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On Power, Pans and Panopticons

David Kutz

United States

dkutz5@gmail.com

Abstract

Some might think it ironic that an artist who makes panoramic photographs and is concerned about the current circumstances of our digitally networked world would explore a surveillance technology invented at the end of the 18th century. This paper reviews the history of the British social reformer Jeremy Bentham's panopticon and places it in context with a contemporaneous invention: the panoramic painting. One of the few existing panopticon buildings, the Presidio Modelo in Cuba, is described, with a focus on its history and cultural impact. Finally, the paper offers reflections on the power/knowledge relationship and on how the panopticon can serve as a metaphor for our highly surveilled world, where those in power, gathering the data (knowledge), can predict and modify our behavior.

Keywords

Panopticon, Panopticism, Foucault, Bentham, Panorama, Surveillance, Behavior Modification, Behavioral Control, Presidio Modelo, Cuban Architecture

Etymology

Fig. 1. *Hermes kills the 100-eyed Argus Panoptes*; 5th century BCE, Stamnos, (ANSA IV 3729) Courtesy: KHM-Museumsverband

Panopticon, from the Greek; "All Seeing" and associated with the Greek primordial giant, Argus Panoptes, often described as having 100 eyes. Like sea mammals and some birds and reptiles that sleep with one eye open, [1] Argus could exert his power of sight even when asleep. [2]

The Benthams

Samuel Bentham (1757–1831), an engineer and ship designer, was the younger brother of the more acclaimed Jeremy Bentham (1748–1832). In 1780 Samuel traveled to Russia looking for work. Prince Potemkin, with a mandate from Catherine the Great to aggressively develop industry in Krichev, White Russia (modern Belarus). Potemkin hired Samuel in 1784 to manage new manufactories and to build ships that could travel down the Denieper River to the Black Sea. Samuel had access to a large workforce of unskilled serfs and brought 20 English master craftsmen to Russia in the hope that these skilled workmen would make it possible to achieve the ship building and manufacturing enterprises he was tasked to complete. [3] Samuel was an inventive man. During his life, he secured several patents related to ship design, and he conceived of the idea of a circular building with an "inspector's lodge" [4] at its center. This building-type would permit a small number of overseers to provide training, as well as to discipline the activities and behavior, of the untrained workforce and the imported craftsmen. [5]

Simon Werrett, in his paper, *Potemkin and the Panopticon*, outlines a number of aspects of Russian culture that likely influenced Jeremy's design, noting that "… the Panopticon subsumed the spatial structure of the Russian estate into a single building: the family house, the noble at the centre, his peasant workforce surrounding him." And:

> In the 18th century, the Russian peasantry learnt their place in the world through their relationship to God. The place where this process was played out was the Orthodox church. It was here that social identity was defined through a spatial structure, inherited from the Byzantine model, in which visibility played the central role. In this respect, there are close parallels between the system of power in operation in the Panopticon and that in the Orthodox church. [6]

Further, Shoshana Zuboff, in her brief commentary on the panopticon, points out that Orthodox churches dotted the Russian countryside: "… these structures were built around a central dome from which a portrait of an all-powerful 'Christ Pantokrator' stared down at the congregation and, by implication, all humanity. There was to be no exit from this line of sight. … no exit from God's total knowledge and power." [7]

Samuel's brother, Jeremy Bentham, the English social reformer and founder of Utilitarianism, came to visit his brother in Russia in 1786–7. He realized the many possible applications of the building-type his brother had invented, and, in a series of letters written during this period, he coined the term "panopticon" to describe Samuel's "Inspection House."

