I would like to thank the following people for their ongoing support of my work: Annie Feldmeier Adams, Wayne Adams, Anita Aviles, Ellis Avery, Andrew Beccone, Kim Belshé, Rachel Bers, Deborah Bright, C. Ondine Chavoya, Kate Conroy, Mary Correa, Ann Cvetkovich, Pradeep Dalal, Terry Dame, Dennis Delgado, Carolyn Dinshaw, Kathleen Dinshaw, Pablo Diaz, Gearóid Dolan, Lisa Duggan, João Enxuto, Sarah Franklin, Elaine Freedgood, Inderpal Grewal, Vanessa Haney, Claire Harman, Peter Holmes, Annamarie Jagose, Caren Kaplan, Kirk Lipsey, Caitlin Long, Charles Long, Judith Long, Erica Love, Sharon Marcus, Anna McCarthy, Summer McClinton, Mimi McGurl, Lawrence F. Mesich, Margaret Morton, José Muñoz, Ann Pellegrini, Gretchen Phillips, Eric Smoodin, Paul Strohm, Elise and Jonathan Rosen, Christina Seely, Susan Schwerk, Kay Turner, Penelope Umbrico, Lee Wallace, Laura Wexler, Andrea Wolfe, Emily Rox at the Herb Lubalin Center, the librarians at the International Center for Photography, and my amazing friends and colleagues at The Cooper Union. Beverly Joel, I am very grateful for your sage book design advice. Eileen Joy of Punctum Books, thank you so much for embracing this project with the full force of your creativity and smarts. And finally, a very special thank you to all of the donors who made printing this book possible.


FLASH + CUBE (1965-1975) was printed by Oddi Printing in Iceland.

© 2012 Marget Long. This book, including images and text compiled from various sources, constitutes an artwork by Marget Long. All rights reserved.
This book is about the Sylvania flashcube—a space-aged, flash photography device, revolutionary in 1965 and nearly obsolete by 1975. Like any visual study of a single object, this project isn’t fixed neatly in one discipline or one time. When I look back at this artifact I am given access not only to its material residue but also to its more ghostly reflections of the cultural, political and economic imperatives of its moment.

Why this object? The flashcube was a mesmerizingly beautiful and utopian source of light. It was manufactured by the millions, for amateur use at a time when photography was radically expanding as a domestic practice. The cool, contained cube marked an important break from the burn-prone, open-faced flash devices of the 1940s and 1950s. Its shiny, Warholian surface encapsulated the counter cultural zeitgeist of the late 1960s; after firing, the flashcube’s blasted interior looks like the devastated landscape of an atomic age.

Despite its mass appeal the flashcube was, like most technologies, eventually abandoned for bigger and brighter things. Today, aside from a short entry on Wikipedia and its collection as a novelty item online, the flashcube is largely forgotten. Photographic flash is, in fact, often relegated to a footnote and is strikingly under-analyzed. Yet flash’s blinding effects and military genealogy, and the flashcube’s precise contemporaneity with the war in Vietnam make this a rich analytical object to reflect on the continuous links between light, war, history and photography. As Claude Lévi-Strauss would put it, the flashcube is good to think with.

In most urban spaces we are conditioned to the total presence of cameras. We expect to see hundreds of photographs-in-the-making in the course of a day, from a tourist using a camera phone to a security camera gathering images from the side of a building. We are, by now, mostly numb to these things. But we are not (and perhaps can never be) entirely anesthetized to the bodily effects of photographic flash. Its light is a startling physical reminder of a camera’s proximity and its power. The short, intense blast of a light is what awakens us to the fact that a photograph has been taken and, by extension, to photography’s profound sensory presence in our lives, for better or for worse. For better, we have nearly seamless access to images in our intimate spheres as well as from across the world. For worse, we have the constant nagging feeling that we might be the subject of an unwanted “tag” or on the receiving end of a surveillant camera. On the extreme end of this experience, there is now a prototype camera that can photograph around corners.

Using an ultra-short laser flash, that camera records a hidden subject’s multiple reflections and then interpolates a 3D image based on those reflections. While we will never be physically “awakened” to this stealth camera (silence and secrecy are the preconditions of its very existence), we can, via the kind of close analysis that I perform here, more fully understand the potential applications and implications, both positive and negative, of a future camera that can “infer the structure of things” outside of its direct line of vision.
All outmoded objects have a story to tell. But how does looking at a defunct photographic device differ from unearthing something like a manual typewriter from 1960s or an 8-track tape from the 1970s? Specifically, what is the significance of the flashcube’s status as an expired photographic tool? Examining photography’s material past seems crucial at a time when photos themselves have become increasingly important in our everyday lives and yet strangely untouchable and de-materialized—flying by as bits of matter on a screen or floating somewhere on a distant “cloud”. There has been new urgency expressed—among artists, art historians and theorists – in considering photography’s more concrete physical forms. Photographic prints, though materially present, can sometimes fail us in this regard. They record a precise moment in time but they don’t often reveal much about the conditions under which they were made, the information outside of the frame. Photography’s material supports—the cameras, the lenses, the computer chips—can however provide deeper insight into the social, political and economic forces behind the pictures we make, circulate and consume.  

This book was conceived as an artwork. It is an archive of pictures and texts intended for the printed page. The materials are wide ranging: from a “terrorist letter,” advertisements, press photographs from Southeast Asia, G.I. snapshots, my snapshots, 1970s photo contest pictures, newspaper and magazine clippings, to corporate communications, blog entries, technical drawings and montage. Some of these materials have been altered; all of them have been carefully assembled to encourage close scrutiny of the flashcube and its material circumstances.

Like any other archive, this one is not neutral. The project grew out of the love of an object. Over time it became a negotiation between that attraction and a critical assessment of the conditions that produced it. In the end I hope that my unorthodox strategies—a visual study assembled primarily of visual materials—can point to other experimental ways for artists, scholars and others to approach the investigation of the everyday devices we use, both past and present.

Margot Long
New York, January 2012

1. Nicholas Mirzoeff’s ground-breaking work in the field of visual studies was crucial in shaping the way I came to think of and think through the flashcube. The ideas, debates and object studies collected in The Object Reader, edited by Fiona Candlin and Raiford Guins (New York: Routledge, 2009) were also formative: that book gave me the intellectual framework and the permission to ply the flashcube with the attention that I was already (artistically) intent on giving it.

