

Poisonous Pedagogy: The Contentious Drift of Psychology

By Marc-André Cotton

Abstract: Involvement of psychologists in the Bush administration's War on Terror has raised legitimate concern. And yet, behavioral scientists have long been praised for their engagement in dubious experiments aimed at conditioning the human brain. This willingness to control originates in early experiences of maternal disruption forced upon children and routinely manipulated by caretakers. The leading role played by behaviorism in the wake of the 9/11 trauma must alert on the dire consequences of such Poisonous Pedagogy.

Located in Washington, D. C., the American Psychological Association (APA) is a professional and scientific organization gathering around one hundred and fifty thousand members in the United States and the world's largest association of psychologists. In the spring of 2005, a task force met in response to APA's Board of Directors to examine whether its current Ethics Code provided adequate guidance to psychologists involved in national security-related activities, and whether APA should develop policy to address the role of psychologists in the interrogation of detainees in the global War on Terror waged by the Bush administration since September 11, 2001. The matter was all the more imperative that photos from the Abu Ghraib prison in Iraq, published less than a year earlier, had already generated numerous investigations concerning the responsibility of health professionals in the abuse inflicted on prisoners. Designated as the Presidential Task Force on Psychological Ethics and National Security (PENS), the group conducted its discussions in June 2005, over an extended weekend, and a summary of its considerations was readily approved by APA's Board of Directors and dispatched to the media.

In the overview of the PENS report suggesting eventually a dozen recommendations, the task force was "*unambiguous*" that psychologists do not engage in, direct, support, facilitate, or offer training in torture or other cruel, inhuman, or degrading treatment. Emphasizing that psychologists have an ethical responsibility to be alert to and report any such acts to appropriate authorities, it stated nonetheless that it is "*consistent with the APA Ethics Code for psychologists to serve in consultative roles to interrogation and information-gathering processes for national security-related purposes*" as they already did in other law enforcement contexts:

Acknowledging that engaging in such consultative and advisory roles entails a delicate balance of ethical considerations, the Task Force stated that psychologists are in a unique position to assist in ensuring that these processes are safe and ethical for all participants.¹

Curiously, the task force seemed to be taking back with one hand what the other had conceded while deliberately evading a number of distressful developments. On one side, it deemed necessary to reassert the psychologists' commitment to protect the person's dignity and rights for instance, but simultaneously called to mind that it had no mandate to judge their action within the field of national security. The PENS report specified also that a detainee's medical record shouldn't be used to the detriment of his safety and well-being, but did not forbid the exploitation of other personal information to inflict emotional stress and force cooperation. The report was even more permissive towards psychologists involved in

surreptitious interrogations that were going on in Afghanistan, in Iraq or in Cuba's Guantánamo Bay. In case of conflict between their professional ethics and the existing law, the report stated, psychologists should attempt to resolve it in a responsible manner but "*may adhere to the requirements of the law*" if they failed to do so².

A misleading Ethics Code

It just so happened that since September 11, several legal opinions issued by the Bush administration had notably redefined the notion of torture and the extent to which detainees of the War on Terror could be interrogated and kept in detention beyond existing legal frameworks. Prisoners weren't given any more the customary protection of the Geneva Convention, of the United Nations or even that of the U.S. Military Code and consequently no one knew for sure what ill-treatments could still be qualified as torture³. Under such conditions, how could a military psychologist oppose the misuse of his counseling position in the process of an interrogation? Similarly, how could he invoke the "*basic principles of human rights*"—as the PENS report suggested—if the definition of such rights was not specified by common international standards, but by the American law aiming at overruling such standards?

A former APA president suggested for instance that one should not ignore the nature of the tasks assigned to military psychologists, the pressure they face in conducting their mandate or the secrecy involved in some of their jobs⁴. Designer of the disturbing "*Stanford Prison Experiment*" in 1971, in which students acting as guards of a mock prison developed sadism towards their comrade prisoners, Pr. Zimbardo had studied at length the mechanisms of obedience to authority⁵. In such settings, it was difficult to discuss an ethical issue with fellow psychologists and even less when the chain of command limited access to information. Social pressure such as group camaraderie, diffusion of responsibility and the use of euphemistic terms meant to conceal reality could seduce even intelligent psychologists to engage in behaviors they would deem unacceptable in another situation. As for military psychologists, their duty as enlisted men commanded that they comply with the army's rule rather than with their professional ethics. All these arguments cast suspicion on the task force's willingness to fully address the outrage raised by the implication of psychologists in coercive interrogations—a reluctance that would later be accounted for.

Indeed, a year after the publication of the PENS report, a journalist revealed that six of the ten members of the APA task force belonged to the armed forces or kept relations with them⁶. Colonel Dr. Louie "Morgan" Banks for example, chief psychologist in the U.S. Army, had served at Bagram Airfield in Afghanistan in 2001, a detention center where serious abuses had been reported. In 2002 at Fort Bragg (North Carolina), he had organized a training session for Guantánamo interrogators⁷. Another task force member was Colonel Dr. Larry James, chief psychologist for the Joint Intelligence Group at Guantánamo in 2003 and director of the behavioral sciences group in the interrogation unit of Abu Ghraib in 2004. Captain Dr. Bryce Lefever, a Navy psychologist deployed with Special Forces to Afghanistan in 2002 to lecture on various interrogation techniques, also formed a part of the team⁸. Furthermore and at odds with the usual practice of APA working groups, lobbyists attended the meetings. Frequently applying for funds from the department of Defense (DOD), they were concerned that discussions would raise conflict with the current policy at the Pentagon. Only four members of the task force—including the non-voting President—had no ties to the DOD or to other government agencies: they were strictly compelled to confidentiality. Thus, while the higher military authority was regularly briefed on the task force's discussions, their content was kept inaccessible to thousands of APA members.

The position of the APA's directorship was also controversial. In addition to selecting the task force members so as to moderate dissent, it maintained strict control over their

decisions through several of its officials. For instance, the director of APA's Ethics committee wrote most of the PENS report, although he didn't belong to the working group. Another delegate of the board and future APA President (2006), Dr Gerald P. Koocher, dismissed out of hand that the participation of psychologists in coercive interrogations be reconsidered, as other prominent APA members petitioned. In an email sent to the PENS task force members, he stated on the contrary, that those professionals were striving for a higher purpose:

The goal of such psychologists' work will ultimately be the protection of others (i.e., innocents) by contributing to the incarceration, debilitation, or even death of the potential perpetrator, who will often remain unaware of the psychologists' involvement.⁹

Obviously, APA's Board of Directors as well as government agencies and the military hierarchy had good reasons to be supportive of psychologists' involvement in interrogation. As a result, it was deemed necessary that their ethics code not formally condemn such conduct, so as to allow a few professionals to camouflage behind voluntarily misleading principles. Facing a growing pressure from public opinion, the DOD would invoke the prestige of a professional corporation and military psychologists would call to mind their duty to obey. As far as the APA was concerned, the organization had historical ties with the Pentagon and received each year a substantial share of defense contracts¹⁰. In 2003, for instance, the annual workshop of APA Science division focused entirely on "*Psychology Science and the Military*". For this occasion, APA co-sponsored a congressional briefing with the office of Senator John McCain designed to "*educate congressional defense staffers on the vital contributions of psychological research to our military and national defense*"¹¹. One of APA's departments—division 19—was even entirely devoted to military psychology. Among its priorities figured the training of professionals who would work for the government or private sector in academic, clinical or research settings and, of course, in the many American military bases being operated worldwide¹². It was therefore unlikely that APA's directory support a policy that would displease its main financial backer.