These letters, some of which were written in response to a competition for a new house of correction in Middlesex, first appeared in the British press and were later published in book form in 1791 as *Panopticon: or, the Inspection-House*. [8]

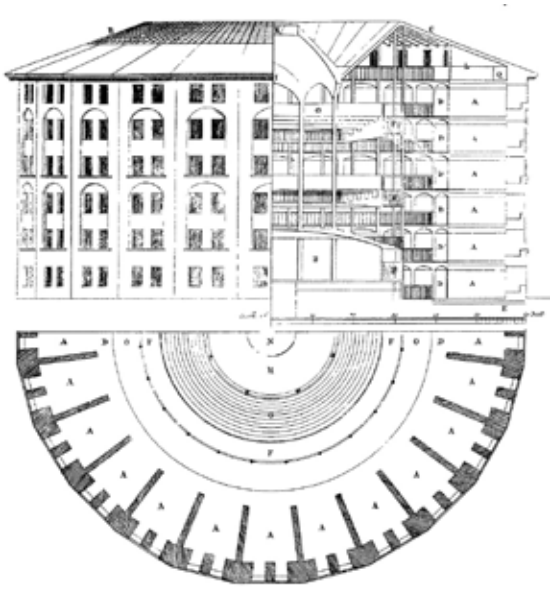

Fig. 2. *Penitentiary Panopticon*, 1791, drawn by Willey Reveley, from The Works of Jeremy Bentham vol. IV, 172-3 (1843) Public Domain

In the front piece of Bentham's book, he suggests that the panopticon could be used for a variety of purposes, such as, prisons, poor-houses, manufactories, hospitals, mad houses and schools. In the preface and again in the closing eulogy, he states:

> Morals reformed — health preserved — industry invigorated — instruction diffused — public burthens lightened — Economy seated as it were on a rock — the Gordian knot of the Poor-Laws not cut but untied — all by a simple idea in architecture! [9]

Further, he says, the panopticon is "a new mode of obtaining power of mind over mind, in a quantity hitherto without example." [10]

Jeremy Bentham's design for a prison was never realized in Britain, perhaps because he was advocating that it be run as a private, for-profit facility, with himself as the operator — the rules of formal bureaucracy lived on. [11] The first panopticon-styled building was designed and built by Samuel in 1805 on the River Okhta in St. Petersburg as a "School of Arts." It was purpose-built to be used as a training facility to teach shipbuilding skills. Samuel had specified that it be built of iron, but it was built of wood and burned to the ground in 1818. Werrett notes, "At Okhta, Samuel Bentham finally succeeded in placing absolute power in the centre of the Inspector's Lodge." [12] A report provided to Samuel by the Russian Navy in 1812 outlined how panopticon-styled facilities had been built across the Russian Empire. [13]

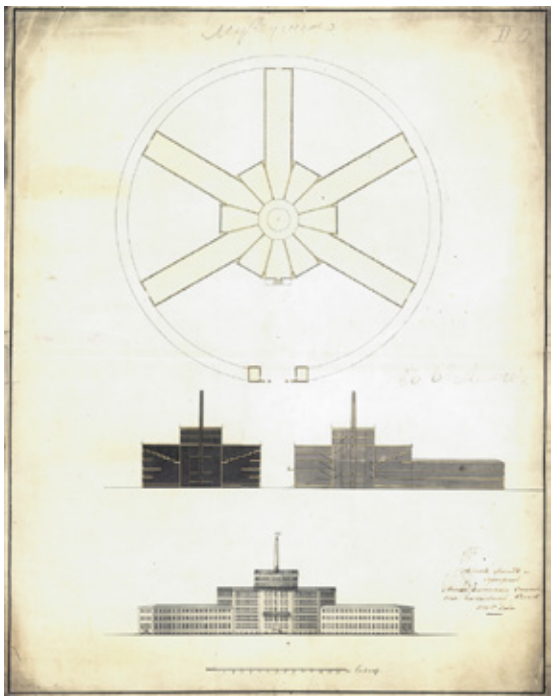

Fig. 3. *The St Petersburg Panopticon*, 1810, reference: Rossiiskii Gosudarstvennyi Arkhiv Voenno-Morskogo Flota, St Petersburg, fond 326, opis' 1, delo 10043, Courtesy: Russian State Naval Archive

Today it is Bentham's prison design that is most associated with the term panopticon. In Bentham's prison design, a single watchman could, in theory, observe all the inmates' cells at once. Since the inmates cannot know when they are being watched, they would be motivated to act as though they are being watched at all times. The result is a late-18th century technology that engenders a new idea about how to exert power — a mechanism for social and behavioral control. A great deal has been written about this change in the power relationship between workman and overseer; between inmate and guard. Later in this paper, it will be seen how the underlying concept of "secret surveillance" is being used in a powerful manner to control human behavior in our digitally connected world and hence why it is relevant today to consider the conceptual underpinnings of the panopticon.

