributes, one being the daily routines of life and the other being the social interactions that are created in accomplishing these tasks.

Hayles, N. Katherine. *How We Became Posthuman*. University of Chicago Press: Chicago & London, 1999.

As mentioned earlier, one of the sticky parts to techno-Utopia is the fact of death. If the thrust in science is to know nature and control it, death is a fact that will always spoil the Utopian vision. Hayles looks at the intellectual and sociological basis for the notion that humanity is moving into an evolutionary stage that is a hybrid of human and augmented human / machine. Assuming that the household reflects the basic needs for survival and reproduction of the family, it now appears that a controlled, interfaced house is becoming a necessity. If science is engaged in a process of stopping death and achieving immortality through miraculous contrivances, it seems that a new type of non-natural, scientifically designed home must be constructed to meet the needs of the designed human. In other words, a smart house and an augmented human go hand in hand.

Houllebecq, Michel. *The Elementary Particles*. Translated by Frank Wynne. Alfred A. Knopf: New York, 2000. (Originally published in France as *Les particules élémentaires* by Flammarion Press, Paris, 1998)

Europe seems to be tilted on a philosophical precipice. If America is essentially a projection of European Utopian ideals without the weight of European historical baggage, then what is there to do for the population of Europe? As a novel, *The Elementary Particles* uses current trends in bio-engineering to propose the next evolutionary stage of humanity. The book explores love, family, reproduction and survival in light of potential scientific advances.

He was certainly the first, and for many years, the only defender of the most radical of Djerzinski's proposals: that mankind must disappear and give way to a new species which was asexual and immortal, a species which had outgrown individuality, separation and evolution.

Hulse, Carl. "Threats and Responses: Plans and Criticisms; Pentagon Prepares A Futures Market On Terror Attack." New York Times July 29, 2003, late ed., A6.

The article talks about some of the Internet surveillance programs being developed at DARPA with an emphasis on filtering all types of information to develop profiles of everyone.

One of the implicit dangers of the smart house is to lose control over networked appliances run by a home Intranet connected to the Internet and perhaps controlled by cell phone keypad input. Obviously, a home Intranet can also be hacked into from the Internet and / or information can be gathered on the users' habits. In Europe, there are many appliances on the market -- among them the Marguerita washing machine -- that can be activated by a remote signal from a cell phone. Here in the US, a recent flap over the 'Total Information Awareness' system sheds light on some of the more sinister possible applications of a networked world. In the *New York Times*, Hulse talks about the uproar over the assault on privacy:

He and Mr. Wyden said the uproar over the market plan should give momentum to their push to cut off all money flowing to the Terrorism Information Awareness effort being run out of Darpa. That program, originally called Total Information Awareness, was developed by Admiral Poindexter as a way of forestalling terrorism by tapping into computer databases to collect medical records, travel records, credit records and financial data. Worried about privacy concerns, Congress earlier this year prohibited it from being used against Americans.

Internet Home Alliance. An Overview of the Connected Home Ecosystem Concept.

<http://www.internethomealliance.com/>

This website represents a network created by companies interested in the next step for homebuilding and integrating all the burgeoning digital networks into future homes. I found the site quite interesting as it seems to extend the American Utopian notion of the home as a force shaping the way individuals live. The site purports to look at the home as a series of interlocking 'ecosystems.' An odd choice of words that seems a bit contrived -- the idea of artificial ecosystems might be more appropriate. The IHA defines these ecosystems as:

around family, career and entertainment. The purpose of this paper is to explain this perspective in some detail and suggest how it can help Alliance members meet their corporate goals. We start with the definition

of a system as defined by business management consultant, Russ Ackoff:

- o A system is any entity, conceptual or physical, that consists of interdependent parts;*
- o A system is a whole that can't be divided into independent parts;*
- o The performance of the whole can't be taken to be the sum of the performance of its parts; and*
- o Success is the product of the interactions of its parts.*

Systems thinking requires that you understand more than just the interactions of the interdependent elements within the system you're developing. You must also understand how those elements interact with the external environment which influences -- and, in turn, is influenced by -- your actions. Approaching an opportunity this way requires a deep appreciation of the distinctions between synthesis and analysis.

Kelly, Kevin. *Out of Control, the New Biology of Machines, Social Systems, and the Economic World*. Addison-Wesley: New York, 1994.

Kelly looks at the entire spectrum of post-industrial society, the global society of capitalism connected by wires, computers, and satellites. He's a techno-futurist and a cheerleader for what he sees as the engineered Utopia we are building. A telling quote in the chapter on control:

Subtlety is the difficult part. "We pick up the phone differently than a dead rat," Strassman said. "I can stock up on different hand motions, but the tricky thing is what manages them? Where does the bureaucracy that controls these choices get invented?" Page 322

This quote happens to be an analysis of wireframe animation and how to make a virtual character animate to move like a human being. This is essentially the artists' provenance of mimesis. The information can also be used to create autonomous human-like robots or to enhance industrial design and the human-machine interface.

Lee, Jeanne; Clark, Brian L.; Janik, Art; and Wilson, Amy. *Smart Homes: Gadget Gallery: Today's intelligent home appliances aren't just cool and high-concept. They also make sense*. CNNmoney. September 27, 2002.