A historical synergy

However, considering briefly the development of American psychology since the end of World War II, the determination of the APA to promote the interest of the Pentagon—even against its pledge never to harm—takes on another dimension. Throughout the course of this conflict, psychologists were indeed allowed to demonstrate their expertise with the military in supporting the war effort. Some took part in the selection of young recruits or tried to relieve thousands of soldiers coming back home with symptoms of what was still called the "*trench trauma*". Others were employed by military strategists to study various psychological operations meant to demoralize the enemy or to indoctrinate the American public. General Dwight D. Eisenhower himself insisted on the leading role of psychology in the Allies' victory¹³. The APA grew stronger through this profitable partnership: the military psychology division was created after the war and the number of its members went from 2,739 in 1940 to more than thirty thousand in 1970¹⁴. By the late 1960s, the DOD was the largest institutional sponsor of the profession with about \$ 40 million spent annually on psychology studies¹⁵.

From its creation in 1947, the Central Intelligence Agency (CIA) also enrolled numerous psychologists for propaganda operations conducted behind the back of Congress, arguing notably that communist regimes had invented sophisticated techniques of mind control. From 1950, the agency engaged in various classified research programs, provided with generous funding, in an effort that historian Alfred McCoy called "*a veritable Manhattan Project of the mind*."¹⁶ The hidden fear of "*brain washing*"—an expression once used to describe Chinese techniques of indoctrination—obsessed most Americans because

such an evocation triggered reminiscence of their own repressed terrors¹⁷. In a rare public declaration to former graduates of Princeton in April 1953, newly appointed Director of the CIA Allen W. Dulles advanced that “*brain washing*” was also one of the most sinister weapons used by the Soviets in the Cold War:

The minds of selected individuals who are subjected to such treatment... are deprived of the ability to state their own thoughts. Parrot-like the individuals so conditioned can merely repeat the thoughts which have been implanted in their minds by suggestion from outside. In effect the brain under these circumstances becomes a phonograph playing a disc put on its spindle by an outside genius over which it has no control.¹⁸

Whatever may be the reality of such a far-off danger, the threat was primarily meant to justify the deeds of the American agency. Three days after this declaration, Dulles approved of operation MKULTRA, the code name for one of the numerous mind control programs secretly conducted by the CIA during more than twenty years. At the same time, the Office of Naval Research (ONR) launched its own covert research program involving fifty-eight universities in the blossoming field of behavioral sciences¹⁹. This synergy between the CIA, the armed forces and prestigious North American faculties would move “*brain washing*” to the core of academic attention and allow several scientists—notably psychologists—to go up the ladder of professional fame.

The Canadian psychologist Donald O. Hebb (1904-1985) for instance, considered the father of Cognitive Psychobiology and soon-to-be APA President (1960), was granted government funding to study the effect of sensory deprivation—one of the key concepts to future coercive interrogation techniques. His studies, pursued at McGill University of Montreal from 1951, showed that even a short-term isolation produced a devastating impact on the human psyche. After four hours of reclusion in an experimental “*cubicle*” (fig. 1) designed to suppress almost all sensorial stimuli, subjects “*could not follow a connected train of thoughts*” and if the ordeal extended to forty-eight hours of isolation, most of them experienced hallucinations similar to the effect of powerful drugs²⁰. The CIA quickly identified the relevance of such finding since an internal report of 1954 concluded that “*this experiment gets at some of the psychological factors found in prisoner-of-war treatment where the individual is completely isolated in solitary confinement.*”²¹ During a symposium on sensory deprivation organized in June 1958 at Harvard University, Dr Hebb acknowledged that the McGill experiment was motivated by mind control procedures and was strictly confidential²².

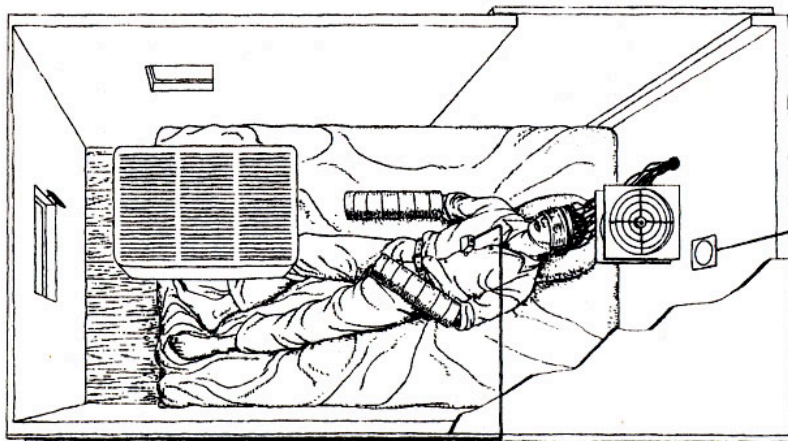


Fig. 1: Dr Donald O. Hebb’s experimental cubicle, constructed at McGill University in Montreal, to study the effect of protracted isolation. (*Scientific American*)

The following years, more than two hundred articles related to the effects of sensory isolation were issued in major scientific publications. In 1957 for instance, Dr Donald Wexler and three psychiatrists from Harvard University reproduced a similar experiment covertly funded by ONR's research program on behavioral sciences. Seventeen volunteers were put in a tank-type respirator with low artificial light designed to inhibit movement and tactile contact, in order to create an atmosphere of sensory monotony. Only five subjects completed the thirty-six hours experiment and all of the seventeen participants suffered various degrees of anxiety, half of them also reporting hallucinations. To the utmost concern of their secret sponsors, Harvard psychiatrists concluded that "*sensory deprivation can produce major mental and behavioral changes in man*" and recommended its capacity to induce psychosis²³.

In 1961, a reference book synthesizing the whole of behavioral sciences contributions to techniques of interrogation, *The Manipulation of Human Behavior*, was finally released by a respectable publisher with the funding support of the U.S. Air Force²⁴. One of the editors, sociologist Albert D. Biderman, had interviewed American prisoners of war returning from North Korea as part of a project also funded by the military. The book's content left little doubt on the extent to which the armed forces subordinated researches to suit their own strategic interests. One contributor wrote:

From the interrogator's viewpoint [isolation] has seemed to be the ideal way of "breaking down" a prisoner, because, to the unsophisticated, it seems to create precisely the state that the interrogator desires: malleability and the desire to talk, with the added advantage that one can delude himself that he is using no force or coercion.²⁵

Two years later, the CIA condensed these findings in a brochure that would found the agency's sinister counter-insurrectional tactics for nearly forty years: the *Kubark Manual*. Its anonymous authors assured that one could not mention interrogation techniques "*without reference to the psychological research conducted in the past decade.*"²⁶ The manual explicitly mentioned Dr Hebb's McGill and Dr Wexler's Harvard experiments to suggest for instance that "*deprivation of sensory stimuli induces regression*" or that "*calculated provision of stimuli during interrogation [strengthens] the subject's tendencies toward compliance.*"²⁷ Several of Biderman's writings were also mentioned in its bibliography.