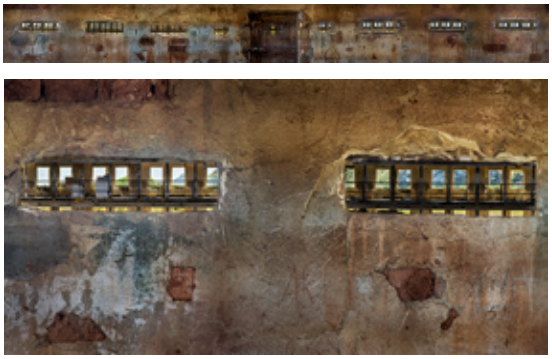

Fig. 4. Top: *360 Degree Panoramic View from the Inside of the Inspector's Lodge, Circular #4, Presidio Modelo, Nueva Gerona, Cuba*, 2019, Archival Pigment Print, 20x195 in (51x495 cm)
Bottom: Detail © 2019 David Kutz

The Panopticon and The Panorama

On June 19, 1787 — in the same year in which Jeremy Bentham was writing his letters from Russia and beginning an aggressive campaign to promote the idea of the panopticon, the English portrait painter Robert Barker (1739–1806) received a patent for a new approach to painting and exhibiting large, 360-degree paintings. Barker called his invention "la nature à coup d'oeil" [nature at a glance]. [14] As noted earlier, Bentham's letters were published in book form in 1791, and that same year, in a newspaper article about Barker's paintings, the term "panorama" appeared in print for the first time. [15] In 1792 Barker began to call his paintings panoramas. Although there is no documented evidence, both Michel Foucault (1926–1984) [16] and Stephan Oettermann (1949–) [17] have suggested the likelihood that Barker, seduced by the social "buzz" generated by Bentham's panopticon, and seeking to market his paintings to a paying audience, changed their name from "La nature à coup d'oeil" to "panoramas".

There are several architectural similarities between Bentham's panopticon and Barker's rotunda. Both are circular building types. Their diameters are similar, with the panopticon at 100- to 120-feet [18] and the panoramic rotunda at 90- to 110-feet. [19] Both Barker and Bentham wanted to assure that the person who wielded power (the paying audience or the overseer) would be at a distance that provided the best possible view from the center point. There are several other intriguing points of comparison. In Barker's 1787 patent, he points out that it is important that the viewing of the full 360-degree painting not be interrupted by an entrance way. Hence, paying customers arrived in the rotunda from below-grade, rising up to the viewing platform to see a massive and impressive painted vista. [20] Bentham's entrance, as can be seen in Fig. 2, is also below-grade. Here the purpose is to allow the guards or overseers to enter and exit the inspection lodge without being seen by the inmates. This was crucial in creating the desired behavioral control. The inmates would not know when the guards were on- or off-duty in the inspector's lodge.

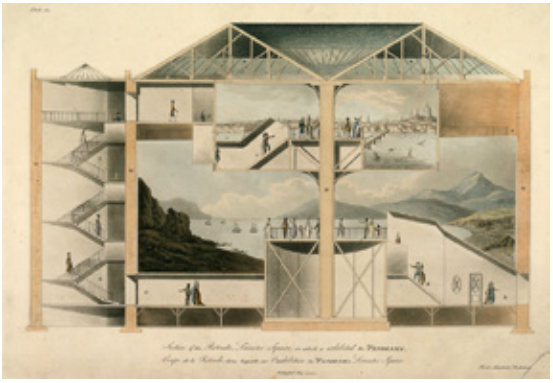

Fig. 5. *Cross-section of the Rotunda in Leicester Square in which the panorama of London was exhibited*, 1801, Robert Mitchell, Public domain

Furthermore, the roof designs are similar. They are constructed in a style that ensures that the circumference walls are brightly lit, leaving the inspector's lodge or, in the case of the panorama rotundas, the viewing platform, in relative darkness. This made the viewing of the paintings more dramatic and the surveillance of the inmates more effective. Unlike Barker's Rotunda, Bentham's plan called for windows in each cell, around the circumference. These windows back-lighted the inmates to make their surveillance even better.