2. The flashcube was replaced by the “flashbar” around 1976, and later by the more powerful built-in flash units used on most cameras today.

3. There are countless how-to manuals on the use of photographic flash. There are also several excellent historical accounts of flash’s early applications. For example, see Chris Houses’s To Photograph Darkness: The History of Underground and Flash Photography (Carbondale, Ill: Southern Illinois University Press, 1990). There is, however, a near total absence of theoretical writing or scholarship on photographic flash. One exception is Thomas Keenan’s “No Flash” in Assemblage, No. 20, Violence, Space (April 1993) p. 48-49.

4. “transient imaging” camera technology is the creation of Ahmed Kirmani, a graduate student at MIT. He frames the project as an “entirely new imaging domain” that relies on continuous time sampling of the light reflected off of hidden objects. Some of the recorded imagery is not visible to either the camera or the source of illumination. When finally “field ready” the applications for this new technology include “looking around the corner; rescue and planning, vehicle navigation around blind corners, medical imaging” as well as, presumably, many other unspecified military applications. For a full description of Kirmani’s project, see http://dspace.mit.edu/bitstream/handle/1721.1/58402/656284100.pdf

5. Ahmed Kirmani, Femtosecond Transient Imaging. Thesis Submitted to the Program in Media Arts and Sciences, Massachusetts Institute of Technology (June, 2010).

Knowledge comes only in flashes.
-Walter Benjamin
3 flops and 1 wild success from GT&E research.

Let us be the first big corporation in America to admit it:
Sometimes we fail flat on our face.
That may come as a shock to you, but we’ve found it’s a smart way to run our research laboratories.
Rather than saddle our scientists with a “Do It The Way It’s Always Been Done” philosophy, we encourage them to stick their necks out—to follow their hunches and poke around in places nobody ever poked around before.
Sometimes this philosophy makes millions of dollars for us (see Eureka!, below).
Sometimes it doesn’t make us a penny.
Take, for instance:
**Flop #1:** The Warn-O-Scope—a new kind of radar set that was supposed to be 10 times more sensitive than ordinary radar. (This, our scientists told us, was because they put lots of little electronic parts right inside the radar tube, where nobody ever put them before.) Theoretically, it worked fine. Practically, it didn’t work at all. Which brings us to:
**Flop #2:** The Stacked Tube. After years of work, we perfected the world’s best radio tube—long lived, practically indestructible. Unfortunately, we built it the same year the transistor was invented, making our tube instantly obsolete. Then there was:
**Flop #3:** The Omegatron—a clever device designed to tell vacuum tube manufacturers precisely how much excess gas they had in their tubes (which, you remember from Physics I, are supposed to be completely empty). This, however, was more than they wanted to know. They wanted to get rid of the gas, not measure it. So finally, we come to:
**Eureka!** The Sylvania Flashcube—a little idea that revolutionized the whole camera business. For the first time, people could take flash pictures as fast as they could click the shutter—no more hot bulbs to change, no more missed pictures while changing bulbs.
Like all great ideas, it looks simple. But it took more than 100,000 designs and years of fiddling and testing before we made the first one.
What are we up to now, you ask? Dozens of things, from laser research to pollution control. We even have an idea that might revolutionize the entire color TV industry. If it works.

General Telephone & Electronics
Text of Terrorist Letter

Following is the text of a letter received by United Press International from a group—Revolutionary Force 9—which said it was responsible for the bombing of three buildings in Manhattan yesterday. The letter was postmarked 1 A.M., March 12—an hour before the explosions. The misspellings, abbreviations and use of symbols are those of the writer of the letter.

IBM, Mobile and GTE are enemies of all life. In 1969 IBM made $250 million, Mobile $150 million and GTE $140 million for US “defense” contracts—profits made from the suffering and deaths of human beings. All three profit not only from death in Vietnam but also from American imperialism in all of the Third World. They profit from racist oppression of black, Puerto-Rican and other minority colonies outside America, from the suffering and death of men in the Americo army, from sexism, from the exploitation and degradation of employees forced into lives of anti-human work, from the pollution and destruction of our environment.

To numb America to the horrors they inflict on humanity, these corporations seek to enslave us to a way of “life” which values conspicuous consumption more than the relief of poverty, disease and starvation, which values giant cars as status symbols more than the purity of our air (so Mobile can make $$$ thru gas sales).

This ways of “life” sucks up 60% of the world’s resources—for 16% of the planet’s population—and then wastes them in compulsive consumerism and planned obsolescence (so IBM can make $$ off new model computers), distributes millions of TV sets (Sylvania’s included), all the better to put lies into our heads and convince us to buy, buy, buy, and then offers only work helping to produce the goods that bring slow death at home or genocide abroad (or in the USA).

This way of “life” is a way of death. To work for the industries of death is to murder. To know the torments America inflicts on the Third World, but not to empathize and identify, is to deny our own humanity. It is to deny our right to love—and not to love is to die. We refuse. In death-directed America there is only one way to a life of love and freedom: to attack and destroy the forces of death and exploitation and to build a just society—revolution.

REVOLUTIONARY FORCE 9

In the early morning hours of March 12, 1970, blasts ripped through the headquarters buildings of GT&E and two other companies in New York City. The terrorist group responsible was protesting the companies’ participation in defense work. Ironically, the explosion within an upper floor of GT&E’s Third Avenue headquarters destroyed the photo lamp sales department.


Magnesium flash powder test, photographer unknown, circa 1920.
AT GENERAL TELEPHONE BUILDING: A plumber surveying damage on 21st floor before starting to make repairs

A real bomber’s chilling reasons

On southeast for Life, correspondent William Worthy’s Welcome to the Vietnam War: An American and an introduction to the political left to reach a man who is being sent to a bomb site. The man agreed to be interviewed but refused to reveal his name or anything about his home background and his associates.

What do you hope to achieve by bombing?

As we are revolutionaries, not reformers. We're not trying to frighten the Establishment, we are trying to destroy it, that a just society can be built based on human values, not on financial or commercial values. It's necessary to have a real struggle of some kind before people will listen and understand our concept of what America is. Once an attempt to attain opium, 3,000 innocent people were killed, and the bombing continued. It is not attacks on individuals who work to achieve their aims, but the buildings put up to act as a barrier to the people they are attacking. For example, a communications center that radiates energy to Vietnam or the war industry in any way. A bomb can be launched at a target from thousands of miles away, because of the speed of light.