The imprinting of maternal disruption

The question may be asked as to why so many scholars felt such a compelling fascination for a field of research that implied to inflict serious sufferings—in this case psychological ones—to human guinea pigs misinformed about possible consequences. Acute sequels of World War II and the climate of terror prevailing during the Cold War partially explain the eagerness these scientists showed in seizing promising academic opportunities. In many ways, such collective dynamics is evocative of the post-September 11 era, when distinguished university professors came to support torture in a hopeless bid to strengthen national security. However, such an explication doesn't address the underlying influence of repressed sufferings always predominant in the restaging of the traumatic circumstances that once brought them about. In this case, a particularly dreadful experience of deprivation and isolation is one the medical profession routinely inflicts upon young children from birth on. Following a natural birth, it is well known that the mother and her newborn are spontaneously driven to one another, and that these early moments are crucial to their future relationship²⁸. Taking the opposite direction of this vital impulse, the patriarchal hierarchy has always disrupted maternal intimacy in the name of archaic principles inspired by what Alice Miller called Poisonous Pedagogy²⁹. Since the 1920s, the practice of obstetrics and childcare were directed towards a strict separation between mother and child—as an unfounded measure of

social hygiene and education. In a book very popular in Germany during the interwar years, for instance, Dr Johanna Haarer instructed that the newborn baby be isolated in a separate room after a routine medical examination:

[The] separation of mother and child offers extraordinary educational advantages for the latter. Later, we will speak at greater length about the fact that the child's training must begin directly following birth.³⁰

Pioneer of American pediatrics, Dr Luther Emmett Holt (1855-1924) was convinced of that too. In a leaflet intended for young mothers, published in 1915 by the American Medical Association, he recommended to place the newborn baby "*in a quite darkened room*"—after carefully cleansing his eyes with a saturated solution of boric acid—stressing that he "*should not be put to the breast for five or six hours*"³¹. According to him, the baby should not be nursed more than four times during the first twenty-four hours. Beginning with the third day, he should not remain at the breast more than twenty minutes in all and nursing times should be "*regular by the clock*"—a discipline intended to simplify mothering. Moreover, any expression of suffering caused by such deprivation should be reprimanded in order to break the child's will as soon as possible. In a book first published in 1894 and influential until the 1940s, *The Care and Feeding of Children*, Dr Holt urged parents to fight out their offspring's "*bad habits*" such as sucking, nail-biting, dirt-eating, bed-wetting and masturbation:

Sucking of the [baby's] hand may often be controlled by wearing mittens or fastening the hands to the sides during sleep. In more obstinate cases it may be necessary to confine the elbow by small pasteboard splints to prevent the child from bending the arm so as to get the hand to the mouth.³²

At the beginning of World War II, 55 % of all American women gave birth in the hospital—comparing to only 5 % in 1900—and this ratio would rise to 95 % in 1955³³. Increase of medical intervention in maternity care and the "educational" practices that ensued had the effect of generalizing the utmost anxiety caused by the disruption of the maternal bond—a veritable experience of torture that the child represses instantly to survive. From birth on, babies were deprived of fondling and placed anonymously in nurseries, behind windows where familiar sounds and olfactory sensations no longer penetrated. To be forsaken in such a manner forced them to suppress the intolerable terror to lose all contact with their birthmother, inevitably generating fear of death. Reinforcing its hold on delivering mothers, the medical corporation tested new anesthetics such as scopolamine, a powerful drug inducing a semi-comatose state popularized as "*Twilight Sleep*"—and sometimes hallucination³⁴. Injected intravenously until the 1960s, this drug proved to be very dangerous for the mother as for the child, whose nervous system was damaged. Scopolamine was later tested among other drugs by various governmental agencies like the CIA, with the hope that it would bring about a "truth serum" likely to facilitate interrogation.

The impact of such relational traumas, grown more complex over generations, has influenced psychological researches and their stream of dubious experiments, in which scientific pretension and obsession of control disputed the leading role. In a book on education published in 1928, the founder of the psychological school of behaviorism John B. Watson (1878-1958) considered the newborn baby as a "*lively squirming bit of flesh, capable of making a few simple responses*" that parents begin to fashion from birth like a raw material³⁵. He described long term negative effects from too much coddling in infancy and advised to treat children "*as though they were young adults*":

Dress them, bathe them with care and circumspection. Let your behavior always be objective and kindly firm. Never hug and kiss them, never let them sit in your lap, If you must, kiss them once on the forehead when they say good night. Shake hands with them in the morning. Give them a pat on the head if they have made an extraordinarily good job of a difficult task.³⁶

Since 1916 and later at the head of Johns Hopkins University's Psychology Department, Watson had tested his behavioral theories on babies—notably on little Albert B., then nine months old, who was conditioned to fear rats (fig. 2). Restaging repressed terrors resulting from his own Baptist upbringing, Watson frightened the poor child many times by striking a hammer upon a suspended steel bar. Later on, even the sight of an inoffensive rabbit made him burst into tears³⁷. Dismissed from the Faculty for a scandalous liaison with his young female assistant, the psychologist was recruited by a New York advertising agency where his salary quadrupled and strove to translate into sales techniques the methodology developed by behaviorism. In an advertising campaign created for *Johnson & Johnson* baby powder for instance, he evoked the “purity” of the product and the dangers of infection to infants. By stimulating a fear response on the part of young mothers, he bargained that they would doubt their competence in dealing with their baby's hygiene and use baby powder more frequently³⁸. In 1957, the American Psychological Association awarded Watson the gold medal for his contribution to the field of psychology.

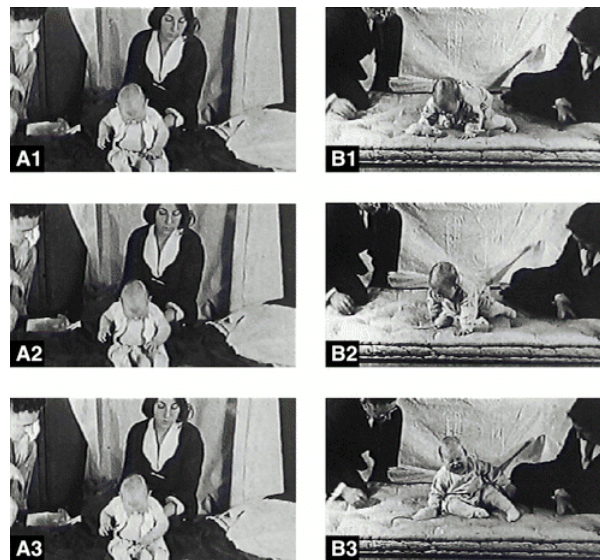


Fig. 2: Film of Watson and Rayner's experiment with nine-month old Albert B. in 1920. (*Annual Review of Neuroscience*)

Opening the Skinner Box

In the wake of Watson's reputation, another behavioral scholar would leave his mark on the discipline and on the post-war American society as a whole: Burrhus Frederic Skinner (1904-1990). As a doctoral student at Harvard in the early 1930s, the young psychologist designed a laboratory apparatus to study animal behavior in response to various specific stimuli. Originally, the “Skinner Box” was composed of an isolated chamber large enough to accommodate a lab rat or a pigeon, of a food dispenser equipped with a lever that the animal might press, of one or more stimulus lights and of a wire floor allowing to “punish” the animal with an electric shock. The classical notion of conditioning implied that a stimulus—pleasant or not—prompted a reaction on the part of any living organism. The singularity of Skinner was to focus on how a behavior could be affected *by its consequences* and on the

measuring of such influence—a process he will henceforth call “*operant conditioning*”³⁹. After starving his subject for some time, Skinner placed it in one of his boxes and “*reinforced*” a certain behavior by dropping a few pellets of food in the dispenser whenever the animal conformed to the desired conduct. This device emulated numerous experiments on which Skinner would eventually mastermind a whole conceptual structure. He observed for instance that by rewarding a lab rat on a random basis, but nevertheless regularly, the rodent was the most prone to reproduce the expected behavior. To Skinner, this observation also explained the domination of a slot machine on the inveterate gambler’s mind and the intensity of all human compulsions. Elaborating his protocols, he came to convince himself that all of what living organisms demonstrated could be deciphered as behaviors obeying a few simple rules—including emotions, language and human thoughts⁴⁰.