In Greek, Panorama means 'all sight' and panopticon 'all seeing.' At first these neologies might seem to be synonyms, but, on closer scrutiny, they turn out to be opposites. The former means to gaze at something, as in a painting that shows everything. The latter means to gather in with one's vision or gaze — to survey. Oettermann notes, "As 'schools of vision', the panorama and panopticon are at the same time identical and antithetical: in the panorama the observer is schooled in a way of seeing that is taught to prisoners in the panopticon." [21] Oettermann also considers the socio-historic context, in particular the expanding Industrial Revolution, when he says, "The panopticon and the panorama can be seen as symbolic of the two halves into which people's lives begin to fall in this era, work and play." [22]

An additional 'opposite' when considering the power of the gaze is to reflect on the concept of the synopticon, developed by the Norwegian sociologist, Thomas Mathiesen. In his 1997 essay, *The Viewer Society*, he reverses the panoptic paradigm. Instead of "the few surveilling the many" with the intent of controlling behavior as found in the panopticon, in Mathiesen's synopticon, there is "surveillance of the few by the many"

[23], as found when many view a single panoramic painting. Mathiesen relates this directly to mass media and in particular to TV news broadcasters where a single on-camera announcer is watched by and hence influences many. As Oettermann argues, the panorama was the first mass media – where the many viewed a single object; a painting that frequently carried not so hidden political and/or historic messages.

A less frequently discussed comparison of these two late-eighteenth century inventions is to consider them as theatrical forums — or spectacles. For Barker, the entertainment value for the leisure class is self-evident. The growing middle-class of wage-earners had the time and resources to pay an entrance fee to see and be entertained by these spectacular paintings, and they made Barker a rich man. However, Bentham, the social reformer and utilitarian thinker, outlined in his letters that his panopticon establishments, whether prisons, hospitals, schools or manufactories, would include a theatrical component. Not unlike the Byzantine Churches that inspired Samuel Bentham, where the religious services are conducted from the center of the church, the top of the centrally placed inspector's lodge is the 'Chapel Gallery.' This multi-purpose area is exposed to all of the inmates in the surrounding cells. It is the stage set for a theatre in the round. A primary function of the Chapel Gallery was for the routine and required "divine service, and [for the inmates to] receive regular consecration". [24] It also functioned as a place for the more senior administrators, owners and nobility — those who supervised the supervisors — to view the inner workings of the facility.

Bentham was an outspoken proponent of open and transparent government and suggested that the public also be invited to have a theatrical view inside the prison from the Chapel Gallery. Beyond his advocacy of transparency, Bentham understood that exposing the public to the conditions of the inmates could discipline the visitors, dissuading them from engaging in socially aberrant or criminal behavior. He also proposed that the inmates wear masks, appropriately designed to illustrate or represent their crimes. The worse the crime, the more horrific the mask. [25] As noted by Foucault, "The seeing machine was once a sort of dark room into which individuals spied; it has become a transparent building in which the exercise of power may be supervised by society as a whole." [26] Those occasions when the surveillance was not secret, but exposed by a viewing public, strengthened the more important conceit of having the inmates think they were always observed. The public viewings were a visible reminder to the inmates that they always might be watched.