Are you referring to the accommodations of the people who have lost the fight against the war?

As I see it, the people who are fighting in the war are not the same people who are fighting for their own freedom. They are not the same people who are fighting for the justice of the people. The people who are fighting in the war are the people who are fighting for their own freedom.

Are you referring to the accommodations of the people who have lost the fight against the war?

As I see it, the people who are fighting in the war are not the same people who are fighting for their own freedom. They are not the same people who are fighting for the justice of the people. The people who are fighting in the war are the people who are fighting for their own freedom.

Are you referring to the accommodations of the people who have lost the fight against the war?

As I see it, the people who are fighting in the war are not the same people who are fighting for their own freedom. They are not the same people who are fighting for the justice of the people. The people who are fighting in the war are the people who are fighting for their own freedom.

Are you referring to the accommodations of the people who have lost the fight against the war?

As I see it, the people who are fighting in the war are not the same people who are fighting for their own freedom. They are not the same people who are fighting for the justice of the people. The people who are fighting in the war are the people who are fighting for their own freedom.

Are you referring to the accommodations of the people who have lost the fight against the war?

As I see it, the people who are fighting in the war are not the same people who are fighting for their own freedom. They are not the same people who are fighting for the justice of the people. The people who are fighting in the war are the people who are fighting for their own freedom.

Are you referring to the accommodations of the people who have lost the fight against the war?
A political fringe turns to terrorism

THE BOMB RADICALS

The U.S. Takes Off on Credit Cards

MARCH 27 • 1970 • 50¢
One Blue Dot Flashcube lets you take 4 snapshots. How does GT&E fit into the picture?

Perfectly. It was one of GT&E's family of companies, Sylvania, who introduced the Flashcube. And ours is a family that grows on innovation.

Take the Flashcube. With it, you get the great picture that used to get away. And capture photo sequences never before possible.

It's a beautiful invention and a major advance in a field where Sylvania is already number one with the famous Blue Dot Flashbulb.

This kind of innovation is basic to the GT&E family of companies. Expect it anytime from any member of the family: General Telephone Operating Companies • General Telephone Directory Company • Automatic Electric • Leever Electric • Sylvania Electric Products • General Telephone & Electronics Laboratories • General Telephone & Electronics International.

We're 116,000 strong and dedicated to Total Communications.

GENERAL TELEPHONE & ELECTRONICS

The Pillow Plan.

An absurd way to decorate your home.

We've got cans of Fresca for you to lie on.
And Tootsie Rolls.
And lots of Sylvania flash-cubes.
They're comfortable too (they're made of foam rubber).
They're Pop Art pillows. And they'll make any room of yours contemporary.
Even Louis the XIV and Chippendale and early American.
(And because they're pillows, you can give them to the kids when you get tired of them.)
One pillow is $3. All three are $8.50.
(About half the regular price.)
And they're good solid pillows, with zippered dye-fast cotton covers. (Not the inflatable type pillows.)
Cut the coupon out of this ad.
And send it in along with the front panel of a package of Sylvania Blue Dots.
You can make your home swing now for practically no money at all.
That's not an absurd idea at all.

Sylvania
Consumer Electronics Inc.
4 Flash Bulbs in One Introduced By Sylvania and Eastman Kodak

Device Known as 'Flashcube' to Be Used With New Line of Instant Cameras

BY GENE SMITH

Sylvania Electric Products, Inc., and the Eastman Kodak Company revealed jointly yesterday a new concept in flash photography.

The two companies introduced what they called "Flashcubes," one of the most notable items they have in the United States and abroad. The new product is actually a small flash unit designed to be placed in either the grips of cameras or other equipment. It is designed to be used with the new line of cameras they have in production.

The "Flashcube" is a small, lightweight flash unit that can be used with any camera. It is designed to be mounted on the camera and can be triggered by a sensor or by the camera's shutter. The "Flashcube" is also designed to be easy to use, with simple instructions included in the package.

The "Flashcube" is available in a variety of colors, and is made of durable materials that can withstand the rigors of regular use. The "Flashcube" is designed to be used with film and digital cameras, and can be used for a wide range of photography needs.

The "Flashcube" is a product that is designed to be used by professional photographers, as well as by amateurs who are looking for a reliable and easy-to-use flash unit.

Marget Long, Sylvania Flash cube (Used), C-print, 40 x 30 inches, 2009.

[NOTE 7]
Revolutionary Force 9
Recalls Beatles’ Song

Revolutionary Force 9, the name taken by those who claimed responsibility for three bombings here yesterday, may have been derived from a Beatles’ song called “Revolution Number 9.”

The song, part of an album entitled “The Beatles,” which was released by Apple Corps Ltd. for Christmas sales in 1968, is a tuneless concoction running 8 minutes 15 seconds.

It begins with a man droning “number nine” over and over, followed by a cacophony of symphonic music, convulsive laughter, a baby crying, bells, machine-gun fire, speeches, conversations and yells. Interpretations vary, but some believe the song captures a feeling of violence and portrays “the destruction of the world.”

The idea had got abroad that there is great risk and danger involved on account of the explosive nature of the blinding, smoke belching, evil smelling, flashlight powder... The flashpan was a piece of equipment which a wise photographer kept in his cupboard, and only took out when there was no other way to get the job done... The unsavoury reputation of this disgusting powder still clings to the name of flash.

*Photo-Flash in Practice*, 1947

(right) *Life*, April 12, 1968.
Teamed for defense

An alert defense depends on many kinds of communications. And at the Air Force’s first operational ICBM base at Vandenberg AFB, Gen Tel helps fulfill these needs. The link to the “outside” is a fully automatic telephone exchange that was provided by our subsidiary, Automatic Electric, and is operated by General Telephone of California. Here, as elsewhere, GT&E is playing its part in national defense.

Forbes, April, 1965.
From Sylvania research comes MAGICUBE...

MAGICUBE looks like any other flashcube. But don't let its looks deceive you. MAGICUBE is the first and only flashcube that works without batteries. You don't know flashcubes work on batteries? Many people don't! They're inclined to blame the flashcube when it doesn't flash.