One question particularly fascinated Skinner: How human societies could end punishment and change to more efficient means of modeling behavior? Although an agnostic, Skinner knew perfectly well what his life path and scientific obsession owed to the Protestant legacy⁴¹. The dread of hell-fire had left its mark on his young mind as indicated by a personal biographical note written in 1927, a year after he graduated from Hamilton College:

The first religious teaching I can remember was at my grandmother Skinner’s. It was her desire that I should never tell a lie, and she attempted to fortify me against it by vividly describing the punishment for it. I remember being shown the coal fire in the heating stove and told that little children who told lies were thrown in a place like that after they died.⁴²

Some time later, the child went to a magician’s show the final act of which concerned the appearance of a devil. He was terrified and questioned his father as to whether such creature existed—of what the adult unfortunately assured him. Skinner continued:

I suppose I never recovered from that spiritual torture. Not long afterwards I did tell a real lie to avoid punishment and that bothered me for years. I remember lying awake at night sobbing, refusing to tell my mother the trouble, refusing to kiss her goodnight. I can still feel the remorse, the terror, the despair of my young heart at that time...

His father William Skinner was a promising lawyer and owned a law firm downtown Susquehanna (Pennsylvania) where young Fred grew up. Willing to teach his boy the dangers of a criminal way of life, he took him through the county jail connected to the County’s courthouse. Three or four men were sitting there behind bars, begging a few coins to buy tobacco. On another occasion, Fred and his younger brother Eddie were taken to see an illustrated lecture on life at the Sing Sing Prison (New York). In such circumstances meant to educate their offspring, the Skinners covertly reactivated the children’s fear of death and abandonment without recourse to physical violence. This type of control had the distinctive feature of going unnoticed, even to Skinner himself who ascertained: “*I don’t believe this was done to frighten us... In whatever way it was accomplished my ethical and moral training was effective and long-lasting.*”

Except on one occasion when his mother heard a bad word and washed his mouth out with soap and water, Skinner didn’t recall being physically punished by his parents. However, he was terrified by the sole idea of deceiving them and remarked: “*I must have been punished in other ways because my parents’ disapproval was something I carefully avoided.*” Like thousands of Americans who grew up in the early twentieth century, the two brothers were stigmatized by the sophisticated blending of bans and rules to which the upper middle class submitted in the pursuit of social status. Their mother Grace Skinner, born Burrhus, was quite inflexible about good manners, especially towards her first son whom she named after her maiden name:

My mother was always quick to take alarm if I showed any deviation from what she called “right”, but she needed only to say “Tut tut,” or to ask “What will people think?”

In order to escape mistreatment, little Fred learned to conceal his acts and control his emotions to comply gradually with his parents’ demands. This profound distress originating from childhood and the young Skinner’s determination to discipline his own behavior to avert punishment had a decisive impact on his later convictions. Opposing corporal punishment of which he denounced some unfortunate by-products, Skinner would become an impassioned advocate of new methods of behavior modification—notably of “*positive reinforcement*” which he found more efficient as a means of learning as much as of social control⁴³. In *Walden Two*, a controversial fantasy published in 1948, he would even dream of an utopian community implementing the principles of behaviorism to all aspects of daily life, beginning with children raised from birth on by behavioral experts⁴⁴.

Conditioning the child’s behavior

To understand the origins of his intellection, one has to grasp a central concept of Skinner’s theoretical structure, the lack of which would ruin any of his experiments on behavior modification: the notion of “*deprivation*”. As we have seen, the trauma of physical and emotional isolation hits to the core of a child’s desperation and is also correlated with psychology’s contribution in coerced interrogation techniques. While theorizing this concept, Skinner was very likely looking for rationales behind the tortures that he had been himself submitted to as a child, since he would not accuse his parents. Such a devotion to the parental figure might explain why his findings have been so often called to justify reenactments of such tortures on animal or human subjects. In his book *Science and Human Behavior*, Skinner stresses the importance of “*deprivation*” in behavior modification with an image:

It is decidedly not true that a horse may be led to water but cannot be made to drink. By arranging a history of severe deprivation we could be “absolutely sure” that drinking would occur.⁴⁵

Skinner then suggests to work on the “*history of [the] subject with respect to the behavior of drinking water*” and particularly on the means to provoke craving, for instance by water deprivation or addition of salt in food prior to the experiment. Under such precondition, the horse will be headed to the water bowl without a single whip. For the same reason, a starved rat or pigeon will eagerly repeat the gesture that prompted food and soon follow the more complex movement inculcated by the operator. Reinforcement deceitfully described as “*positive*” is thus inseparable of a previous frustration and doesn’t operate without it⁴⁶. Considered as a whole, this particular form of training is a trickier way to punish since the coercion exerted on the living organism is not immediately discernable. And yet, all the while condemning punishment, Skinner recommends the use of this very “*operant conditioning*” to humans. In a sentence that resonates like a sinister promise of later interrogation techniques inflicted on suspected terrorists, he explains: “*A survey of the events which reinforce a given individual is often required in the practical application of operant conditioning.*”⁴⁷ In addition to systematic deprivation and humiliation, let’s recall that exploitation of individual phobias indeed belongs to this awful arsenal. For that matter, Skinner himself considers translating his experiments on war prisoners with no moral concern⁴⁸.

Faithful to the spirit of his time, Skinner could probably barely see what central influence his personal repressed traumas exerted on the course of his life—notably that of early maternal disruption. This unrecognized truth drove him to devote the essential part of his adulthood to keep under control the dire psychological consequences of a tortured infancy

rather than to resolve such a painful issue. In the first part of his autobiography, he soberly reports the circumstances of his coming to life:

My birth was difficult and my mother nearly died—a fact of which I was occasionally to be reminded.⁴⁹

Perhaps Grace Skinner was thinking of this difficult birth when she once told her eldest son that a boy who lived down the street “*had no right to be alive*” because his mother had died when he was born⁵⁰. Whatever she may have blamed on him, the ordeal was most probably terrifying for the newborn baby harshly taken away from the maternal breast, and his parents were to complain of his nightly cries⁵¹. As Dr Holt’s books were very popular in the early 1900s, there is no doubt that his nursing was “*regular by the clock*” and not “on demand”—that is according to his needs. He was later fed a kind of breakfast cereal or baby food called “Force”. Like a resonance of this early training, Skinner’s scientific work will most particularly focus on the best way to condition a lab rat by controlling its nourishment.

As a good Victorian girl, Grace Skinner also strongly condemned a child’s discovery of sensuality that is so important to his later emotional balance. One day at a distance, her attention was called by the neighbors’ children examining each other’s private parts in their nearby garden and she sucked a deep breath: “*If I caught my boys doing that, I would skin them alive!*”⁵² Young Fred soon understood what was at stake and feared to be discovered while masturbating. Around the age of ten, he built his first “box” with a packing case—an ideal refuge into which he crawled. “*Certainly, a “box to hide in” is something most of us have wanted at one time or another, Skinner would later confide. For some reason or other this seemed to be the right place to go when I felt like writing something.*”⁵³ All by himself and rid of parental supervision, he slowly interiorized the dire repercussion of affective deprivations that were forced upon him and that would obsess his adult life and scientific work, by way of consequence.