Both the panopticon and the panorama were viewing instruments invented towards the end of the Age of Enlightenment. The secularism of this era shifted man (rather than God) into the role of the all-viewing, all-seeing, and the all-powerful. Or, as framed by Alexander Pope in his Age of Reason, *Essay on Man*, "Know, then, thyself, presume not God to scan; The proper study of mankind is man." [27]

Observing the world from man's central position changed the Western European perspective in profound ways. With Carl Linnaeus's publication of *Systema Naturae* (The System of Nature), in 1735, a new and comprehensive classification system of all plants on Earth was invented. Following Linnaeus, Europeans began a wave of worldwide scientific explorations to observe all aspects of our planet. As noted by Mary Louise Pratt,

> … these two events [exploration and classification], and their coincidence, suggest important dimensions of change in European elites' understandings of themselves and their relations to the rest of the globe. … [it is] about the emergence of a new version of what I like to call Europe's 'planetary consciousness,' a version marked by an orientation toward interior exploration and the construction of global-scale meaning, through the descriptive apparatuses of natural history. [28]

Pratt goes on to argue that this drive toward "planetary consciousness" through natural history and interior exploration resulted in Western European's colonial imperialism and hegemony, especially in Africa and South America. For those not invited or able to explore the world by ship, there was the panoramic rotunda, with its massive representational views of the world. For those who believed that man was redeemable by man, there was the power of behavioral control induced by the panopticon's inspection lodge.

When considering the relationship between the panopticon and the panorama, one might conclude that the panopticon came first, followed by the panorama. However, Foucault suggests that the opposite might be true and that Bentham was influenced by Barker's invention. [29] Either way, both are emblematic of an era.

A History of a Panopticon — Presidio Modelo

Fig. 6. *Presidio Modelo, Panorama Showing Five Panopticons*, *Nueva Gerona, Cuba*, 2019, Archival Pigment Print, 10x42.5 in (25.4x108 cm) © 2019 David Kutz

Fig. 7. *Presidio Modelo, Inmates View of the Dining Hall from Circular,* 2019, Archival Pigment Print, 10x15 in (25.4x38 cm), © 2019 David Kutz

No structure incorporating all of Jeremy Bentham's design ideas has been built. However, many prisons throughout the world exploited some of Bentham's principles. The vast majority, however, were built in the star configuration — not in the round.

Jane Semple, in her seminal text, *Bentham's Prison: A Study of the Panopticon Penitentiary*, suggests that the most famous existing panopticon prison is Stateville Correctional Center in Crest Hill, Illinois. This is a large, maximum-security penitentiary complex incarcerating over 3,500 people. Its "round house" is no longer in use but has been kept as a historic relic. [30] However, Semple notes,

> … it [Stateville] was a travesty of Bentham's plan, fatally flawed by the failure to understand that unseen inspection was of the essence. The central inspection towers were devised so that the inmates could observe every move of the guards; supervision became a mockery. And the building became notorious as one of the 'most awful receptacles of gloom which were ever devised and put together with good stone and brick and mortar.' [31 & 32]

Today the Presidio Modelo or model prison, found near the town of Nueva Gerona, on the Isla de Pinos (now the Isla de la Juventud) in Cuba is a still standing truly Bentham panopticon-styled penitentiary. It has not served as a prison since 1967.

Rogelio Zayas Bazán, as President Gerardo Machado y Morales' Minister of the Interior, traveled in 1925 from Cuba to the United States to research correctional facilities. More than a century after Jeremy Bentham's support of social change through penal reform, the desire to improve prison conditions was again a topical issue, and Bazán was enthusiastic about how a modern prison could, with fair and benign treatment, transform criminals into productive citizens. He visited many penitentiaries in America and was most impressed by the panopticon at Stateville, [33] designed by architect W. Carbys Zimmerman. At the Annual Conference of the State Charities and Corrections in Danville, Illinois in 1915 — a decade before the construction of Stateville — Zimmerman stated that, "[The] model cells are so placed that a full view into every part of them is possible from one point, without the observer being visible to the prisoner …" [34] — the words of a true Benthamite.