<http://money.cnn.com/2002/09/19/pf/yourhome/smarthomes//index.htm>

This article is a marketing puff piece that essentially presents a bunch of gadgets, which are not very visionary but are already on the market and can be

retrofitted into existing homes. The references are quite good, however, and there is a bit of light-weight soul searching about the social effects of all the proposed innovations.

The 21st-century smart home is evolving on two fronts. First, rather than one big network controlling everything in your home, smaller, independent networks are being developed to control each system: communications, entertainment, home office, and home infrastructure systems like heating and cooling, lighting and security. Second, as manufacturers realized that consumers lack enthusiasm for Web-enabled washing machines and toasters, they started designing individual appliances with just enough intelligence to make chores less tedious.

Lefebvre, Henri. *Critique of Everyday Life*. Translated by John Moore, with a preface by Michael Trebitsch. Verso London & New York: 1992. (First published as *Critique de la vie quotidienne: Introduction by Grasset, Paris 1947*)

This book sheds light on a number of themes that Western nations take for granted. For instance, one often thinks of Capitalist consumer society as a replacement of earlier religious, agrarian societies. Western societies often sustain various rituals, superstitions and religious practices long after they cease to have relevance or meaning to our everyday lives. What fascinates me here is the foundation upon which people construct the reality of their day-to-day lives. This foundation has been radically altered in the course of the 20th Century by a series of wars and industrialization. What then was the position of the Church (any religion) in an agrarian culture? Religion appears to give order and sense to man in nature and marks the organic nature of peasant communities that are living according to fairly natural rhythms and life cycles. This may sound abstract but is of course very simple. There are life cycles and cycles for planting and there are daily moral struggles within any small community. The Church (religion) provides a sense of order and an agreed-upon mythos to create stability both psychologically and politically within largely rural communities.

In capitalist societies, we have less of a need for this sense of life cycles and natural rhythms or, to be more precise, we know that our bodies respond to such cycles and rhythms but since we no longer live in agrarian villages, we have somehow lost or been alienated from what is most natural. The theme of alienation is central to this book, yet is not the common understanding or representation of 'alienation' in the post-WW age. This type of alienation concerns the effects of capitalism and the will to power or the strive to become 'more human.' In post-war culture, this

dynamic often puts the 'rebel' or alienated subject in a nihilistic posture. He / she wants to destroy everything, and alienation turns into nihilism. For Lefebvre, alienation is what makes us more human. It is the struggle of humanity to control nature, even human nature. Lefebvre writes:

The drama of human alienation is more profound and enthralling than any of the phony cosmic dramas or divine scenarios which man is supposed to act out in this world. The drama of alienation is dialectical. Through the manifold forms of his labor, man has made himself real by realizing a human world. He is inseparable from this other self, his creation, his mirror, his statue -- more; his body. The totality of objects and human products taken together form an integral part of human reality. On this level, objects are not simply means or implements; by producing them, men are working to create the human; they think they are molding an object, a series of objects -- and it is man himself they are creating. ... As he strives to control nature and create his world, man conjures himself up a new nature. Page 168-169

Lefebvre also discusses how the Roman Catholic Church used the strategy of subsuming different agrarian rituals, signs etc., in order to extend and solidify its control. This strikes a familiar note to a 20th - 21st Century American who is aware that consumer marketing strategists are constantly absorbing the 'counter-culture' signs, language, and fashion to expand markets. The strategy is the same for both the Christian Church and Capitalist societies and reflects the will to power. The 'alienated' cultures have the same will to power as the dominant cultures and are merely reflections of the overall conditions of capitalism. Lefebvre writes:

This dual character also corresponds to the dual character of bourgeois society: progressive in terms of technology, thought, consciousness -- but otherwise retrogressive. And finally it corresponds to the dual character of capital: a brutal objective reality which eludes human will and drags it along towards a predestined fate for as long as human thought and action, straining towards another order, cannot reverse it -- and yet at the same time an abstraction, an unreality, a complex of signs and concepts.

Before Balzac, in the epic of human consciousness in the ascendant, which bears the name, "The Phenomenology of the Spirit," Hegel had ironically described abstract animals, specialists, experts, imprisoned in a narrow field of practice or thought. And nowadays we are still struggling with this deep -- in other words everyday contradiction: what makes each of us a human being also turns that human being into something inhuman. More biological than truly

human, this organization smothers the individual, dividing him and stunting his development at the very moment it is striving to create him as a human individual. Page 150

I'm neither a Marxist nor a Fundamentalist Christian, yet it seems that these two strains of thought or being are still battling for supremacy in a 21st century global information society. The counter position that is being advanced by 'Moslem' extremists -- although one may also add all the other flavors of vestigial religions -- seeks to restore or repair or rebuff the expansion of capitalist humanism by returning or proposing a return to their respective concept nature and religion.