In 1945, Skinner caused much comment by publishing, in the *Lady’s Home Journal*, the written account of a strange *mise-en-scene* once again illustrating how past traumas resurface in the adult life through the unconscious play of restaging. His article entitled *Baby in a Box* showed an invention of his, intended to simplify mothering: it resembled a huge incubator accessible through a window, equipped with a heating and air-conditioning system (fig. 3). The Skinners put their second daughter Dorothy in this “*baby tender*” as soon as she came home from the hospital—depriving her of all direct contact with her mother. At eleven months, the little girl stayed there most of the time and her father remarked that she so had a separate room at little cost. “*But a more interesting possibility, added Skinner, is that her routine may be changed to suit our convenience.*”⁵⁴ By slightly raising the temperature for instance, Skinner observed that her daughter slept longer; on the contrary, by lowering it a little bit crying and fussing could always be stopped. After three months, Deborah didn’t cry anymore, to her parents’ satisfaction, and began to show considerable energy. At seven months, she was able to grasp the ring of a modified music box with her toe, to stretch out her leg and to play the tune with a rhythmic movement of her foot. Critics nicknamed the apparatus a “*heir conditioner*”—suggesting that the controversial scientist was monitoring her progeny more than the ambience of the box he had locked her into.



Fig. 3: Deborah Skinner in her “baby tender”, 1945. (*Lady’s Home Journal*)

In spite of such reluctance, Skinner’s academic reputation encouraged Americans to transpose his findings to childrearing practices. In his handbook *Dare to Discipline* published in 1970, psychologist and evangelical Christian author James Dobson sings the praises of Skinner’s “*Law of Reinforcement*” and of its presumed effectiveness in the treatment of autism for instance:

[The autistic child] is placed in a small, dark box which has one sliding wooden window. The therapist sits on the outside of the box, facing the child who peers out the window. As long as the child looks at the therapist, the window remains open. However, when his mind wanders and he begins to gaze around, the panel falls, leaving him in the dark for a few seconds... the use of reinforcement therapy has brought some of these patients to a state of conversant, civilized behavior. The key to this success has been the immediate application of a pleasant consequence to desired behavior.⁵⁵

Dr Dobson put forward that immediate reinforcement was also “*a miracle tool*” available to parents in teaching responsibility to their children. Reserving spankings for the moment a child expresses “*direct challenges to authority*”, he recommended to reward desired behaviors according to age, for instance by a piece of candy, a few pence or even a mere word of flattery. “*Verbal reinforcement, Dobson wrote, should permeate the entire parent-child relationship.*”⁵⁶ Skinner’s concept of “*extinction*” suggesting that unreinforced behaviors would eventually disappear also belonged to his conditioning apparatus. Dobson advised such recourse in the case of a three-year-old girl whining because her mother doesn’t pay attention:

In order to extinguish the whining, one must merely reverse the reinforcement. Mom should begin by saying, “I can’t hear you because you’re whining, Karen. I have funny ears; they just can’t hear whining.” After this message has been passed along for a day or two, Mom should show no indication of having heard a moan-tone. She should then offer immediate attention to a request made in a normal voice. If this control of reinforcement is applied properly, I guarantee it to achieve the desired results.⁵⁷

The staggering hardness displayed by Dobson in the face of a child's affective needs was a by-product of the psychic dissociation he routinely activated to suppress recollection of his own pathetic childrearing. The only son of a Nazarene evangelist, he soon learned to "fear the rod" and to conceal expression of emotional distress⁵⁸. Like many of his contemporaries, he found in behaviorism a conceptual frame allowing him to stay loyal to his parents' presumption that children were evil beings. Often comparing them with young animals to be tamed, he didn't see any wrong with imposing unconditional submission by means of behavioral control. From this standpoint, Skinner's radical behaviorism appears to be a sophisticated elaboration of the universal denial inflicted on a child's liveliness for ages. According to this dehumanizing doctrine, sufferings resulting from deprivation of essential needs—like the mother's unconditional indulgence for her newborn, prolonged breastfeeding on demand and the safeness provided by loving, nurturing parents—should be reinterpreted and manipulated to increase an adult's influence on the child in such a way that educational coercion would not readily be noticed. When the nation as a whole gets in tune with its political elite to worship success and to praise the virtue of meritocracy, it is not surprising that a turbulence of repressed frustrations would seek for expression and eventually blow out loud. Collective reenactments resulting from such an effusion of thwarted sentiment are in proportion to the sense of hopelessness that they convey. Their amazing precision offers enlightenment about the potency of underlying processes at work in the realization of human consciousness.

Reenacting the torment of annihilation

During the 1960s, as Skinner's theories triumphed and progressively reshaped American society, young psychologists began to challenge their supremacy. Inflicting electrical shocks to laboratory dogs undergoing various behavioral trainings, Dr Martin Seligman and colleagues discovered for instance that their subjects failed to learn to avoid shock, as Skinner's radical behaviorism predicted, but laid pitifully in the bottom of their cage fearing yet another jolt. They concluded that the animals had been conditioned to such impotency and forged a new concept called "*learned helplessness*"⁵⁹.

This theory was later transposed to human behavior as a new model explaining depression, a state characterized by absence of emotional response. According to these scientists, a person feeling a lack of control over life was probably suffering of "*learned helplessness*" and could acquire more optimistic explanatory styles by experiencing positive accomplishment that stimulate self-esteem. In their most utopian impetus, they envisioned the creation of Optimism Institutes in which basic research on personal control would be conducted and "*then applied, to schools, to work settings, to society itself.*"⁶⁰ Giving way to positive psychology, these findings were widely acclaimed and various programs designed to "*safeguard children against depression and build lifelong resilience*" flourished nationwide⁶¹. In 1996, Dr Seligman was elected President of the American Psychological Association with the widest margin in its history and is currently director of the University of Pennsylvania Positive Psychology Center.

It is therefore with consternation that in July 2005, investigative journalist Jane Mayer of the New Yorker disclosed that the CIA had used Dr Seligman's studies to refine methods of breaking a detainee's will in the War on Terror⁶². Seligman later acknowledged that he spoke for three hours at the Navy base of San Diego in the spring of 2002, before a few dozen of Navy and CIA officials, but emphasized that his talk was aimed at helping American soldiers "*resist torture*"—not inflict it. Nevertheless, among the attentive audience figured notably two military psychologists who were to play an important part in updating the agency's coercive interrogation techniques: Dr John "Bruce" Jessen and James E. Mitchell⁶³.

It was a decisive moment in what George W. Bush would later call “*The Program*” because a Taliban combatant named Abu Zubaydah—held by the government as “*a very senior al Qaeda official*”⁶⁴—had just been captured in Pakistan after a violent raid and the Pentagon called for radical action to make him talk. Mitchell made no secret of his admiration for Dr Seligman and claimed to apply the concept of “*learned helplessness*” to suspects of such utmost importance. When the CIA sent him to Thailand, in the secret prison where Abu Zubaydah had been transferred, the latter was soon stripped off his clothes and thrown in a little confinement box—just like a dog. One FBI agent who had taken care of the wounded prisoner was appalled by such treatment, but Mitchell retorted: “*Science is science. This is a behavioral issue.*”⁶⁵ Jessen joined Mitchell by the end of July and the CIA officially sought the Justice Department’s permission to use ten coercive techniques “*to convince Zubaydah that the only way he can influence his surrounding environment is through cooperation.*”⁶⁶ The circumstantial response of jurist Jay Bybee—who also signed, on this very same day of August 1st, 2002, an infamous legal memorandum redefining torture—show at length what the CIA’s “*enhanced*” methods of interrogation owe to behavioral sciences.