President Machado assigned architect César Guerra y Massaguer to design the Presidio Modelo, and Machado placed the cornerstone in a well-documented ceremony on February 1, 1926. [35] The entire site, as planned, was never completed because the Depression ended construction in 1932, but the five panopticons were completed. Four "circulars" where built to house prisoners, each with 455 two-person cells. The fifth unit, which served as the centrally placed 3,000-seat dining hall, was known as the place of "three thousand silences," since inmates were not permitted to speak during meals. If they did, they faced severe penalties, including solitary confinement in an especially cramped punishment cell for nine days. [36]

Fig. 8. *Presidio Modelo, Dining Hall,* 2019, Digital Photograph, © 2019 David Kutz

Guerra's design included a number of reformist innovations that garnered accolades from international criminologists. He called for underground tunnels connecting each building, workshops to lift prisoners' morale and give them purpose, headphones in each cell so inmates could listen to the radio and window screens to keep insects out. The windows also provided the inmates with exceptional views of the island paradise. It was to be a scientific, rational and humane prison —a model for the world to marvel at. [37]

Fig. 9. *Presidio Modelo, Inmates View of the Dining Hall from Circular,* 2019, Archival Pigment Print, 10x15 in (25.4x38 cm), © 2019 David Kutz

Unfortunately, this is not how it worked out. Pedro Castells, the first warden, had apparently not read Bentham or others interested in prison reform. As noted by Joseph R. Hartman, "… the prison echoed the brutality of Cuba's colonial prison system and its interrelated history of plantation slavery." [38] Castells closed the tunnels, so prisoners would need to walk through the blazing sun for meals, no headphones were installed, and there was no mobile library. The workshops became a "means of torture and exploitation." Guards indiscriminately tortured and killed prisoners. "Scatological and violent expressions of power challenged the sanitary ideas of moral reform." [39]

In the 36-year history that the Presidio Modelo (1931-1967) functioned as a prison, there was an extraordinary exception to the inhumane, brutal, cruel and oppressive conditions imposed on the inmates. On July 26, 1953, Fidel Castro and about 160 cohorts assaulted the Moncada Barracks in Santiago de Cuba, making their first attempt at a Cuban revolution. Their effort failed, and on October 17, 1953, after what is known as the "Cuban trial of the century," Fidel Castro, Raúl Castro and 24 compañeros arrived on Isla de Pinos. [40] But, instead of being incarcerated in the now grossly over-crowded circulars, Fidel Castro and the other "Moncadistas," as political prisoners, were segregated from the common criminals, and housed in one of the hospital wards.

Fig. 10. *Presidio Modelo, Hospital Ward,* 2019, Digital Photograph, © 2019 David Kutz

Considering the circumstances and living conditions of those incarcerated in Presidio Modelo, Castro's motley cohort were granted extraordinary privileges. As noted by Tony Perrottet, "They devised their own daily schedule for exercise and self-improvement. They started their own library of five hundred books … For five hours a day they gathered before a blackboard on the airy hospital patio, where Fidel [Castro] and others conducted lessons in philosophy, history, public speaking …. They were permitted to cook their own meals to supplement the prison gruel …" [41] What a mistake for the American-backed military dictator, Fulgencio Batista!

Fig. 11. *Presidio Modelo, 360 Degree View of the Hospital Courtyard,* 2019, Digital Photograph, © 2019 David Kutz

As Fidel said, "What a fantastic school this is!" and rejoiced in one prison letter, "From here I'm able to finish forging my vision of the world." [42] With mounting international pressure, Fidel and his cohorts were released from the Presidio Modelo on May 15, 1955. [43] Three and a half years later, on December 31, 1958, the first phase of the revolution was over, and Fidel stepped into the presidential palace.

The conditions at Presidio Modelo under Fidel could not have been worse. Political prisoners, of which there were many, where not isolated from the general population. There were water shortages, little food, brutal forced labor, overcrowding, sexual abuse, deplorable sanitary conditions, torture and even murder. Armando Valladares, a bureaucrat in the post office of the Ministry of Communications for the Revolutionary Government, was arrested in 1960, reportedly for refusing to put an "I'm with Fidel" sign on his desk at work. [44] While imprisoned, Valladares smuggled out and published his poetry in the West. He became a member of PEN International and garnered the attention of the ACLU. After 22 horrific years in jail, thanks to a direct appeal in 1982 by the French president, François Mitterrand, Valladares was released. [45]

Valladares' book, *Against All Hope*, [46] provides a vivid, first-person account of the many horrors he and others political prisoners experienced. One thing is eminently clear from his writing; Jeremy Bentham's reformist aspirations of benign humanist power were not accomplished in the Presidio Modelo. The "power of vision" to kindly modify, control and improve behavior did not work. Valladares spent five years on the Isla de Pinos, departing to another prison after Castro closed Presidio Modelo in 1967.