Humanity has a commonality in its ways of social organization. The primal instincts for survival, reproduction, and some amount of control over nature's fury and unpredictability, manifest themselves in the way we organize our daily lives. The family, home, and community are always the starting point. On the other hand, the thrust of the will to power is to penetrate and organize the personal domain. There obviously are advantages and disadvantages to both. One certainly does not want to return to an agrarian culture filled with stoop labor, disease, superstition and early death. To some extent, the alienation from nature creates humanism. The dilemma of our present time is that we are still searching for balance of all these aspects in our daily lives. Lefebvre writes:

It is most certainly impossible for a viable feeling of life to be based upon the impression of the bizarre. Such a feeling can only have its basis in the consciousness of human power, which surrounds us, upon which we live, and in which we participate in all acts of our everyday lives -- and yet which escapes us in such a way that we are unable to live it, so that nearly all our ideas and feelings still come to us from a time when man was weak in the face of nature. Page 119

McLuhan, Marshall. *Understanding Media: The Extensions of Man.* MIT Press: Cambridge, MA 1997. (First printed 1964)

This book is seminal in its survey of the emerging global networks in 1964. It also takes a look at the psychological underpinnings and possible consequences of a networked world and an extended humanity. McLuhan used two examples -- the invention of the printing press and the harnessing of electric power -- as ways in which our tools had changed society. I could go on and on about how concise this book is. Here's a snippet from the chapter titled, "The Gadget Lover Narcissus as Narcosis":

Physiologically there are abundant reasons for an extension of ourselves involving us in a state of numb-

ness. Medical researchers like Hans Selye and Adolphe Jonas hold that all extensions of ourselves, in sickness and in health, are attempts to maintain equilibrium. Any extensions of ourselves they regard as "autoamputation" and they find that the autoamputative power or strategy is resorted to by the body when the perceptual power cannot locate or avoid the cause of irritation. Our language has many expressions that indicate this self-amputation that is imposed by various pressures. We speak of "wanting to jump out of my skin" or of "going out of my mind," being "driven batty" or "flipping my lid." And we often create artificial situations that rival the irritations and stresses of real life under controlled conditions of sports and play.

Megna, Michelle. "A Servant In The House: The home of the future will anticipate your daily needs before you know what they are." New York Daily News October 5, 2003, SPORTSFINAL Edition: 8

This piece is quite forthright and clear in defining the changed environment of embedded system homes. I particularly like the PhillipsHomeLab:

The goal of the HomeLab is to remove the wires, remotes and clunky entertainment devices and incorporate "ambient intelligence." What this means is the technology can think on its own and react to -- or predict -- your individual needs.

Minority Report, Dir. Steven Spielberg. With Tom Cruise, Samantha Morton, Max von Sydow, Colin Farrell, Tim Blake Nelson. Writ. by Scott Frank and Jon Cohen. Based on a short story by Philip K. Dick. Twentieth Century Fox and Dreamworks Pictures, 2002.

What is most interesting about science fiction is its extrapolation of current trends into an imagined future. With *Minority Report*, we see the end of all privacy. It's a world of pre-emptive strikes. It's a world of threat prevention. Frightening in all its implications for the future of America.

Mitchell, William J. *E-topia -- "Urban Life, Jim -- But Not As We Know It."* MIT Press: Cambridge, MA, 2000.

The author starts his book with the claim that he is neither on the side of the techno-enthusiasts nor the techno-wary. He argues that he has a new vision for the future network-integrated society. As far as I can discern from my reading, this happens not to be the case. Mr. Mitchell indeed seems to be in the camp of the techno-Utopians. The book does lay out in a concise manner the general point of view vis a vis the networked future that is current in engineering circles. What struck me was the continuation of the uniquely

American utopian ideal in Mitchell's discourse. It also has a quite chilling aspect.

Curiously enough, there is venerable precedent for these notions of embedded intelligence and sensorily aware, responsive objects, and spaces. The ancient Romans believed that each particular place had its characteristic spirit -- its genius loci ... For us equipping a place with its genius has simply become a software implementation task ... By virtue of the rules that it encodes, it can facilitate some activities and discourage or exclude others. It can even enforce ethical and legal norms. Code is character. Code is the law. Page 50

Even more telling is a discussion of energy usage by smart house systems. William's notion is that since the electricity market is deregulated (and if the trend continues, this would apply to all other energy sources), smart systems will shop for the best prices for energy over the networks. From personal experience, I can say this won't quite work. A friend installed an electric storage heating unit in his studio. The deal was that you set the heater to draw current during off-peak hours. This was before Pennsylvania switched to de-regulation and after de-regulation, there was no such thing as off-peak rates. The counter argument would be that the heater needs to become smarter to know when prices are low. This strange notion suggests designing a home around the idea of fluctuating commodities markets.

Mitchell, William J. Me++ -- *The Cyborg Self and the Networked City*. MIT Press: Cambridge, MA 2003

This book actually is an updated elaboration on the observations Mitchell put forth earlier in *E-topia*. What is different, among other things, is the inclusion of the effects of the 9/11 attacks on New York and Washington, as well as the introduction of wireless computer networks that can interface with the Internet, cell phones, PDAs and so on. Here Mitchell senses that the idea of an anti-hierarchical, rhizomatic structure that emerged in the 90s with the Internet and the use of pagers has now, in the 00s, become not only the mode of operation for the new nomadic corporate workers but also the method used by Moslem and other extremists to attack and disrupt the mechanisms of globalization.

