HUMAN INTERACTION IN A TECHNOLOGICAL SOCIETY:
A PHOTOGRAPHIC ESSAY

by

Walter C. Dent

A.A.S., Fashion Institute of Technology
State University of New York
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B.A., University of Massachusetts at Amherst
Amherst, Massachusetts
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Signature of the Author

Walter C. Dent
Department of Architecture
Center for Advanced Visual Studies
January 18, 1985

Certified by

Otto Piene
Professor of Visual Design
Director, Center for Advanced Visual Studies
Thesis Supervisor

Accepted by

Nicholas Negroponte
Chairman
Departmental Committee for Graduate Students

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HUMAN INTERACTION IN A TECHNOLOGICAL SOCIETY:
A PHOTOGRAPHIC ESSAY

by
Walter C. Dent

Submitted to the Department of Architecture on January 18, 1985 in partial fulfilment of the requirements for the Degree of Master of Science in Visual Studies.

ABSTRACT

Through the advent of technological advancement global communication has been greatly increased. Information can be emitted and received instantaneously through satellite transmission systems. Saturation of the airways continuously bathes the human in video and audio imagery. Dependence on human physical labor has been reduced by the current trend of transporting information rather than materials. Entertainment, Education, Religion, Politics, Commerce and Medicine, are continuously adapting and implementing new technological developments. Technology has created an attitude of increased expectation of instant fulfilment. Social behavior adapts and revises itself with the influx of contemporary mores delivered by the communications medium. If television is the illusion of reality, what is the reality of the illusion?

The thesis consists of two parts, (1) a written investigation of observed influences created through communicative technologies and (2) a photographic essay of present and possible attitudes that result from audio/video technological complexity. The photographic essay is not an attempt to document interaction as it "normally" appears in society, but to spot human interaction through a "surrealistic" approach. The photographic presentation consists of nine (9) images, (8-black and white and 1-color), each approximately 19"x23", hinged between acid-free ragboard and presented under glass. They will be exhibited at the Center for Advanced Visual Studies at M.I.T. during the month of January thru mid-March. The thesis book is constructed with the written material in the first section and the photographic essay in the second represented as reduced black and white, photo-screened images accompanied by their respective titles and true dimensions.

Thesis Supervisor: Otto Piene
Title: Professor of Visual Design
In his preface to the catalogue of the first exhibition of Futurist painting in Paris of 1912, Umberto Boccioni states:

The era of the great mechanized individuals has begun, and all the rest is Paleontology... therefore we claim to be the primitives of a sensibility that has been completely overhauled.¹

In the first machine age, the direction of contemporary architecture was constantly disputed amongst architects, and several views and designs propagated, most importantly, the Beaux-Arts, Art Nouveau, Deutscher Werkbund and Futurism. It is not my intention to address the complex development of "modern architecture" in this thesis, but to establish the introduction of machinery as the central figure within this environment. I have chosen the Futurist ideals, established before World War 1, as my basis when comparisons are implied.

During the first machine age, society was inundated with new inventions - the telephone, electricity, the typewriter, the gramophone, the automobile, the airplane, the locomotive, the cinema, and mostly, home machinery. Architecture, unlike the Beaux-Arts tradition, was to become functional, scientific and unstylistic. The use of reinforced concrete constru-
tion raised the concrete facade to the level of the vernacular. In regards to architectural ornamentation, the views of the architect Adolf Loos, represented the contemporary ideals:

Freedom from ornament is the symbol of an uncorrupted mind, a mind which he only attributes to peasants and engineers. In this view succeeding generations were to follow him, thus laying further foundations to the idea of engineers as noble savages and also laying further foundations to the idea that to build without decoration is to build like an engineer, thus in a manner proper to a Machine Age. ²

Futurist Architectural viewpoints were represented through Antonio Sant' Elia's "La Citta Nuova", of 1914, which held the position that:

The house of cement, iron and glass, without curved or painted ornament, rich only in the inherent beauty of its lines and modelling, extraordinarily brutish in its mechanical simplicity... must rise from the brink of a tumultuous abyss; the street itself will no longer lie like a door-mat at the level of the thresholds, but plunge stories deep into the earth, gathering up the tra-
ffic of the metropolis connected for necessary transfers to metal cat-walks and high-speed conveyor belts. That the new architecture is the architecture of cold calculation.... boldness and simplicity; the architecture of reinforced concrete, iron, glass, textile fibres and all those replacements for wood, stone and brick that make for the attainment of maximum elasticity and lightness.³