Fig. 12. *Presidio Modelo, Administration Building as a School,* 2019, Digital Photograph, © 2019 David Kutz

In 1978 Castro converted the main administration building of Presidio Modelo into an international school for Marxist youth and renamed Isla de Pinos "Isla de la Juventud". [47] Shortly thereafter, the hospital ward where Castro was imprisoned became a museum commemorating his stay and the entire site became a Cuban National Monument.

The Power of Sight

If one were to summarize René Descartes' influential writing into a single phrase, one could say, "Cogito, ergo sum" or, "I think, therefore I am." [48] A parallel known phrase of Michel Foucault would be "knowledge/power." In this phrase, Foucault was not reiterating the familiar Baconian model, "knowledge is power," where knowledge is an instrument of power, but rather, "Foucault was stating that the goals of power and the goals of knowledge in society cannot be separated — in knowing we control and in controlling we know." [49] He spent his life exploring this concept.

In 1975 Foucault's book, *Surveiller Et Punir : Naissance De La Prison*, was published. Two years later, the Foucault-approved English translation by Alan Sheridan, entitled, *Discipline and Punish : The Birth of the Prison*, was published. Sheridan remarks in his translator's note the difficulty of translating 'surveiller' into English. Although Foucault's suggestion of using the term "discipline" followed the structure of the book, Sheridan thought it "unsatisfactory." He goes on to explain why the English words, "surveillance', "observe", "supervise", or Bentham's term, "inspect", were also unsatisfactory. [50] Outside of the context of translation, these words are relevant when considering Foucault's concept of panopticism, first presented in this book.

It is not possible within the scope of this paper to consider the prolific outpouring of analytical and academic discussion on panopticism, but there are several key takeaways.

At the time that *Discipline and Punish* was published, except for his reputation among criminologists, architects tasked with building prisons and those who knew Bentham as the founding father of Utilitarianism, Bentham had nearly vanished from the canon of Western philosophy. [51] As Foucault researched the European history of criminal punishment and reform, he said in a 1977 interview, "There was scarcely a text or a proposal about the prisons which didn't mention Bentham's "device" — the "Panopticon", and further, "He [Bentham] invented a technology of power designed to solve the problems of surveillance." [52] So, through Foucault, Bentham was resurrected, particularly amongst the French intelligentsia. [53] Although the panopticon prison, such as the one in Cuba, did not accomplish its mission of providing a nearly utopian power to control the incorrigible, for Foucault, the panopticon was a perfect metaphor in his study of the power/knowledge relationship of the gaze. In his words,

> Just a gaze. An inspecting gaze, a gaze which each individual under its weight will end by interiorizing to the point that he is his own overseer, each individual thus exercising this surveillance over, and against, himself. A superb formula: power exercised continuously and for what turns out to be a minimal cost. … It is indeed the case that the gaze has had great importance among the techniques of power developed in the modern era …" [54] And, "The Panopticon functions as a kind of laboratory of power. Thanks to its mechanisms of observation, it gains in efficiency and in the ability to penetrate into men's behavior; knowledge over all the surfaces on which power is exercised. [55]

In *Discipline and Punish*, Foucault traces the European history of how society punishes criminals. He expounds on the extraordinarily brutal spectacle of public torture and execution, ending in Europe in the late 18th century, and then moves on to consider the more benign, humanistic, enlightened and reformist idea of behavioral modification, as exemplified by the Bentham's panopticon. B. F. Skinner (1904-1990), a social scientist who spent his career focused on behavioral control, expressed in his 1971 best-selling book, *Beyond Freedom and Dignity*, his dire concern for the future of mankind. Considering the severity of environmental issues, Skinner quotes the English biologist, geneticist and eugenicist, C.D. Darlington. [56] Darlington considers the process of ecological succession by alluding to Alexander von Humboldt and one of his disciples, the father of the American conservation movement, George P. Marsh, who