As father to the child we invented the flashcube in 1956 this bigger model. But we've found that the trouble is in the electrical system. A dead battery or faulty contacts...

And because of this, millions of flash shots are spoiled every year. So we've re-invented the flashcube! We've developed a flashcube that doesn't depend on batteries or contacts. That works on its own, built-in independent power source.

And we've called it MAGICUBE. That's how it seems to work. Every time, Sylvania's Blue Dot MAGICUBE is self-powered. It is flashed by a simple mechanical—no electrical—device within the camera.

Kodak has now developed a new series of Instamatic"*" cameras designed for Sylvania's Magicube. Many other camera makers are following suit.

And why not? Thanks, no more flash shots will ever be missed because of dead batteries or faulty contacts.

One small problem, though. Now if you've got a flashpicture, who are you going to blame?

General Telephone & Electronics

*Courtesy Research, New York, November 1963

The judges awarded the First Prize to Dr. William M. Johannes, a 60-year-old dentist from Columbus, Ohio, for this incandescent double exposure. First he shot the sun a half hour before it set on a cloudy day. Then, on the same frame of film, he photographed a close-up of a dandelion puff.
Early flash apparatus used a blast of air from a bulb (A) to blow lycopodium spores (B) into a candle flame (C). These glowed and were directed down a tube (D) to light a twist of guncotton (E) which fired the flashpowder (F). This was used successfully, on the end of a pole (G), in Hermannshöhle, Germany.

Amateur Spending Is on Rise

By JACOB DESCHEN

A number of factors have contributed to the need for more amateur photography equipment in recent years. The cost of the equipment has risen, and many photographers have turned to amateur photography as a way to earn extra income. The popularity of amateur photography has also increased, with more people taking up the hobby as a creative outlet. According to the brochure, the number of amateur photographers has increased by 20% in the past year.

ATTACKING THE PROBLEM

Despite the increased demand, the industry has struggled to keep up with the demand. This has led to a shortage of equipment, which has driven up prices. The brochure suggests that manufacturers should consider investing in new production lines to meet the demand.

CONCLUSION

In conclusion, the brochure argues that the amateur photography market is a lucrative one for manufacturers. By investing in new production lines, manufacturers can meet the growing demand and ensure a steady supply of equipment for amateur photographers. The brochure also suggests that manufacturers should consider offering a wider range of equipment to meet the diverse needs of amateur photographers.
She screamed “Nong qua, Nong Qua!” (“Too hot, Too hot!”) when he photographed her running past him.
Margot Long, *Nikon F on Ice #1*, (Dirty snow on Third Avenue, Camera with Bullet Hole, War Remnants Museum, Ho Chi Minh City), Inkjet Print on Archival Paper, 13 x 19 inches, 2010.

Life, November 22, 1968.
Kodak Instamatic 104/Outfit box, manufactured 1965.
Life, B-52 Trigger, April 28, 1972.
More Mother's Day pictures are taken with Blue Dot Flash than with all other brands combined.

Don't get caught without them.

Remember, Blue Dots for sure shots.

Blue Dot Flashbulbs and Flashcubes.
Sylvania invents MAGICUBE... you might never miss a flash picture again.

Sylvania invented the flashcube. 4 flash shots in one cube. Great.

Now Sylvania invents MAGICUBE. First flashcube to work without batteries. Greater.

Why? Because, know it or not, flashcubes work on batteries.

And where you've been blaming goofed-up photos on flashbulbs that don't flash, it's 50 to 1 the fault lies elsewhere.

In the electrical system. A battery that's gone dead. Contacts that have corroded.

MAGICUBE ends all that. It has its own built-in independent power source. The cube is fired mechan-ically. Not electrically.

No more batteries to go dead. No more pictures to miss because the electrical system failed.

Just one small problem. Now if you miss a shot, you have only yourself to blame.

(previous page, right) Life, April 28, 1972.
(previous page, left) Life, April 28, 1972.
(this page) Life, November 6, 1970.

(next page, left) Life, May 26, 1972.

(next page, right) “China Beach, Danang.” Soldier’s photograph, photographer unknown, 1967.
More breathtaking pictures are taken with Blue Dot Flash than with all other brands combined.

Remember, Blue Dots for sure shots.

Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GTE SYLVANIA
Life, Special Double Issue: Year in Pictures, December 29, 1972.

More stars are photographed with Blue Dot Flash than with all other brands combined.

Remember, Blue Dots for sure shots.

Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GTE SYLVANIA
TAKING IT EASY

PREK TAMBEAK, CAMBODIA: While South Vietnamese soldiers visit with their families, this trooper from a rifle force battalion stationed in the Prek Tambeak areas of Cambodia seems to enjoy relaxing by himself on a makeshift hammock.

EX 1-2-3 PS SEE (SGF 105)

CREDIT (UPI) HOI BY CHAU VAN HAN

12/28/70


Life, April 28, 1972.

UPI Photograph, front and back, December 28, 1970.
More sexy pictures are taken with Blue Dot flash than with all other brands combined.

Remember Blue Dots for sure shots.

Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GTE Sylvania
Six-step inverted pyramid "defies gravity"

GTE World Headquarters, Stamford, Connecticut

[NOTE 21]

More monstrous pictures are taken with Blue Dot Flash than with all other brands combined.

Remember, Blue Dots for sure shots.
Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbuls

asonic

GTE SYLVANIA
More bridal pictures are taken with Blue Dot flash than with all other brands combined.

Remember, Blue Dots for sure shots.
Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GTE SYLVANIA
With this one exception, GT&E provides total illumination

General Telephone & Electronics brightens just about everything you can think of not under the sun. Buildings, ball parks, golf courses, airports, highways and byways... and, of course, the home.

We do it with over 6,000 different kinds of lamps produced by Sylvania, a member of GT&E's family of companies. One lamp so small that you can pass it through the eye of a needle. And another, is the form of flexible tape, that can be twisted and coiled.

And we're casting new light on light itself. Including a new red phosphor for color TV picture tubes that makes pictures far brighter.

We're also doing brilliant things with "non-light" in the infrared and ultraviolet spectrums, and applying these out-of-sight radiation to painting, baking, plant growth, germ control and nighttime detection.

In creating new ways to use light, GT&E is contributing to the safety and convenience of the total community.