Bybee’s legal opinion first reformulated the agency’s request to move Zubaydah’s interrogation into an “*increased pressure phase*” and use these techniques “*in some sort of escalating fashion, culminating with the waterboard, though not necessarily ending with this technique.*” These ten techniques also consisted of different physical threats, a variety of stress positions, confinement in a box (small or bigger, with or without insects) and sleep deprivation up to eleven days at a time. The detainee’s personal record, his notable fear of insects for instance, originated a few specific procedures. The jurist then elaborated at length on a technique called the “*waterboard*”—a torture inspired by the Spanish Inquisition in which water is poured over the face of a lying captive, thus causing an inescapable sensation of drowning. A later report of the CIA’s Inspector General states that Zubaydah was meted out such treatment “*at least 83 times during August 2002.*”⁶⁷ Interviewed by a delegation of the International Committee of the Red Cross after his transfer to Guantánamo in September 2006, Abu Zubaydah will try to put into words the experience of such an unspeakable ordeal:

A black cloth was then placed over my face and the interrogators used a mineral water bottle to pour water on the cloth so that I could not breathe... I struggled against the straps, trying to breathe, but it was hopeless. I thought I was going to die. I lost control of my urine. Since then I still lose control of my urine when under stress.⁶⁸

Following their imprisonment in the secret prisons of the CIA, Zubaydah and several co-detainees were subjected to various experimental procedures aiming at improving “*The Program*” in its elaborating phase. They were frequently displaced from one detention center to another, sometimes a many hours flight away, which increased sensation of abandonment and hopelessness. Guardians ripped their clothes off on arrival and kept them naked in tiny little cages designed to restrain movement. For many weeks, their food diet consisted of only water and Ensure—a nutrition drink their stomach wouldn’t bear—and all lost much weight. The ambient air was conditioned and always very cold. Deafening “*shouting*” music was constantly playing on an approximately fifteen minute repeat loop, twenty-four hours a day, sometimes replaced by a loud hissing or crackling noise. During waterboarding sessions, always monitored by health personnel, a medical device placed over their finger continually measured their heartbeat and saturation of oxygen in the blood. “*I collapsed and lost consciousness on several occasions, told Abu Zubaydah. It felt like they were experimenting and trying out techniques to be used later on other people.*”⁶⁹ A recent report by Physicians for Human Rights corroborates that experiments were indeed carried out. CIA’s Office of Medical Services health professionals collected information on these human subjects to refine

waterboarding—for instance replacing water with saline solution to allow repeated torture sessions⁷⁰. In the case of one CIA detainee, Khalid Sheik Mohammed, the technique was used at least 183 times in March 2003⁷¹. Later on, he confessed inventing false information in order to make the ill-treatment stop⁷².

The interrogators' compulsion to mortify and dehumanize their captives was beyond belief as the Red Cross report also dreadfully recorded. Such an obsession to avenge showed how ferociously these young soldiers had themselves been offended by their educators and military trainers to the point of losing all sense of personal dignity. Maintained in solitary confinement and permanently shackled, detainees were subjected to extended periods of nudity ranging from several weeks continuously up to several months intermittently—even for interrogation sessions or in presence of female personnel. During prolonged stress standing positions, with their hands chained above their head for several days continuously, the torture victims wore diapers or were forced to defecate on their legs. Clothes were brought when their captors had whatever reason to compliment them, and literally ripped off the next day. Sometimes an improvised collar was placed around their necks and used by interrogators to slam them against the walls.

A dreadful hazing ritual

In November 2008, a Senate report⁷³ will corroborate the leading roles played by Dr Jessen and Dr Mitchell in the development of such degrading procedures and one New York Times journalist will describe them as “*the architects of the most important interrogation program in the history of American counterterrorism.*”⁷⁴ Both of them have long taught at the U.S. Air Force Survival School based at Fairchild near Spokane (Washington). This training created during the Cold War and called SERE—for Survival, Evasion, Resistance and Escape—is supposed to reinforce a soldier's resiliency in case an enemy captures him. During many weeks, young cadets are submitted to increasing levels of stress and those like Marines or future pilots undergoing level C are also trained to resist interrogation. After a man's hunt, they are captured and locked in a mock prisoner-of-war camp designed to provide the most realistic conditions. They are stripped of all personal belongings, maintained in solitary confinement, deprived of sleep by exposure to deafening sounds or music, and even go through or attend waterboarding sessions. Dubious blending of Poisonous Pedagogy and behavioral science, the SERE training doctrine assumes that by submitting young soldiers to the worst of situation they will ever face, but in a gradual and controlled manner, they would somehow be emotionally inoculated and increase their resistance to “real” torture⁷⁵. But in reality, the training itself *is* torture the sequels of which will permanently alter the brain of their young victims. One former Marine familiar with level C training describes what he believes “*resembles more of an elaborate hazing ritual than actual training*”:

While I was in the school, I lived like an animal. I was hooded, beaten, starved, stripped naked, and hosed down in the December air until I became hypothermic. At one point, I couldn't speak because I was shivering so hard. Thrown into a 3-by-3-foot cage with only a rusted coffee can to piss into, I was told that the worst had yet to come. I was violently interrogated three times. When I forgot my prisoner number, I was strapped to a gurney and made to watch as a fellow prisoner was waterboarded a foot away from me. I will never forget the sound of that young sailor choking, seemingly near death, paying for my mistake.⁷⁶

Within a few days, this young lieutenant saw all of his references collapse and became convinced that he was being held in some murky shadow land where regulations non longer applied. “*I was sure that my captors, who wore Warsaw Pact-style uniforms and spoke with thick Slavic accents, would go all the way if the need arose.*” Another former U.S. Air Force Academy cadet, based in Colorado Springs (Colorado), underwent the same training and

became a facilitator. Twenty-five years later he speaks of it as the most intense experience he's ever been through:

I was put into a very small box. I was a varsity soccer player, so I told them not to put me in the box, because it was too small for me to go into and I had knee surgeries and these kinds of things. They put me in anyway... They would play a Rudyard Kipling poem called "Boots" [that] can drive you crazy if it gets continually played on these loudspeakers. They would play Siamese music. They would play a ringing telephone, these kinds of things. And during this, they wouldn't let you sit on the ground. When we were in the big box, they would take you out, put you into stress positions. They would put you on a piece of wood on your knees and make you put your arms back in the air in this time. The whole time, they were hazing you.⁷⁷

The traumatizing experience of Survival School is most probably connected with the emotional detachment some of these graduates would show while inflicting similar abuses on the detainees they had mission to hold or interrogate. As a matter of fact, the collective resignation that allowed torture to spread along the chain of command, and all the way to Bagram or Abu Ghraib, might well originate in this inevitable rite of passage. According to a military study conducted in 2006, 44 % of Marines who had recently served on war zone believed torture should be allowed to save the life of a comrade and only 38 % thought that all non-combatants should be treated with dignity and respect⁷⁸. In a situation where their own survival was at stake, their capacity to disconnect their emotions from the original trauma threw them into reenactment of cruel mistreatments.

Both members of the Church of Jesus Christ of Latter-day Saints, commonly called the Mormon Church, Dr Jessen and Dr Mitchell also had a quasi-messianic confidence in the presumed virtue of SERE training⁷⁹. After their respective services in the Survival School of Fairchild, the former had been named chief psychologist at the Joint Personnel Recovery Agency (JPRA) and the latter worked as a private consultant for the CIA. Shattered by the September 11 tragedy, Mitchell suggested that his former colleague work out a project recommending the use of SERE methods against al-Qaida and pass it on to his superiors. According to the two psychologists, the SERE training had no adverse consequence for the young recruits' health and some of level C techniques could be reverse-engineered and transposed in the context of interrogation. According to an internal report, only a tiny minority of the 26,829 cadets trained from 1992 through 2001 in the Air Force SERE training had to be pulled from the program for psychological reasons⁸⁰. Moreover, the memo signed by Bybee expressed "*the good faith belief that no prolonged mental harm will result from using these methods in the interrogation of Zubaydah.*"⁸¹ Not considered torture by the Department of Justice, they were to find a prominent position in the array of tactics liable to be inflicted on detainees. Dr Jessen was willing to promote participation of SERE instructors to interrogation and drafted an exploitation plan for Guantánamo (GTMO)⁸². In the summer of 2002, the JPRA also offered assistance to the CIA by conducting several trainings in SERE techniques for the agency's personnel.