> … have taught us … that every new source from which man has increased his power on the earth has been used to diminish the prospects of his successors. All his progress has been made at the expense of damage to his environment which he cannot repair and could not foresee. [57]

Skinner then argues,

> Almost all our major problems involve human behavior, and they cannot be solved by physical and biological technology alone. What is needed is a technology of behavior, but we have been slow to develop the science from which such a technology might be drawn. [58]

Foucault thought, that "the Panopticon is a marvelous machine which, whatever use one may wish to put it to, produces homogeneous effects of power." [59] As we have seen, this "marvelous machine" was no match for the challenge put forth by Skinner.

Today's Panopticon

Neither Foucault nor Skinner consider how the power of computer systems, with the aggregation of big datasets and the learning algorithms of artificial intelligence, can analyze and predict our behavior. This ability has been pushed to new heights with an all-seeing eye and super-powerful surveillance machine, the devise in your pocket: the "smart" phone.

Fig. 13. *Amazon Echo, a Contemporary Inspection Lodge*, 2014, Frmorrison at English Wikipedia [CC BY-SA 3.0 (https://creativecommons.org/licenses/by-sa/3.0)]

With *Discipline and Punish* and the restoration of Jeremy Bentham, the new interdisciplinary academic field of Surveillance Studies emerged, and with it, a stream of buzz words, such as; data exhaust, post-panopticon, super-panopticon, datavaeillance, uberveillance, lateral surveillance, social searching, social surveillance, surveillance capitalism and information panopticon. In Surveillance Studies, "new surveillance" is empirically both watching and being watched, using the eye or other senses and various kinds of data. [60] It is related not only to the millions of CCTV cameras (inspection lodges) trained on us around the world, but also to how data — including pictures, GPS information, selfies, search inquires, emails, text messages, purchasing patterns and more — are gathered, stored, processed, associated and analyzed by computers and their human operators.

This complex social restructuring generates many dualities to consider, including; private/public, watch/watched, free will/determinism, authority/power, subject/agent, and control/freedom. Big data mining, combined with machine learning, has developed ever more sophisticated algorithms that not only can understand one's demographic characterizes, but can begin to predict, with ever greater accuracy, one's behavior and, with the benefit of recent developments, even begin to predict one's psychological state. [61] There is nothing intrinsically evil about this new surveillance technology, which is getting closer and closer to the capabilities Skinner sought.

Every news cycle rings another alarm. Beyond the media buzz, there is little an individual can do to protect themselves from being a donor of big data that fuels the learning algorithms and artificial intelligence, which are seeking the holy grail: the ability to influence our behavior. At this juncture, our only defense is to become aware and gain knowledge about how the new surveillance power works, so we can try to make reasonable judgements, and shift the power/knowledge balance.

Notes

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Author Biography

After receiving a BFA from Rochester Institute of Technology, I moved to New York City to become the eleventh employee at the newly-founded International Center of Photography. During my 2 years at ICP I hung exhibitions, participated in master class workshops, and taught photography.

I worked as a photojournalist from 1976 to 1980, with assignments from the New York Times, Life, Look, and Time magazines.

For the next three decades I worked in film and television as a director, producer, and media executive. In addition to commercial and industrial assignments, I created the award-winning documentary, *The African Burial Ground: An American Discovery* and was a senior executive directing the launch of *VOOM-HD.*

In 2013, I return to photography as an art form, and earned an MFA from the Vermont College of Fine Arts in 2016.

I am now actively engaged in making work and continuing my research into geography, urban planning, travel and globalization. I am a member of Soho Photo Gallery, a cooperative gallery in New York City, the International Panorama Council, the Surveillance Studies Network and volunteer with my local arts organization: Arts Gowanus.