With the publishing of F.T. Marinetti's "Futurist Manifesto", in Le Figaro, on February 20, 1909, the artist's total involvement with technology was proclaimed. Marinetti experienced a drastic alteration within his environment. He glorified the new technology and particularly adopted the instrument of personal mobility, the automobile:

We declare that the splendor of the world has been enriched with a new form of beauty, the beauty of speed. A race automobile adorned with great pipes like serpents with explosive breath... a race automobile which seems to rush over exploding powder is more beautiful than the Victory of Samothrace.⁴
(I find it very interesting that this love for the race-automobile and the attraction for speed, is to this day a trademark of the Italian automakers Ferrari, Maserati and Lamborghini).

Being that this thesis concerns itself with human interaction and technology, I shall introduce the Futurist Manifestos that navigate social attitudes within Futurist Ideology. I have purposely omitted such manifestos referring to painting and sculpture, which are directed towards artists, and shall concentrate on their writings concerning social rebirth.

A compendium of these manifestos will constitute a correlation with present social influences, which will be expounded within the section titled: OBSERVED. Again, this thesis is not an investigation of Futurism as a Movement, but rather its influence, whether direct or indirect, upon social complexity. On this basis, I take the liberty of selecting those manifestos and statements which address my intentions.

The Art of Noises, 1913

We invite young musicians of talent to conduct a sustained observation of all noises, in order to understand the various rhythms of which they are composed, their principal are secondary tones. By comparing the various tones of noises with those of sounds, they will be convinced of the extent
to which the former exceed the latter. This will afford not only an understanding, but also a taste and passion for noises. After being conquered by Futurist eyes our multiplied sensibilities will at last hear with Futurist ears. In this way the motors and machines of our industrial cities will one day be consciously attuned, so that every factory will be transformed into an intoxicating orchestra of noises.  

Destruction of Syntax - Imagination without Strings - Words in Freedom. 1913

Futurism is grounded in the complete renewal of human sensibility brought about by the great discoveries of science. Those people who today make use of the telegraph, the telephone, the phonograph, the train, the bicycle, the motorcycle, the automobile, the ocean liner, the dirigible, the aeroplane, the cinema, the great newspaper (synthesis of a day in the world's life) do not realize that these various means of communication, transportation and information have a decisive influence on their psyches.

1. Acceleration of life to today's swift pace. Physical, intellectual, and sentimental equilibration on the cord of speed stretched between contrary magnetisms. Multiple and simultaneous awareness in a single individual.

2. Dread of the old and the known. Love of the new, the unexpected.

3. Dread of quiet living, love of danger, and an attitude of
daily heroism.

4. Destruction of a sense of the Beyond and an increased value of the individual whose desire is "vivre sa vie" in Bonnot's phrase.

5. The multiplication and unbridling of human desires and ambitions.

6. An exact awareness of everything inaccessible and unrealizable in every person.

7. Semi-equality of man and woman and a lessening of the disproportion in their social rights.

8. Disdain for "amore" (sentimentality or lechery) produced by the greater freedom and erotic ease of women and by the universal exaggeration of female luxury.

9. A modification of patriotism, which now means a heroic idealization of the commercial, industrial, and artistic solidarity of a people.

10. A modification of the idea of war, which has become the necessary and bloody test of a people's force.

11. The passion, art and idealism of Business. New financial sensibility.

12. Man multiplied by the machine. New mechanical sense, a fusion of instinct with the efficiency of motors and conquered forces.

13. The passion, art, and idealism of Sport. Idea and love of the "record".

14. New tourist sensibility bred by ocean liners and great
hotels.

15. The earth shrunk by speed. New sense of the world.

16. A loathing of curved lines, spirals, and the tourniquet. Love for the straight line and the tunnel. The habit of visual foreshortening and visual synthesis caused by the speed of trains and cars that look down on cities and countrysides. Dread of slowness, pettiness, analysis, and detailed explanations. Love of speed, abbreviation, and the summary. Quick, give me the whole thing in two words!

17. Love of depth and essence in every exercise of the spirit.

So these are some elements of the new Futurist sensibility that has generated our pictoral dynamism, our anti-graceful music in its free, irregular rhythms, our noise-art and our words-in-freedom.  

Futurist Manifesto of Men's Clothing, 1913.