Following this new paradigm, GTMO was to become a veritable "*Battle Lab*" for new interrogation techniques before their approval by the Pentagon in December 2002. The commandment of the military base set up the first Behavioral Science Consultation Team (BSCT) trained by colonel and senior Army SERE psychologist Louie "Morgan" Banks, a future member of APA's task force on ethics in the spring of 2005. The tasks of BSCTs—which soon would be appointed to all detention centers in Afghanistan and Iraq—included consulting on interrogation techniques, conducting detainee file review to construct personality profiles or else providing recommendation for interrogation strategies. In the course of Bank's training, it was said that "*all daily activities should be on random schedules*" so as to disorient the prisoners⁸³. A list of "*countermeasures*" to deal with

resistant detainees of Islamic background was introduced—for instance a tactic called “*Invasion of personal space by female*—and resort to phobias like fear of dogs was also discussed. However, raising concern about the potential negative side effects of waterboarding and physical pressures used by SERE instructors, Banks recommended not to transpose these techniques to interrogation setting, underlying their limited potential benefits:

If individuals are put under enough discomfort, i.e. pain, they will eventually do whatever it takes to stop the pain. This will increase the amount of information they tell the interrogator, but it does not mean the information is accurate. In fact, it usually decreases the reliability of the information because the person will say whatever he believes will stop the pain.⁸⁴

In November 2002, FBI and Military officials also raised concern over coercive interrogation techniques asserting that some of them could be construed as torture and expose service members to possible prosecution. But the GTMO command was receiving direct order from Deputy Secretary of Defense Paul Wolfowitz and paid no heed to the objection. Several “*enemy combatants*” captured in Afghanistan had been transferred to Guantánamo and one of them, young Saudi Mohamed al Khatani, was suspected to be the twentieth hijacker of September 11. Therefore an interrogation plan was drawn to “*break the detainee and establish his role in the attacks [...]*”⁸⁵. First of all, interrogators would induce and exploit Stockholm syndrome by establishing “*an isolated, austere environment where the detainee becomes completely dependent on the interrogators and the interrogator presents himself as a ‘caretaker’ of the detainee.*”⁸⁶ Then, SERE techniques—including waterboarding—would be used to “*convince [him] that it is futile to resist*” and hopefully elicit the necessary information. Except for a few details, al Khatani’s coercive interrogation would serve as a blue print of future standard interrogation procedures applied not only in Guantánamo, but also in Afghanistan and Iraq until their withdrawal by the Office of Legal Counsel’s new director Jack Goldsmith in December 2003. With the training and dispatching of behavioral teams to various American detention centers engaged in the War on Terror fantasy, tortures and mistreatments inflicted on detainees would spread to amazing proportions.

Such a pandemic is but one of the obnoxious fruits of the prevailing educational doctrine thinking of Man as an evil being and oppressing human consciousness. Taking over from Protestantism, behavior scientists dictate new means of punishment engendering cruel reenactments. On top of social hierarchy and with national security as an excuse, the President then leads the liturgy of a revengeful crusade while pretending to “work for Good”. Speaking at the 2010 Economic Club Annual Dinner of Grand Rapids (Michigan), George W. Bush will admit with a stunning candor: “*Yeah, we waterboarded Khalid Sheikh Mohammed [and] I’d do it again to save lives.*”⁸⁷

Marc-André Cotton

© M. A. Cotton, 3.2013 / www.regardconscient.net

¹Report of the Presidential Task Force on Psychological Ethics and National Security, I. Overview of the Report, June 2005, p. 1, <http://www.apa.org/pubs/info/reports/pens.pdf>.

²Report of the Presidential Task Force on Psychological Ethics and National Security, *op. cit.*, p. 5.

³The U.S. Military Commissions Act of 2006 explicitly deprives any person considered an “*unlawful enemy combatant*” of the protection of the Geneva Convention, notably the right of *habeas corpus*.

⁴Philip G. Zimbardo, Ph.D., *Commentary on the Report of the APA’s Presidential Task Force on Psychological Ethics and National Security (PENS Report)*, p. 5, <http://www.prisonexp.org/pdf/PENS-commentary.pdf>.

⁵Pr. Zimbardo has authored *The Lucifer Effect: Understanding How Good People Turn Evil*, Random House, 2007, in which he relates the Stanford Experiment from a personal perspective.

⁶Mark Benjamin, *Psychological Warfare*, Salon.com, 26.7.06, <http://www.salon.com/news/feature/2006/07/26/interrogation>.

⁷Report of the Committee on Armed Services of the U.S. Senate, *Guantánamo Bay as a “Battle Lab” for New Interrogation Techniques in Inquiry into the Treatment of Detainees in U.S. Custody*, 20.11.08, p. 43, http://armed-services.senate.gov/Publications/Detainee%20Report%20Final_April%2022%202009.pdf.

⁸A detailed analysis of existing relations between APA task force members and the department of Defense is available in Bradley Olson et al, *The American Psychological Association and War on Terror Interrogations* in Steven H. Miles, *Oath Betrayed, America’s Torture Doctors*, University of California Press, 2009, pp. 190-194.

⁹Gerald P. Koocher, Re: Discussion, email of May 6, 2005 to the PENS task force members, http://s3.amazonaws.com/publica/assets/docs/pens_listserv.pdf.

¹⁰In 2005, according to a report of the National Research Council, le DOD allotted 3 % of its \$ 5.7 billion research budget to psychology and the social sciences. Tori DeAngelis, *Report Calls on Military to Double Social, Behavioral Sciences Funding*, Monitor on Psychology, Vol. 39, No 1, January 2008, <http://www.apa.org/monitor/jan08/reportcalls.aspx>.

¹¹Heather Kelly and Dianne Maranto, *APA Science Policy Highlights Value of Research to Military Operations*, The Industrial-Organizational Psychologist, Vol. 41, No 3, January 2004, Society for Industrial & Organizational Psychology, Inc., <http://www.siop.org/tip/backissues/jan%2004/25maranto.aspx>.

¹²Jamie Chamberlin, *A Chance to Serve*, Monitor on Psychology, Vol. 36, No 1, January 2005, <http://www.apa.org/monitor/jan05/closer.aspx>.

¹³“Without doubt psychological warfare has proved its right to a place of dignity in our military arsenal.”

Dwight D. Eisenhower cited par Frank Summers, *Making Sense of the APA: A History of the Relationship Between Psychology and the Military*, Psychoanalytic Dialogues, Vol. 18, No 5, 2008, pp. 614-637.

¹⁴Ellen Herman, *The Romance of American Psychology*, University of California Press, Berkeley, 1995, p. 2.

¹⁵Frank Summers, *Making Sense of the APA*, *op. cit.* This represents about \$ 320 million in current dollars.

¹⁶Alfred McCoy, *A Question of Torture, from the Cold War to the War on Terror*, Metropolitan Books, 2006, Holt Paperbacks, 2007, p. 7.

¹⁷Psychiatrist and psychohistorian Robert Jay Lifton recalled that popular culture depicted communist “brain washing” as “an all-powerful, irresistible, unfathomable, and magical method of achieving total control over the human mind.” Robert J. Lifton, *Thought Reform and the Psychology of Totalism: A Study of Brainwashing in China*, University of North Carolina Press, 1989, p. 4.