[NOTE 23]

Forbes, January 1, 1966.

(previous, left) Soldier's photograph, "To Carol From Charles," date unknown.
(previous, right) Life, May 28, 1971.
(next, left) Life, September 22, 1972.
(next, right) Soldier's photograph, location unknown, 1970.
More pictures of thanks being given are taken with Blue Dot Flash than with all other brands combined.

Remember, Blue Dots for sure shots.
Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GITE Sylvania
(previous page) “Big Shot” mass flash promotional photo by Sylvania Photo Lamp Division.
New York Stock Exchange, 1957.

(this page) Marget Long, Telecommunicating, Photomontage, 10 x 14 inches, 2010.
New View Picture Cube, Promotional photo of girl in bikini and author photo, circa 1972.
Flash grenade thrown by police into the crowd of activists, Occupy Oakland.
More incriminating pictures are taken with Blue Dot flash than with all other brands combined.

Remember, Blue Dots for sure shots.
Blue Dot Magicubes
Blue Dot Flashcubes
Blue Dot Flashbulbs

GTE SYLVANIA
Marget Long, *Nikon On Ice # 1*, (Dirty snow on Third Avenue, Camera with Bullet Hole, War Remnants Museum, Ho Chi Minh City), Inkjet Print on Archival Paper, 13 x 19 inches, 2010.
Do you have to give up your identity to make it in a big corporation?

You've heard the stories. One big corporation forbids you to wear anything but white shirts. Another says it wants you to be "creative"... and gives you a 4-pound rule book telling you exactly how to do it.

Yet another doesn't want you to buy a more expensive car than your boss because "it wouldn't look right". Is this really happening in American business?

People who revolutionized pictures taking with the Sylvania flashcube, who developed the high-energy liquid laser, who came up with the sharpest color TV picture in the world, who pioneered instant electronic stock market quotations, and so on.

We are looking for more people like this—people who aren't afraid to stand up and try themselves out. We are an equal opportunity employer. All you need to make it with us is a good head on your shoulders.

General Telephone & Electronics

Great White Shark seen in Danang
The cannonballs are gone, but the ground is littered with very tiny snail shells on what is called 'Shell Hill' in many accounts from the Crimean War. The snails, oddly enough, made me feel connected to history.

Errol Morris, *Believing is Seeing (Observations on the Mysteries of Photography)*, 2011

13. **Fossil.** This represents a bad shadow which disturbs the formal clarity of the subject. It is a common defect of many pictures made in artificial light; the eye "follows" the line and form of the subject and perceives color differences, but unless accurate visualization is practiced, bad "mergers" such as this will occur. Shadows may be *useful*, but they should not obscure form.


EXPLOSION AFTERMATH—A soldier watches a huge smoke ring in the blackened sky over the U.S. Air Base at Da Nang, South Vietnam, yesterday, following the explosion of a nearby ammunition dump. The blast destroyed several hundred tons of ammunition, killed one American Marine and a Vietnamese child and injured about 75 persons. (AP Wirephoto via radio from Saigon)(See AP Wire Story) 2009556521969.
If you try to take a flash picture with a used-up magicube, you see a red warning signal through the big, bright viewfinder of your Kodak Instamatic X camera. So you don’t have to worry about missing flash pictures. You don’t have to worry about flash batteries, either. All Kodak Instamatic X cameras take flash pictures without them. You just drop in the film, pop on a magicube, and flash away. The X-45 model also gives you automatic film advance, an automatic electric eye, and an easy setting for sharp close-ups. Less than $58. Other Kodak Instamatic X cameras from less than $21.

KODAK MAKES YOUR PICTURES COUNT.
Centerville, South Dakota, December, 1975. Photo courtesy of Craig Cristansen.
MARGET LONG, *BEAUTY CONTESTANTS AT REUNIFICATION PALACE*,
Source photo, Reunification Palace photo collection, photographer unknown,


FIG. 1

FIG. 2

1. In the summer of 1965 at a joint press conference at the Waldorf-Astoria Hotel in New York, GTE Sylvania and the Eastman Kodak Company unveiled a revolutionary new product called the “flashcube.” The one-inch, light-transmitting plastic cube enclosed a tiny flash bulb and reflector in each of its four sides and was described as, “in effect, a repeatable, self-contained, disposable flashgun.” The flashcube was made for amateur use with a new line of Kodak Instamatic cameras; it was designed to stay cool to the touch and prevent the “burns and misfires” of its predecessors, bulky and unpredictable open-faced flash units.

The announcement made big news on Wall Street. Both GTE’s (Sylvania’s parent company) and Kodak’s stocks surged that day. GTE Sylvania introduced the “Magicube” five years later, updated with “blue dot technology” and a mechanical trigger pin to further reduce the “millions of pictures lost to misfires each year.”


2. The flashcube was not the first large-scale collaboration between Kodak and Sylvania. During World War II, the companies joined forces to make the proximity fuse, a radio device that directs a warhead to fire when it gets close to its target rather than detonate at a specific time. Sylvania ultimately produced more than six million fuses during the World War II. Edward A. Sharpe, “The Radio Proximity Fuse: A Survey,” Vintage Electric Sys Vol 2, No. 1 (2005).

3. This building in midtown Manhattan was GTE’s corporate headquarters from 1959 until 1975, when the company and six of its subsidiaries moved to a new “world headquarters” in Stamford, Connecticut. GTE decided to leave the city shortly after their midtown offices were bombed by anti-war activists in 1970. In Stamford, GTE spearheaded a contentious “futuristic downtown revitalization” whereby thousands of houses were razed to make room for GTE’s fortress-like, glass and steel building. F. D. Rich Co., the project’s developers, were widely criticized for eliminating historic buildings and creating pedestrian-unfriendly streets. In 1999, reflecting on the criticism, Frank Rich said, “The streets were never meant to be for pedestrians. GTE came here because they were bombed in New York. Crime was a problem in the city. That’s why the buildings were designed to be impenetrable.” Eleanor Charles, “Commercial Property/Stamford, Conn.: A Pioneer Business Park That Confounded Critics,” The New York Times, 26 September 1999.