WE MUST INVENT FUTURIST CLOTHES, hap-hap-hap-hap-happy clothes, daring clothes with brilliant colors and dynamic lines. They must be simple, and above all they must be made to last for a short time only in order to encourage industrial activity and to provide constant and novel enjoyment for our bodies.

We want Futurist clothes to be comfortable and practical.
Dynamic
Aggressive
Shocking
Energetic
Violent
Flying (i.e. giving the idea of flying, rising and running)
Peppy
Joyful
Illuminating (in order to have light even in the rain)
Phosphorescent
Lit by electric lamps.

Pattern changes should be available by pneumatic dispatch; in this way anyone may change his clothes according to the needs of mood.

Available modifications will include:
Loving
Arrogant
Persuasive
Diplomatic
Unitalonal
Multitalonal
Shaded
Polychrome
Perfumed.
As a result we shall have the necessary variety of clothes, even if the people of a given city lack the imagination themselves.

The happiness of our "Futurist Clothes", will help to spread the kind of good humor aimed at by my great friend Palazzeschi in his manifesto against sadness. 7

Within the writings of "Le Futurisme" of 1914, we find the following passage by Marinetti:

I envy the men of the Two-thousands, who will live in an Italy entirely revivified, shaken and tamed by new electrical energies whose power, derived from the harnessing of the sea, will be controlled by a kind of technology of engineers who live in high tension chambers where a hundred-thousand volts flicker through great bays of glass. They sit at control panels with meters, switches, rheostats and commutators to right and left, and everywhere the rich gleam of polished levers. These men enjoy, in short, a life of power between walls of iron and crystal; they have furniture of steel, twenty times lighter and cheaper than ours. They are free at last from the examples of fragility and softness offered by wood and fabrics with their rural ornaments.... Heat, hum-
idity and ventilation regulated by a brief pass of the hand, they feel the fullness and solidity of their own will....

With Italy's involvement in the war in 1915, a move applauded by Marinetti, (war, the hygienic control of life), Umberto Boccioni and Antonio Sant'Elia were both killed. The post-war Futurist group had little in common with the earlier association. This new Futurism had propagandistic elements that quickly became identified with Fascism.

"Man Multiplied by the Motor".

Marinetti
"The unknown is an exception, the known a deception."

Francis Picabia, 1920.

I transmit, therefore I exist. As soldiers of Media we don our technology. Clearer, smaller, sharper, new and improved, perfection must be attained. Develop a more powerful machine for less cost if this business is to survive. Create an answer even if there isn't a problem. The mad technological race is on!

With instant telecommunications the gap between space and time has been bridged with a satellite. During World War II, the main outlet for visual information of the conflict was the newsreels. The film was edited, narrated and presented to aid the war effort. The collective viewing of the newsreels at the cinema generated group discussion and personal involvement in the war effort. Information was de-
signed and produced exclusively for the mass audience. The radio provided a "live" connection with the government, who assured the listener that victory was at hand, and the average citizen could do their part in the war effort. Victory Gardens developed throughout the country and ration cards were established. The average citizen, otherwise known as "John Doe", received information concerning the conflict through the government sources, edited in the name of National Security. The cinema reinforced the war effort through films from Hollywood of prominent actors in the war, usually pilots, and screenplays based upon the road to victory.

With the advent of the Vietnam War, the reality of death, pain, confusion, fear and total disillusionment, was presented to the television viewer within the comfort of his/her home. Gone were the patriotic newsreels, gone were the fireside chats by the President. The viewing of the horror was usually ingested alone, upstairs, on your personal television. No discussion with the person next to you, there in vivid color was war. In contrast, there also was the first man on the moon, transmitted directly to your personal television set upstairs. Society was extremely confused, split and very afraid of the present chain of events. There were those who chose to vocalize their disgust and those who chose to await the Future. The Future, presented to the masses at the 1938 New York Worlds Fair, was summarized in one word, "Technology". Technology would lead us out of the present madness, and into a world of futuristic miracles, the
trick was to wait.

With the end of direct U.S. military involvement in Vietnam, the business of full speed ahead to the Future was proclaimed. Development for a U.S. superiority in technology was the objective at hand, for this was the way to the Future. Yet, when the Japanese automakers were outselling the American automakers, and their electronics were constructed better and cost less than the American market, the threat to U.S. dominance in technology was greatly evident. The Japanese excelled in home entertainment products while the U.S. excelled in the computer market. Military Technology and Information Sciences, became the flagship of U.S. production. Industrial, "blue-collar" workers, who kept the country productive during the Wars, a tremendous amount being women during WWII, found themselves out of work in the name of "technological advancement". The society reluctantly adapted to the Informational Services.