I am becoming the focal point of a global personal Panopticon. It is not a spoked building radiating from my body (that is, a network of one-way sightlines), as constructed by Jeremy Bentham's Enlightenment imagination and elevated to iconic status by Michel Foucault, but a wildly ramifying circuit structure with artificial eyeballs at the end of wires. ... I am both a surveying subject at the center of my electronic web

and the object of multimodal electronic surveillance. All of those constructions, of the gaze that post-Foucauldians have alerted us to -- the gaze of desire, the gendered gaze, the consumers' gaze, the critical gaze, the reflexive gaze and certainly the gaze of power -- are extended, reorganized, and reconstructed electronically. Re-released Big Brother (or Big Brother 2.0) is made from little pieces linked together; he/she is everywhere and all of us -- at least those who pay attention. Page 26

Mon Oncle. Dir. Jacques Tati. 1956.

This film presents an intriguing French view of modernity ca. 1956. I chose Tati for several reasons. His mimetics and position as an independent filmmaker / auteur resonate with my own project as a performance artist. He also has a keen sense of gesture which conveys an overall sense of the human condition. This particular sense is something that I believe eludes those engineers whose goal is to redesign the ways in which we live per se.

The film *Mon Oncle* is a classic example of that dichotomy. The set-up is a French corporate executive's family life. The executive lives in a totally 'modern' home. The uncle in question is the brother of the executive's wife, an eccentric who lives in the village.

The modern home and its modern conveniences, especially those of the kitchen, are a lesson in gadget mania gone awry. One sequence in the film shows the proud wife showing off her home to a neighbor. In the living room, an outsized green signal light accompanied by a comedic warning sound tells the wife that the steak she is cooking in the kitchen is ready. The wife goes to the closed kitchen door, waves her hand in front of an outsized electric eye in the center of the door, and the door swings open. In the kitchen, she puzzles over the buttons on the stove, counts out the sequence and presses one button. To the left, a finished beefsteak pops up into the air like a piece of toast and lands on a plate. She then tells her friend to step back as she prepares to spray the finishing sauce on the steak with a piece of equipment that looks like an industrial paint sprayer. My interest in this case are the speculations about how people might deal with incorporating future technologies into their home lives, which often takes the form of comedy or puzzlement.

More, Thomas. *Utopia*. Translated by Paul Turner. Penguin Books: London, 1965. (First published in 1516)

What intrigues me is the context of this book -- that it was published in Latin in 1516, and that Sir Thomas More was a devout Catholic who was canonized as a saint in 1935 by Pope Pius XI. Indeed much of what

this book proposes in the form of political satire is still part of Western thought. For instance, there is a discussion about capital punishment, albeit in England at the time they were putting common thieves to death. More also discusses the uneven distribution of wealth, and the fact that those who perform manual labor reap the least rewards while creating the wealth that sustains the aristocracy.

More observes that when people are squeezed to the point where they cannot sustain themselves despite hard labor, the natural outcome is desperate people who must steal in order to survive. He also states that private property, money, greed and the accumulation of power over other men create the conditions for the moral downfall of man. He argues that no country in Europe actually follows the teachings of the bible and the Ten Commandments because they contradict the means used to accumulate wealth and power. In the mythical land of Utopia, he envisions a place where there is a totally ordered society that functions without money or private property. As I read this book, I compared the ecstatic ruminations of Sir Thomas with the actual implementations of his theories in all of the 'Marxist' utopias created during the 20th century. For example, in More's land of Utopia all the citizens must work as farmers for the community, without gaining any profit for their labor other than fulfilling their social responsibility. This brings to mind the Cultural Revolution in China where artists, intellectuals, students and city dwellers were forced to work on farms to create a 'balanced' society. We all know how devastating, bloody and disruptive the Cultural Revolution was. More envisions a peasant Utopia that to this day lives on in a dreamy nostalgia for our Western pre-industrial, agrarian village societies. In America, it has become the mythic icon of the family farm that has more or less been swallowed up by today's mechanized agri-business. This is something of a quandary in the 21st century. Part of the consensus of the collective wish of humanity has always been a desire for abundance and a freedom from want. The abundance component of Utopian ideals has been implemented quite effectively in the West with the advent of industrial processes; yet inequality of distribution and extreme want still exist. A cursory look back at the founding fathers of America reveals that much of their vision for the future nation came from the idea of the farming society proposed by Sir Thomas. But America's vision of a farmer-statesman democracy was based on slavery in order for it to function. Indeed, in More's Utopia slaves are used to do the dirtiest and most difficult tasks. Looking at the theoretical basis for European and particularly English colonialism and its methods, I was astounded at how much of it was embodied in this passage from Utopia:

By the way, the slaves that I've occasionally referred to

are not, as you might imagine, non-combatant prisoners-of-war, slaves by birth, or purchased from slave markets. They're either Utopian convicts or, much more often, condemned criminals from other countries, who are acquired in large numbers, sometimes for small payment, but usually for nothing. Both types of slaves are kept hard at work in chain gangs, though Utopians are treated far worse than foreigners. The idea is that it's all the more deplorable if a person who has had the advantage of a first-rate education and a thoroughly moral upbringing still insists on becoming a criminal -- so that the punishment should be all the more severe. Another type of slave is the working class foreigner, who rather than live in the wretched poverty at home, volunteers for the slavery of Utopia. Such people are treated with respect, and with almost as much kindness as Utopian citizens, except that they're made to work harder, because they're used to it. If they want to leave the country, which doesn't often happen, they're perfectly free to do so, and receive a small gratuity. Page 82-83

In this paragraph, one can sense the process used to colonize in America, with both purchased and indentured slaves, as well as the methods used for colonizing Australia. At one point, people in England were so desperate to escape poverty that they would steal a loaf of bread, knowing they would be caught and sent to the Australian prison colony where, after a number of years, they could work off their 'debt to society' and become freed colonists. One must surmise that the Utopian ideals of Europe and the European vision for a Utopia in the new world were indeed created by the forces of moral certitude, crime, punishment and slavery, and that Utopia and slavery are intertwined.

More, in his description of Utopian religious and moral values, defined what we in America call 'the pleasure principle' (surprisingly enough). I had often wondered where exactly the concept of 'Life, Liberty and the Pursuit of Happiness' in the U.S. Constitution came from, and it appears that More had laid out a framework in his book:

... happiness is the summum bonum towards which we're naturally impelled by virtue -- which in their definition means following ones' natural impulses, as God meant us to do. But this includes obeying the instinct to be reasonable in our likes and dislikes. And reason also teaches us, first to love and reverence Almighty God, to Whom we owe our existence and our potential for happiness, and secondly to get through life as comfortably and cheerfully as we can, and help all other members of our species to do so too. ... Pleasure they define as any state or activity physical or mental, which is naturally enjoyable. The operative word is naturally. According to them, we're impelled by reason as well as an instinct to enjoy ourselves in any

natural way, which doesn't hurt other people, interfere with greater pleasures, or cause unpleasant side effects. But human beings have entered into an idiotic conspiracy to call some things enjoyable which naturally are nothing of the kind -- as though facts were as easily changed as definitions. Now the Utopians believe that, so far from contributing to happiness, this type of thing makes happiness impossible -- because, once you get used to it, you lose all capacity for real pleasure, and are merely obsessed by illusory forms of it. Very often these have nothing pleasant about them at all -- in fact, most of them are thoroughly disagreeable. But they appeal so strongly to perverted tastes that they come to be reckoned not only among the major pleasures of life, but even among the chief reasons for living.

In the category of illusory pleasure-addicts they include the kind of person I mentioned before, who thinks himself better than other people because he's better dressed than they are. Actually he's just as wrong about his clothes as he is about himself.

More has his Utopians all dressing in the same utilitarian garments in order to avoid such types of unnatural pleasures. Which brings to mind both the Soviet and Maoist experiments with utilitarian clothing for the masses. What is odd to me is the denial of any aesthetic 'pleasure' in dressing or being fashionable. What is chilling is the religious fervor that accompanies More's notion of natural law. Indeed, many of the principles of Utopian ideals have been realized by technology. Yet the same technology creates a new set of inequalities.

Nochlin, Linda. "Pictures of an Exhibition: Less than More." Artforum International September 2003: 178-179, 240, 246.

The piece is a review of various artists' work presented at the 2003 Venice Biennale in an ancillary exhibit called Utopia Station. Nochlin considered the exhibition flawed but her critique originally got me interested in looking at the origins of Utopian thought. Here's her set-up for the article.

What is Utopia? How does the utopian idea engage with history as well as with the present? How might utopia be reconceived and reconfigured for our troubled times? And how can utopia -- a concept typically set forth in a text -- find its material counterpart in works of art?

Norman, Donald A. *The Invisible Computer, Why Good Products Fail, the Personal Computer Is So Complex, and Information Appliances Are the Solution.* MIT Press: Cambridge, MA, 1999.

The discussion in this book focuses on how to create or incorporate ubiquitous computing into the fabric of our daily lives. While the author is a cognitive scientist, the book is informed by a technologists' point of view. Although Norman is building a case for 'human-centric design,' there still is the corporate top-down approach. In any case, his discussion of the progression from personal computer to the information appliance reveals the next step in the evolution of computing technology.

Although any individual information appliance can function on its own, the real power comes from viewing appliances as a system of interconnected components. ... All information appliances partake in similar families of interrelated systems. For these to work smoothly requires an efficient, omnipresent and invisible infrastructure. Page 62-63

This is a rather telling remark. The notion of an omnipresent infrastructure has all the telltale marks of state control mechanisms built in. If, on the other hand, one were to allow 'market forces' to build the infrastructure, one might wind up with monopolistic control of the kind that Microsoft has over the desktop PC operating system. Neither path bodes well for the future. The notion of human control obviously is an intrinsic part of the technology sector. Norman remarks:

Because humans and computers are such different kinds of systems, it should be possible to develop a strategy for complementary interaction. ... One major theme is to make computers more like humans. This is the original dream behind classic artificial intelligence: to simulate human intelligence. Another theme is to make people more like computers. This is how technology is designed today; the designers determine the needs of the technology and then ask people to conform to those needs. Page 159

Norman, Donald A. *The Design of Everyday Things.* Basic Books: New York 1988.