4. Ansel Adams saw light as a “substance like a rock or flesh” to be evaluated and interpreted. Light, then, was both as dead as a rock and alive as a human body. Was the cube—the form that he used in his artificial lighting diagrams—dead or live matter for Adams? Did he view its flat surfaces as particularly well suited for observing light, like the side of one of his rock faces in Yosemite? Or would the cube have been simply an in-vogue modernist object onto which Adams could project his rigorous lighting schemes? Is it also possible that the cube was for Adams something more mysterious—an entity as commonplace yet enigmatic as light itself.

Ansel Adams, Artificial Light Photography, Basic Photo Series (New York: Morgan & Morgan, 1956).

5. By the late 1960s, GTE was a complex multinational corporation that made massive telecommunication systems. With the exception of Sylvania’s televisions, lighting and radios, GTE produced surprisingly few consumer products and, as a result, had a serious corporate identity problem. Despite a
ENDNOTES continued

strong retail presence, the pub­lic wasn’t aware of the full scope of their busi­ness activities. Me­an­while their main rivals, AT&T and Gen­eral Electric, spent millions tout­ing their global projects and pro­ject­ing the image of benev­olent corporate cit­i­zens. DDB was hired to cor­rect this prob­lem and to reach GTE’s tar­geted audi­ence, afflu­ent adult males. They placed ads sim­i­lar to this one in pop­u­lar sci­ence mag­a­zines and busi­ness perio­di­cal­s. Here DDB links the flashcube—“its beau­ti­ful inven­tion”—to GTE’s “fam­i­ly of com­pa­nies.” Nan­cy Con­dry, “GTE: GEE! No GTE Cam­pa­ign,” Ency­clo­pedia of Maj­or Mar­ket­ing Cam­pa­igns, Vol. 1, 2000.

GTE’s cor­po­rate his­tory is long and com­pli­cated by dereg­u­lia­tion and the rash of mergers of the 1980s and 1990s. It sold its con­sumer elec­tron­ics busi­nesses, includ­ing the brand names of Phí­lco and Sylvania in 1980. In 1984, GTE for­mal­ized its deci­sion to con­cen­trate on three core busi­nesses: tele­com­mu­ni­ca­tions, light­ing and preci­sion met­als. That same year, GTE launched its first sat­el­lite and GTE’s cel­lu­lar tele­phone ser­vice went into opera­tion; GTE’s earn­ings exceed­ed $1 bil­lion for the first time. Bell At­lantic merged with GTE in 2000 and named the new entity Ver­izon Com­mu­ni­ca­tions. GTE Sylvania’s light­ing div­i­sion still exists as Osram Sylvania and is owned by Siemens AG, a multi­na­tion­al con­glomer­ate. http://en.wikipedia.org/wiki/GTE; http://en.wikipedia.org/wiki/Sylvania_Lighting

6. This couch, round as a rou­tine wheel, sits inside the cas­ino at Re­un­i­fi­ca­tion Pal­ace, the for­mer home and work­place of Nguyễn Văn Thiệu, avid gam­bler and pup­pet Pres­i­dent of Vietnam. In 1946. The eerie, disem­bodied qual­ity of Jacob Riis’s ten­e­ment pho­tographs like­wise has been attrib­uted to his haphazard use of magne­sium flash pow­der. Many of his icon­ic pho­tographs were made in the middle of the night in total dark­ness. There were no nic­eties or prelim­i­naires: Riis and his pos­sé of photogra­phers (his “raiding party”) lit the scene by toss­ing a match into a fying pan of flash pow­der. Riis’s sub­jects were sud­denly con­fronted with a vol­u­mod­i­ous explo­sion; their blank stares and stiff­ened bod­ies were indel­i­bly linked to the his­tory of 19th cen­tu­ry ten­e­ment life in New York City. See Yochelson & Citron, Redis­cov­er­ing Jacob Riis, Expos­i­tion Journalism and Pho­tography in Turn-of-the-Cen­tury New York (New York: The New Press, 2007).

10. Before the “light­ning wars” waged with these large, aero­space flash instal­la­tions, Paul Virilio iden­ti­fied what he called the “light­ning wars”—trac­er bul­lets, flares that lit up noc­turnal tar­gets, and pow­er­ful banks of search­lights—used in warfare at the start of the tenth cen­tu­ry. Paul Virilio, War and Cin­ema, The Logistic of Percep­tion (Lon­don: Verso Press, 1984), p. 88.

11. This aero­space pho­togra­phy was part of a multi­page pho­to­graph illus­tration enti­tled “The Bom­bardment of Haiphong:—Why It’s Not Total.” The pho­tographs were used as ev­i­dence to sup­port Pres­i­dent Johnson’s deci­sion not to com­pletely halt bom­bing in Viet­nam in 1968. The caption read: “These pho­tographs offer startling proof of the fast-im­proving sophis­ti­cation of the enemy’s sup­ply sys­tem. The pic­tures were tak­en over North and South Viet­nam by U.S. Air Force jets using new ultrasen­sive cam­eras to record det­ails that escape the human eye. The U.S. clas­si­fied Haiphong’s island amphi­theater as a ‘cultural cen­ter’ and has not bom­bed it. This photo...” shows it being used as a sac­ra­ment for 50 Soviet­made trucks.” Life, 12 April 1968, p. 38.

12. In 1956, pub­lisher Hen­ry Luce rein­vent­i­ed Life mag­a­zine by giv­ing pic­tures new stat­us over texts. The for­mu­la—50 glos­sy col­or photos with text condensed into cap­ti­ons—was incredi­bly suc­cess­ful. From that time for­ward Life was closely tied to the prac­tice of photogra­phy, par­tic­u­larly through the work of its all-star cast of photo­jour­nalists. By the 1960s and 1970s, the mag­a­zine pro­vided read­ers a stead­y diet of pho­tos rep­or­ting on pop­u­lar cul­tur­es (the Ken­nedy, mov­ie stars, etc.), tech­no­logy (the Apollo space pro­gram) that con­trib­uted to the war­fare in Southeast Asia. But des­pi­te win­ning the Na­tion­al Mag­a­zine Award in 1967, Life’s sub­scrip­tions declin­ed from 1969 onward. This was, at least in part, due to reader burn­out with images of death and loss in Viet­nam. The mag­a­zine shut down as a week­ly in Decem­ber 1972 and pub­lished only spe­cial is­ues like The Year in Pic­tures after that time. Dora Jane Ham­blin, That Was the “Life” (New York: W.W. Norton & Com­pa­ny, 1977).