Presently, we are saturated with icons that point to the Future. Personal Computers, Electronic Mail, Televideo Shopping, Media Rooms, Home On-Line work situations, etc... have created the "electronic cottage", where human interaction is reduced to a minimum. With the popularity of Video Cassette Recorders, a film can be recorded directly from the cable television channel, thereby eliminating the need to attend cinemas. Audio Compact Discs, allow the audiophile to recreate precise sound quality usually associated with the concert hall. These compact discs
or CD's, are available for the home system, the automobile, and portable use, vis a vis the Sony Walkman. With the deregulation of AT&T, one can only imagine telecommunicative possibilities.

We live in a society where it is common that each home has three or four television sets for an average family. Television is presently being developed to interface with various inputs. Flat screen technology will allow the placement of monitors on walls, in watches, within automobile dashboards, etc... The assimilation of pop culture, such as "break dancing", is perpetrated through the media to the extreme of immediate commercialism, resulting in over exposure and rejection as trend.

With the aid of television, the Fashion Industries can bombard the passive viewer into submission. Consider the Punk Look, originating in England, a Punk or Skinhead would state his/her social attitude through their dress. In the short time that the Fashion Industry has embraced it, the social, political identification has been replaced with a cute, harmless, nonconformist, conformist uniform. In a mass produced society, one must become a nonconformist in order to display ones individuality. To dress differently, wear ones hair strangely, etc... would elevate the person to an oddity.

Once again, television is a great vehicle to promote this desire to escape conformity. Music Television or better
known as MTV, allows the promotion of Fashion, Nonconformity and Trend, simultaneously. I accuse MTV and Music Videos of violating my imaginative space. The constant repetition of Music Videos has created a direct visual flashback to the original imagery associated with the music. I have been relived of my own personal impression when listening to the music. With the introduction of the Video Jukebox, one selects the musical choice and the music is accompanied with the video.

Technology is presented as friend and protector, as exhibited in Ronald Reagan's "Star Wars", defense plan, which is to be a deterrent to the Russians. The association of this method of defense against Intercontinental Ballistic Missiles, with the fantasy film "Star Wars", is indicative of the U.S. commercial attitude towards Futurism.

The Futurist Manifesto concerning "The Art of Noices" of 1913, has come to be within the youth oriented "break dance" music. The sounds are no more than the predicted industrial city noise. It is no wonder this "music" surfaced in New York City. The repetitive, monotone beat of the machinery combined with the laborious chant of the "foreman", is instrumental in the intoxicating orchestra of Futurist Noises.

America transmits its rapidly changing culture to the rest of the world by way of commerce through satellites. To be a first time traveller abroad is disheartening to the adventurous, when confronted with the major fast-food chains.
The American Media directs its advertising message toward
the youth culture. Hollywood gears its films for the young
adult absorbed within pubescent fantasies. There are many
"telephone sex", services that fulfil verbal sexual desires,
in the privacy of your home, payable by VISA or Master Card.
The dehumanization of sexuality through technology will be
more common with the perfection of home terminals.

Technology is but a tool, like the firearm, if misused,
unfortunate consequences can erupt. I see countries and cul-
tures looking to and implementing the American method of
Media, Entertainment, Defense, Technology, Business, etc...
Indeed, the world is smaller, shrunk by the Futurist stand-
ards. This Futurist attitude has not created the Utopia in-
visioned.

During the 1938-1940 New York Worlds Fair, the exhibits
that intrigued the masses were the ones that predicted the
Future. The World of Tomorrow, Futurama, etc... displayed
how we would live in the years ahead. Architecture, Trans-
portation, Clothing, and the work-place, highlighted what
was to be expected in the coming future. The events in Eu-
rope were down played at the Fair and when the East European
countries fell to the Nazis, down went their Pavilion. The
U.S.A. was trying to recover from the Depression and hope
for the future did not mix well with the European War.
Instead, we chose to focus on the new "technology", here
was our chance to escape to the Future, where life would be wonderful.

Well, here we are, once again trying to escape to the Future, where our personal life should be wonderful. Hidden away in our isolated "electronic cottages", communicating with the outside world through our monitors. We will adapt and relearn to interface our needs through machinery. We will endow the machines with "human" attributes in the name of Artificial Intelligence.