What interests me here is the examination of the forces brought to bear on the designers who create commodities. The approach is different from Guy Debord's and reveals some interesting insights into the methods technology and design.

If everyday design were ruled by aesthetics, life might be more pleasing to the eye, but less comfortable; if ruled by usability, it might be more comfortable but

uglier. If cost or ease of manufacture dominated, products might not be attractive, functional, or durable. Clearly, each consideration has its place. Trouble occurs when one dominates all the others. Page 151

Norman sees the manufacturing process as often colliding with the design aesthetics, and both positions don't necessarily take into account the end user of any product. In fact, one might say that the manufacturing process dominates the whole equation. This is not to say that manufacturing is inherently bad but I believe in -- and the author argues for -- more attention to human concerns. He argues that technology and learning how to operate new products creates more than a little strain on human cognitive processes. Norman states:

There are an amazing number of everyday things, perhaps twenty thousand of them. Are there really that many? Start by looking around you ... Suppose that each everyday thing takes only a minute to learn; learning 20,000 of them occupies 20,000 minutes -- 333 hours or about 8 forty-hour work weeks. Page 11-12

Consider this: each new product that is introduced into the market has operations that need to be learned by the end user; the thrust of the market is to innovate and introduce new products all the time, to keep the buyers buying. Each time a person has to learn a new task it puts them in a state of imbalance. It diverts attention from other areas of the person's life; indeed, one might infer that Debord's theory about the alienating effects of technology actually has a cognitive basis. In any case, Norman talks about the curve of technology as it introduces new products and adjusts their design thusly:

The development of a technology tends to follow a U-shaped curve of complexity: starting high; dropping to a low, comfortable level; then climbing again. New kinds of devices are complex and difficult to use. As technicians become more competent and an industry matures, devices become simpler, more reliable and more powerful. But then, after the industry has stabilized, newcomers figure out how to add increased power and capability, but always at the expense of added complexity and sometimes decreased stability ... But what good is technology if it is too complex to use. Page 32

By the end of the 1990s, many people working in the digital art milieu began to talk about 'techno-fatigue' as a result of so much innovation in such a short period of time. We in the industrialized nations swear by our technological superiority. This sort of hubris is dangerous, to say the least. Not because being 'advanced' hasn't helped us but because too much of a belief in our supposed edge and the infallibility of technology

may prove foolish in the long run. It seems to me that we are at a point where humanism and a humbler approach to all our modern appurtenances is a proper course of action. One final quote from Norman's book that perhaps is the most relevant to my project:

Two developments are worthy of mention, both intended to serve the ever-promised "house of the future." One most wonderful development is the "smart house," the place where your every want is taken care of by intelligent, omniscient appliances; the other promised development is the house of knowledge: whole libraries available at our fingertips, the world's information resources available through our telephone / television set / home computer / rooftop satellite antenna. Both developments have great potential to transform lives in just the positive ways promised, but they are also apt to explode every fear and complexity discussed in this book into reality a thousand-times over. Page 213

Playtime. Dir. Jacques Tati. 1973.

Playtime is another fascinating Tati film that is a perfect representation of synthesized reality. The film is set in a modernist Paris of steel and glass buildings that reflect its monuments. A group of American tourists are ushered off a jet plane and taken in and out of these modern buildings. The only time they ever view famous Paris landmarks is in the glass reflections on the facades of the buildings. The film is almost prescient in its notion of virtual reality and the simulation of mundane events. It speaks to the extension of media where in effect, the reflection has replaced the reality.

Report to Congress regarding the Terrorism Information Awareness Program. In response to Consolidated Appropriations Resolution, 2003, Pub. L. No. 108-7, Division M, § 111(b) A factual presentation is laid out on the Electronic Freedom Foundations website

(http://www.eff.org/Privacy/TIA/20030523_tia_report_review.php):

Formerly "Total Information Awareness," TIA has been renamed "Terrorism Information Awareness." The renaming is intended to correct the impression "that TIA was a system to be used for developing dossiers on U.S. citizens." TIA's intent, DARPA says, is to "protect citizens by detecting and defeating foreign terrorist threats before an attack." Report, Executive Summary p. 1 (ES-1). ... The new TIA programs are:

Rapid Analytical Wargaming (RAW), which seeks to provide decision-makers with the ability to better anticipate future political, policy, security, and military/terrorism activity;

Futures Markets Applied to Prediction (FutureMAP), which seeks to use "policy markets" in which experts trade "outcome futures" to answer questions like "will terrorists attack Israel with bioweapons next year?";

Global Autonomous Language Exploitation (GALE), which seeks to teach computers to find critical foreign intelligence information from broadcasts, conversations, newswires and the Internet and then provide it to humans without their specifically requesting it;

Scalable Social Network Analysis (SSNA), which aims to model networks of connections like social interactions, financial transactions, telephone calls, and organizational memberships;

Misinformation Detection (MInDet), which seeks to detect intentional misinformation and inconsistencies in publicly available data and to identify false or misleading statements in textual documents;

Activity, Recognition, and Monitoring (ARM), which seeks to automate the ability to capture, identify and classify human activities in surveillance environments (including crowds) using video, agile sensors, low power radar, infrared, and radio frequency tags; and

Next-Generation Facial Recognition (NGFR), which seeks to improve face-recognition technology using 3-D imagery and processing techniques, infrared and multispectral imagery, and expression analysis.