Begin­ning in the late 1960s, Sylvania, Polaroid and Kodak began to cap­i­tal­ize on the photographic aspirations of Life’s read­ers. These com­pa­nies spent vast sums adver­tising their lat­est cam­eras and acces­so­ries in the mag­a­zine. The hope was that photo­graph­ers would also become photo­pro­duc­ers, requir­ing the pur­chase of new, easy-to-use equip­ment. Life’s edi­tors did their part in fos­ter­ing this con­sumer demand as well. In 1970, they rein­tro­duced national photo com­pe­t­i­tions, fea­tur­ing high-profile judges like Ansel Adams. These immen­sely pop­u­lar com­pe­t­i­tions directly engag­ed mil­lions of read­ers in the aesthe­tics of...
It’s dark and all I can see outside is a glassy, oval-shaped eye. But before I can invite the eye in, he hits me with a blast of light so strong that I’m lifted off my feet. The light wave carries me backwards, feet first, past the portrait and the blurry white knot of Papa’s bow tie.

The eye leaves as quickly as he appeared. He has pictures to develop and a story to write. His effects are lasting though: the sudden airlift lands me in bed.

When I wake up, Olivia’s pearls are glowing in the dark. I hear bulldozers circling outside and the grinding sound of my clock starting up.

15. The source of this photomontage is a Kodak television commercial featuring flash-frenzied dancers and cubic, M.C. Escher-worthy sets.

16. A large photograph of this shot-up camera hangs in a light box at the War Remnants Museum, which opened in Ho Chi Minh City in September of 1975. The camera belonged to Japanese war photographer Taizo Ichinose, who died when he stepped on a land mine in Cambodia in 1973. The bullet hit his camera during an earlier incident.

17. “To winterize” something means to prepare it for the long, cold months of winter—as in the case of a house, to clean out the gutters or insulate the attic. Here the advertisement suggests that winter will require the purchase and use of a flashcube. But the text could also be read more abstractly as a command to “cool” photography itself. The flashcube, in fact, looks strikingly like an ice cube. The advertisement might also imply that if you put this cool-looking device on your camera, you can take hip and cool pictures from inside your private domestic space. Perhaps “to winterize” a camera has a less literal meaning as well. Sylvania may have been driven by corporate or political necessity to create a safe distance between their domestic photo products and the heat of a foreign war and its messy photo documentation. Camera equipment would be less desirable to consumers if it were even subliminally connected to death and a morally suspect war.

18. Kodak’s line of Instamatic cameras, introduced in 1963, revolutionized amateur photography in the U.S. More than 50 million of these cameras were produced between 1963 and 1970. The cameras were inexpensive and simple to use. All of the Instamatics with the model names ending in 4 (the 104 shown here) were designed to accommodate flashcubes. A new series of Instamatics was introduced in 1970 to support Sylvania’s Magicube, which introduced mechanically triggered pyrotechnic detonators, an improvement over the original flashcubes which required batteries to fire. In 1975, Sylvania replaced plastic for use with the new Flipflash system and the flashcube was phased out. Douglas Collins, The Story of Kodak, (New York: H.N. Abrams, 1990.)

19. Ice Cold. Beyond its modernist aesthetic, is there also a material connection between the design of the flashcube and the philosophy of communist containment that prevailed during the Cold War? (The concept of containment refers to the political theory emergent in the late 1940s that if one nation falls to communism, neighboring countries would fall as well, like dominoes. Communism, it followed, would spread uncontrollably without proper barriers.) The atomic bomb, of course, figured centrally in this narrative: unlike conventional weapons, radiation could contaminate and destroy invisibly.

The flashcube, in this context, is the perfect Cold War container. Unlike its open-faced predecessors, the flashcube is impermeable: the explosion and the heat are sealed inside the plastic shell when the flash fires. The light is controlled; never misjudged or misfired.

Sylvania’s advertisements tell us as much—fingers touch and hands cradle the flashcube throughout the campaigns. Yet the specter of atomic heat is also present. In the advertisement referenced in Note 12, for example, the cool-toned flashcube on the left is contrasted with the orange fireball on the right. For a provocative account of the connections between nuclearization, light, photography and militarization in the context of the Pacific Islands, see Elizabeth DeLoughrey’s “Radiation Ecologies and the Wars of Light,” Modern Fiction Studies, Fall (2009): 468-495.

20. The cube’s solid, simple geometry survives as the minimal form par excellence. On October 3, 2011, New York artist Agata Oleksiak (known as Olek) crocheted a hot pink camouflage sweater onto “The Cube” by the artist Tony Rosenthal. (The 1967 sculpture on Astor Place in New York is officially titled “Alamo” but is locally referred to as “The Cube.”) Olek’s cube intervention was inspired by the Occupy Wall Street movement and the Occupy Wall Street slogan “I’m still proud of what I do for a living.” She crocheted that text into the camouflage pattern that temporarily swaddled the five-ton steel cube. With the pull of her crochet hook, Olek ingeniously connected the multiple meanings of this cube at this site with the cube’s wider legacy as the form most closely associated with minimalist art, as well as the sexual and cultural politics of the 1960s. I’d like to see Olek sink her crochet hooks into a Donald Judd slab cube or a Tony Smith steel cube, although her commitment to such narrowly circumscribed art historical critique is, I suspect, next to none.

21. In 1974, GTE’s building engineer claimed that “since the building was symmetrical in both directions, there are no ’oddball’ forces.” And in the words of the building’s architect, Victor Bihari, the “inverted stepped pyramid design...reflects a 21st-century spirit and technology...a building floating in the air without any visible support, as if it’s defying gravity.” Bethlehem Steel, Building Council History, No. 33: General Telephone and Electronics Corporation World Headquarters, February, 1964.
ENDNOTES continued

22. More Monsters. Pictures. This fascinating series of flashcube advertisements ran in Life throughout 1971 and 1972. The quarter-page ads refer directly to upcoming U.S. holidays (Halloween, Mother’s Day, Thanksgiving, etc.) and remind consumers of the photo opportunities presented by these holidays. The running joke here is created by the mismatch of image and text. The “incriminating picture” ad uses a snapshot of a man in the not-so-horrific act of raiding the family refrigerator. The “monstrous picture” shows a boy dressed for trick-or-treating. The low-key, snapshot aesthetic lightens the mood of the text while it also, quite cannily, comments ironically on the darker images in the body of the magazine, particularly the photographs of the war in Southeast Asia, which were truly monstrous and incriminating.