Life in the coming years can be humanized, dehumanized, and/or extinguished, all in the name of technology. What is most important is that the machine is an extension of life, and not that life is an extension of the machine.

Man Multiplied by the Machine.

Marinetti
"I do not photograph nature but my fantasy; and the camera is but a tool, like the brush. I would photograph an idea rather than an object, a dream rather than an idea."

Man Ray.
The Annunciation.

Procedure:

To simulate the large video screen, a black and white 35mm negative was reversal processed into a positive transparency. The image was photographed from television and projected onto a large white foam-core board, which was then cut to the shape of the television screen.

The floating female was light by a studio strobe unit while the video screen required a time exposure in the area of 4 seconds. The T.V. screen was suspended by fine black thread to blend with the black background, but I still have not solved the mystery of the Annunciate. The total scene was recorded with a 4x5 view camera.
The Madonna of E.E.

Procedure:

To create the video image, I photographed the child in the studio to obtain a black and white print, using a still camera. The print was then videotaped on 1⁄2 inch tape, in order to avoid freeze framing a section of a "motion" tape. In this manner the tape would run continuously for 2 hours if necessary.

The Madonna's clothing was designed by myself and the location was found at Wellesley College. The lighting was strobe light to simulate the sun combined with the natural illuminance of the T.V. The image was recorded with a Hasselblad and a 80mm lens.
Massacre of the Innocents, 19\frac{1}{2}" \times 23\frac{1}{2}". © Walter C. Dent 1984.
Massacre of the Innocents.

Procedure:

To obtain the video image, I photographed commercial television with a 35mm still camera, and reversal processed the black and white negative. The black and white transparency was projected through the back of the empty T.V. shell onto a frost matted acetate screen.

The lighting was strobe light combined with the quartz light from the projector. The image was recorded with a 4x5 view camera.
The Child Stripped Bare, 19½"x19½", © Walter C. Dent 1983.
The Child Stripped Bare,

Procedure:

The individual masks that the children wear were constructed by, photographing the female face in the studio, printing the image and drymounting them onto foam-core board with a wooden stick as a handle at the bottom. The location was the Copley Square environment at the threshold of the I.M. Pei. glass structure.

The image was recorded with a Hasselblad and a 50mm lens. The lighting was natural, low, and very near to dusk.
That Obscure Object of Desire.

Procedure:

The reading material was constructed by applying Letterpress type to colored paper and fitted as covers. The titles and authors are fictitious, and any resemblance to an actual book is purely coincidental. The lighting was strobe light and the image was recorded with a 4x5 view camera. The original image is in color.
Involuntary Submersion.

Procedure:

The location was selected in downtown Boston's Financial District. To create the illusion of the child's hand emerging from the image and into the border, a large white frame was constructed and supported by two large light stands at the location. The frame had to be at the same angle as the camera to prevent converging verticals of the borders. The image was recorded with a Hasselblad and a 50mm lens. The lighting was syncro-sun using a small strobe unit approximately 175 watt-seconds.
The Conversation, 23½"x19½", © Walter C. Dent 1984.
The Conversation.

Procedure:

This image was recorded in the studio with a large studio strobe unit and a 4x5 view camera. The headpiece was suspended with a little faith.
Oh, What Beauty!

Procedure:

The Digital Ivis System was transported to the location from The Center for Advanced Visual Studies, with the aid of my fellow students, Jonathan Goldman and Uriel Levi. The Sony Laser Disc System was utilized to provide the visual image which was from a videodisc.

The whole system was powered by a Honda generator that supplied ample current. The lighting was natural which caused the grass to be burned out due to the exposure compensation for the monitor. The image was recorded with a Hasselblad and a 50mm lens.
It has been a while since you logged-on.

I miss sensing you, receiving your touch. Where have you been? I tried to transmit but your terminal was down.

I must quit now, I have a bus to catch.

End

Dear Rola,

The Lovers.

Procedure:

The lighting for this image was solely from the computer monitor, which was available at the Architecture Machine Group, at M.I.T. The Message was written, filed, and recalled for display by myself. Selective focus was chosen for greater impact.

This image has more meaning when the viewer has a basic understanding of computer terminology, such as the "bus" referral and the closing "End". The image was recorded with a Hasselblad and a 150mm lens.
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