The Report's description of these programs is provided in the appendix to this review. Clearly, it is reasonable to expect that programs will continue to be added, which again highlights the need for close oversight. If TIA is permitted to continue, EFF will not be surprised if DARPA's new "LifeLog" program, for instance, joins the TIA "surveillance product line" in the next year or two.

This change seems purely cosmetic, reminiscent of the FBI's renaming its Carnivore tool "DCS-1000." There is no question that TIA, if implemented, will process information about U.S. persons. For instance, TIA technologies will be tested on a "realistic world of synthetic transaction data" that simulates "the behavior of normal people, unusual-but-benign people, and terrorists."

Raskin, Jeff. *The Humane Interface*. Addison-Wesley: New York, 2001.

Raskin discusses how embedded computer systems and human interaction with machines can be tailored to be more integrated.

Who is the "you" about whom I am talking? can I dis-

tinguish between you and your conscious? Taking an engineering perspective, I sidestep this questions, saying simply that the "you" in this case is the union of your physical self and all the physical and mental phenomena that your physical self manifests. We do not have to address the question of the possible distinctions among you, your conscious, and your unconscious to understand interface-design principles. Page 14

This book and the previous quote reveal how blind engineering can be to humanist and artistic practice. The scientist's inability to control the ambiguities of the human being can lead to invariably 'sidestepping' the question. These may be the people who design products that are developed based on market research. I will admit that Raskin tries to be humanist in his approach but it tends to devolve down to making the product easier to use.

***The Prisoner*. TV-Series. BBC. Sep 29, 1967 - Feb 2, 1968
Writ. David Tomblin, George Markstein, Terence Feely, Patrick McGoohan, Anthony Skene, Lewis Greifer, Michael Cramoy, Roger Parkes, Vincent Tilsley, Gerald Kelsey, Roger Woodis, Ian L. Rakoff.
Exec. Prod. Patrick McGoohan.
Prod. David Tomblin.
Dir. Don Chaffey, Pat Jackson, Robert Asher, Roy Rossotti, Peter Graham Scott, David Tomblin, Patrick McGoohan.
Perf. Patrick McGoohan, Guy Doleman, George Baker, Leo McKern, Colin Gordon, Eric Portman, Anton Rodgers, Mary Morris, Peter Wyngarde, Patrick Cargill, Derren Nesbitt, John Sharp, Clifford Evans, David Bauer/Georgina Cookson, Andre Van Gysegham, Kenneth Griffith, Alexis Kanner, Angelo Muscat, Peter Swanwick, Denis Show.**

The TV series' structure addresses the ideas of government control and surveillance, the notion of Utopia as an ordered society, and the individuals' rights to privacy. The series starts with Patrick McGoohan, who is a secret agent for the British, deciding to resign from his post in the government. This apparently is unheard of and next thing he knows, he awakens in a high-tech automated cottage on a sunny island. He is free to roam about but if he tries to leave the island, an ominous robotic ball stops him from doing so by rolling across the water and entrapping him. On the island are other cottages with inhabitants, and there are regular social events that all inhabitants must attend. The other occupants of the island may also be former spies or guards -- the plot is deliberately murky when it comes to their identities. The island village itself is an imagined Utopia of well-kept gardens and tidy households. The conflict lies in the loss of freedom, the total surveillance of everyone's movements, and the artificially constructed society. Analytically, the series deals with designed communities of the post-war period and is incisive in its sense of a government's desire to control the individual through architecture, surveillance, social pressure and intimidation.

Thomas Jefferson Slave Master: *Unearthing Secret America*. Scientific American Frontiers. PBS. October 8, 2002. Narr. Alan Alda. Prod. John Angier. David Huntley.

One part of this program consists of a tour through Thomas Jefferson's Monticello manor. The discussion focuses on the attention that Jefferson, the inventor, paid to creating mechanisms that separated the slaves' daily house activities from any contact with the main household. This included sunken passages for slaves to move around the grounds without being seen and even a rotating door where the food for a meal could be placed on shelves and was then rotated into the dining area to be picked up by one butler who would serve the family.

One might say that even before the industrial revolution, Thomas Jefferson was practicing a form of architectural mechanization in his Monticello mansion. Although the clever clockwork-like inventions used for 'labor-saving' appear to be visionary at first glance, the underlying subtext is to separate the slave class from any direct contact with the owner of the estate. The Deus Ex Machina hides the system of slavery that sustains the household. It is apparent that the larger social systems of any époque shape the design and structure of the home. Capitalism's spectacle, implemented in the home via design and appliances (commodities), has the underlying purpose to create separation / isolation and a tearing of the social fabric.