23. Total Illumination. In his novel, Sunset Park, Paul Auster describes the Florida sun as a “Machivelian sun” that generates a light that does not illuminate things but obscures them, “blinding you with its constant, very bright effulgence, pounding on you with its blasts of vaporous humidity, destabilizing you with its miragelike reflections and shimmering waves of nothingness. It is all glitter and dazzle, but it offers no substance, no tranquility, no respite.” Paul Auster, Sunset Park. (New York: Henry Holt, 2010), p. 7.

Can flash too be described as a kind of dazzling and cunning nothingness? David Grandy, in his writing on otherwise and light, observes that light’s unfamiliarity and inscrutability come from “its capacity to receive and announce other things while retreating from view as an independent entity.” I would modify this claim when describing the unique phenomenological effects of photographic flash. When flash breaks into material reality it is perhaps more fully something than Grandy’s wash of nothing: more like the distinct, linear and quickly receding flashes of a lightning bolt. Flash may indeed be even more bewitching and “other” than Grandy’s light. David Grandy, “The Otherness of Light: Einstein and Levinas,” Postmodern Culture, September (2001).

24. This is an isolated, close-up photograph of the “blue dot” painted on the bulb of a flashcube during the manufacturing process. The mark indicates the flashcube’s unused status, the potential for another flash picture. The photo reveals the dot’s irregular, cell-like shape—the only reminder of the human hand or body in an otherwise perfectly machine-made, mechanical object.

25. The “Big Shot” mass-flash photographs were spectacular productions orchestrated by Sylvania’s photo flash division to demonstrate the importance of flash in modern photography. The first of these nighttime photo events took place in Levittown, New York to coincide with the opening of the tract-home residences in 1951. Photographer Leo Chopin took the photo from a water tower, opening and closing the camera shutter while Sylvania photo division engineers individually flashed each of the identical residences. A total of 1500 Sylvania flashbulbs were used and the photograph appeared in Collier’s and newspapers around the country. Four other “Big Shot” photos were made by Sylvania later in the 1950s: the aircraft carrier U.S.S. Antietam; Carlshbad Caverns in New Mexico; Pennsylvania Railroad in Altoona, Pennsylvania; and the Wall Street trading floor photo reproduced here. These advertising stunts (as well as Sylvania’s constant promotion of flashbulbs and other electronic products on its in-house television program, “Beat the Clock”) solidified Sylvania’s dominance in the U.S. photo flash market. By 1956, 590 million flash bulbs were sold to amateur photographers and more than half of them were made by Sylvania. Thomas E. McCarthy, The History of GTE: The Evolution of One of America’s Great Corporations (Stamford, CT: GTE Publishing, 1990), p. 99.

26. Da Nang recurs as a site throughout this book. I chose this place for both historic and personal reasons. During the Vietnam War this small city in central Vietnam (just 85 miles south of the demilitarized zone), was the site of a major U.S. air base and, at the time, was considered the busiest airport in the world. This is where the planes that dropped the bombs took off and landed. Da Nang was as well the location where many U.S. troops first touched down in Vietnam. Many soldiers also spent their rest and recreation time in Da Nang’s bars and on its beaches.

I was seven years old in 1968, and as far as I recall, the Vietnam War was never discussed in my household. My first direct knowledge of the war came in around 1973, when I was twelve, in the form of a guy named Paul who slept on a cot on my best friend’s porch. Paul’s long hair and army jackets intrigued me but I was slightly wary of this quiet man who lived in another family’s house. One day, while rifling through the albums stowed near his cot, I asked Paul where he was from. He told me that he had just returned from Vietnam, from a place called Da Nang, which he said was “like hell on earth.” Today the former air base in Da Nang is an international airport and the beach is lined with high-end resorts, golf courses, marinas and “private villas.” I stayed in one of these resorts with my girlfriend, Carolyn, over New Years in 2010. The hotel has an infinity pool and the grounds are lush and green. To the north of the resort the hillsides are brown. In many spots there is still dioxin in the soil and nothing but elephant grass will grow there.

While staying at the beach in Da Nang, Carolyn and I talked a lot about her friend Rod, who was stationed there in 1968. Carolyn remembered that, many years ago on a run together in the Berkeley hills, Rod told her that the sweeping beauty of the California coastline reminded him of the view of the beach at Da Nang, which he said was “the most beautiful place he had ever seen.” Rod was exposed to Agent Orange while stationed in Da Nang and died of a brain tumor in 1990.

27. Heiress Paris Hilton is in tears after receiving her 23-day prison sentence in 2007. This photo by Nick Ut was taken exactly 35 years after his iconic photo of Kim Phuc. Ut said of the Hilton photo, “I was lucky to get the shot I did...I focused on her blond hair when she got out.” David Hinkley, Daily News, “A Far Cry from Vietnam,” 12 June 2007.

28. “A visit to the Reunification Palace is like traveling back in time to the 1970s. Things at the palace were left untouched from the day Saigon fell to North Vietnam. You are free to walk around in the Palace, marvel at the James Bond-style conference rooms, the casino, and the screening room. In the basement you’ll find the war rooms full of 1960s phones, radios, office equipment, maps and a shooting range! Tours are available (in English, French, Chinese and Japanese) and are free, but not necessary. A visit to the Palace is a must do in Ho Chi Minh City.” http://www.virtualtourist.com/28. “In August I enjoyed a great holiday trip to Vietnam with four people, two with digital cameras and two shooting analog (film). Vietnam is a great place for taking pictures. There are rivers everywhere, rice fields of incredible brilliant green, Mekong Delta, Sapa Mountains, Halong Bay (Unesco World Heritage), great portraits of people working, Sapa Mountains, Halong Bay (Unesco World Heritage), great portraits of people working, Sapa Mountains, Halong Bay (Unesco World Heritage), great portraits of people working, Sapa Mountains, Halong Bay (Unesco World Heritage), great portraits of people working, Sapa Mountains, Halong Bay (Unesco World Heritage).” http://1000words.kodak.cpm/thousandwords/ post/?id=184869