Unitarian Universalists Association.
Dictionary of Unitarian & Universalist Biography
<http://www.uua.org/uuhs/duub/articles/georgeripley.html>

This website is cited for its discussion of the grange movement and its ties to 19th century Bostonian communal agrarian Utopianists. Since I grew up in Boston, I knew and observed the application of communitarianism that is woven into New England society. I kept wondering how this fit in or was at odds with the promise of our nation's 'American Dream.'

Virilio, Paul. *Open Sky*. Translated by Julie Rose. Verso: London, New York, 1997. (Originally published by Editions Galilée as *La Vitesse de Libération*, 1995)

Virilio's book takes a look at the current technological Utopia of Western societies. In this case, the Utopian dream is in the process of becoming actualized, which begs the question, "What have we created?"

This abrupt transfer of technology, from the building of real-space infrastructures (ports, railway stations, airports) to the control of the real-time environment thanks to interactive teletechnologies (teleports) gives

new life today to the critical dimension. Indeed, the question of the real instant of instantaneous teleactions associated with the notion of atopia and utopia, promotes what is already being referred to as tele-topia, with all the numerous paradoxes attendant on this ... Page 10

Virilio argues that the technological Utopia is being implemented as a nihilistic one. One may draw the conclusion that the dissolution of the human sphere is at its heart. Harkening back to the original concept of Utopia explained in Thomas More's book of the same name, the meaning of the term is "No-Place or Non-Place." The religious Utopian ideals speak of an after-life where the human is beyond death and perfect. This is the trajectory (Virilio uses the mathematical term vector) we are on, in essence, destroying / transforming humanity through technological Utopia, thereby annulling the human condition by annulling the human.

Indeed, if industrial technologies have progressively favored the decline of the extended family of the rural world and promoted the bourgeois, and then the nuclear family, (so aptly named) at the time of the Last Century's urban expansion, the end of the supremacy of physical proximity in the megalopolis of the post-industrial age will not content itself with promoting a boom in the single-parent family. It will go on to provoke an even more radical gap between men and women, thereby directly threatening the future of sexual reproduction. Parminedes' great divide between masculine and feminine principles will widen further as a result of the very performance of love over distance. Page 106

The book discusses the collapsed space of instantaneous networked communication with which we are all becoming familiar. Indeed, it is becoming second nature for us in the 'developed' world to rely on the networks to keep things running smoothly. We all know about or use bank transactions over secure lines, video surveillance, bar code scanners, MRI imaging, Internet chat, immersive 3D interactive games, remote control wars, such as Gulf War 1 & 2, voice recognition, distance robotics etc. Open Sky talks about the reality in which we live, a telematic reality that is beyond the mediated environment of broadcasting.

Indeed, at a time when more than 90 percent of the micro-electronic production is engaged in the manufacture of discrete components (scanners, sensors, detectors) and when they are cooking up -- for the human organism this time -- 'smart pills' capable of instantaneously transmitting information on an individual's nervous function, surely we cannot go on denying the probability of some form of neurotechnological processing of mental imagery. Page 101

Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America*. MIT Press: Cambridge, MA 1981.

Of all the books I've read on the subject, this one most explicitly mapped out the archetype of the 'American Dream' as it started with the new republic and continues to this day in the idea of the Smart House of the near future. I was surprised to learn that many of the current positions on the home, family and society as well as strategies for dealing with poverty were proposed and acted on 200 years ago in the US. Even further back, at the time of the earliest settlements of the Plymouth, MA colony, the idea of surveillance within the home was a fact of daily life.

Even more than the façade, the interior of a New England dwelling shows the distinctive architectural ideal of the Puritans. Here the family lived according to the rules and duties of their covenants. Surveillance of one another was necessary. An individual promised God not only faith and good works for himself or herself, but a sanctified life for the entire group. Page 12

Indeed, the founders of this nation felt that the home should reflect and be imbued with American ideals, which inspired the notion of the 'model home':

For Jefferson, and for many other civic leaders, there was a problem of guiding, but not regulating domestic settings. How could Americans create an environment that protected the respect for order, self-sufficiency, and spirituality they held in common, without imposing on the freedom of each individual and each family to live as they pleased? The answer was the concept of the model home. Some prototypes could be small and inexpensive; each would be ornamented, so that the family would recognize their home as a place of beauty, repose, and Christian virtue. There was also a mechanical image at work here, a notion of continuous improvements on a template to make the product better and cheaper. Optimistic belief in inevitable progress encouraged the assumption that aesthetic, technological, and social breakthroughs would keep occurring. Page 75

At the beginning of the 20th century, home automation and home systems were becoming an important part of the ideal of the 'American Dream.'

These new and simpler bungalows did not necessarily cost less than the elaborate Victorian dwellings of a generation before. Interest in regulating health and increasing domestic efficiency meant that a larger proportion of the construction expenses -- often 25 percent -- now went into household technology. Modern systems supplied the home with power, heat and numerous services. The first House Furnishings Exhibition, held at New York's Madison Square Garden in 1906, was a multi-industry effort to educate the public on the immense quantity of labor saving devices and economical mechanisms available to the homemaker. Page 168