¹⁸Allen W. Dulles, cited par Martin A. Lee and Bruce Shlain. *Acid Dreams—The Complete Social History of LSD: The CIA, the Sixties, and Beyond*, Grove Press, 1994, p. 27. For the original, read Allen W. Dulles, *Brain Warfare*, April 10, 1953, p. 3, <http://abuse-of-power.org/foia-mk-ultra-document-archive>, No 0000146077.pdf.

¹⁹Alfred McCoy, *A Question of Torture*, *op. cit.*, p. 31.

²⁰Alfred McCoy, *A Question of Torture*, *op. cit.*, pp. 35-37.

²¹Cited by Alfred McCoy, *A Question of Torture*, *op. cit.*, p. 38.

²²In his introduction to the Symposium, Dr Hebb explained: “The work that we have done at McGill University began, actually, with the problem of brain washing. We were not permitted to say so in the first publishing. What we did say, however, was true—that we were interested in the problem of the effects of monotony on the man with a watch-keeping job, or other task of that sort. The chief impetus, of course, was the dismay at the kind of “confessions” being produced at the Russian Communist trials. “Brainwashing” was a term that came a little later, applied to Chinese procedures. We did not know what the Russian procedures were, but it seemed that they were producing some peculiar changes of attitude. How? One possible factor was perceptual isolation and we concentrated on that.” Philip Solomon and al., *Sensory Deprivation: A Symposium Held at Harvard Medical School*, Harvard University Press, 1961, p. 6.

²³Donald Wexler and al., *Sensory Deprivation: A Technique for Studying Psychiatric Aspects of Stress*, AMA Archives of Neurology and Psychiatry, Vol. 79, No 2, February 1958, pp. 225-233. See Alfred McCoy, *A Question of Torture*, *op. cit.*, p. 40.

²⁴Albert D. Biderman and Herbert Zimmer, *The Manipulation of Human Behavior*, John Wiley & Sons, 1961, http://www.voltairenet.org/IMG/pdf/Biderman_Manipulation_of_Human_Behaviour-4.pdf. Contribution of the US Air Force is mentioned at page viii.

²⁵Lawrence E. Hinkle, Jr., *The Physiological State of the Interrogation Subject as it Affects Brain Function*, in Albert D. Biderman, *The Manipulation of Human Behavior*, *op. cit.*, p. 29.

²⁶*Kubark Counterintelligence Interrogation*, July 1963, p. 2, http://www.ethicalapa.com/files/Kubark_1.pdf.

²⁷*Ibid.*, pp. 88-90, http://www.ethicalapa.com/files/Kubark_2.pdf.

²⁸On that topic, read for instance Arthur Janov, *Love and Nursing: The Transmission of Love through the Breast*, in *The Biology of Love*, Prometheus Books, 2000, pp. 299-303.

²⁹Among these principles figures the blame of so-called « doting love » as mentioned in Alice Miller, *For Your Own Good: Hidden Cruelty in Child-Rearing and the Roots of Violence*, Farrar, Straus and Giroux, third paperback edition, 1990, p. 40.

- ³⁰Johanna Haarer, *Die deutsche Mutter und ihr erstes Kind*, Carl Gerber Verlag, München, 1940, p. 109, quoted by Sigrid Chamberlain, *The Nurture and Car of the Future Master Race*, *The Journal of Psychohistory*, Vol. 31, No 3, Winter 2004, p. 374.
- ³¹Dr Luther Emmett Holt and Dr Henry Shaw, *Save the Babies*, American Medical Association, 1915, p. 6, <http://www.archive.org/stream/savebabies01shawgoog>.
- ³²Dr Luther Emmett Holt, *The Care and Feeding of Children, A Catechism for the Use of Mothers and Children's Nurses*, Appleton & Co, 1894, BiblioBazaar, 2008, p. 133. This book has known sixty-eight English editions between 1894 and 1935.
- ³³Eric William Boyle, *Childbirth and Reproduction*, US History Encyclopedia, <http://www.answers.com/topic/childbirth-and-reproduction>. Read also Richard W. et Dorothy C. Wertz, *Birth in the Hospital*, in *Lying In: A History of Childbirth in America*, Yale University Press, 1989, pp. 132-177.
- ³⁴A *Twilight Sleep Maternity Hospital* was established in Boston in 1914. Read Richard W. and Dorothy C. Wertz, *Lying In*, *op. cit.*, pp. 150-152. In his research on Primal Health, natural birth advocate Dr Michael Odent links “*twilight sleep*” to the developing of the American drug culture of the 1960s, suggesting the influence of obstetrical drugs on the hippie generation. Dr Michael Odent, *Notes on Birthing*, Ways of the Wise Woman, <http://www.waysofthewisewoman.com/dr-michel-odent-notes-obgyn-studies.html>.
- ³⁵John B. Watson et Rosalie A. Rayner Watson, *Psychological Care of Infant and Child*, Norton, 1928, p. 46.
- ³⁶John B. Watson et Rosalie A. Rayner Watson, *Psychological Care of Infant and Child*, *op. cit.*, pp. 80-81.
- ³⁷John B. Watson et Rosalie A. Rayner, *Conditioned Emotional Reactions*, *Journal of Experimental Psychology*, Vol. 3 (1), pp. 1-14, February 1920, <http://psychclassics.yorku.ca/Watson/emotion.htm>.
- ³⁸Kerry W. Buckley, *Mechanical Man: John Broadus Watson and the Beginnings of Behaviorism*, Guilford Press, 1989, pp. 141-142.
- ³⁹Skinner summarized the basic principles of operant conditioning in an undated text, *A Brief Survey of Operant Behavior*, B. F. Skinner Foundation, <http://www.bfskinner.org/bfskinner/SurveyOperantBehavior.html>.
- ⁴⁰On this topic, see notably William T. O’Donohue and Kyle E. Ferguson, *The Psychology of B. F. Skinner*, Sage Publications, 2001, pp. 101-148.
- ⁴¹In the third volume of his autobiography, Skinner writes: “*Much of my scientific position seems to have begun as Presbyterian theology, not too far removed from the Congregational of Jonathan Edwards.*” B. F. Skinner, *A Matter of Consequences*, Knopf, 1983, p. 403.
- ⁴²The following quotes are from B. F. Skinner, *Particulars of my Life*, Knopf, 1976, pp. 60-62.
- ⁴³B. F. Skinner, *Punishment in Science and Human Behavior*, Macmillan, 1953, Free Press, 1965, pp. 182-193, http://www.bfskinner.org/bfskinner/PDFBooksSHB_files/Science_and_Human_Behavior_1.pdf.
- ⁴⁴B. F. Skinner, *Walden Two*, Macmillan, 1948, Hackett Publishing Company, 2005.
- ⁴⁵B. F. Skinner, *Science and Human Behavior*, *op. cit.*, pp. 32-33.
- ⁴⁶In his chapter *Deprivation and Satiation*, Skinner points out for instance, at page 149: “[...] *the effect of operant reinforcement will not be observed if the organism has not been appropriately deprived.*”
- ⁴⁷B. F. Skinner, *Science and Human Behavior*, *op. cit.*, p. 73.
- ⁴⁸In *Science and Human Behavior*, Skinner writes for instance, page 152: “*A drug is administered repeatedly until its reinforcing power becomes great. It is then used to reinforce desired behavior—for example, the behavior of a prisoner of war in answering questions. The drug is then withheld, and the probability of the behavior increases greatly.*”
- ⁴⁹B. F. Skinner, *Particulars of my Life*, *op. cit.*, p. 23.
- ⁵⁰B. F. Skinner, *Particulars of my Life*, *op. cit.*, p. 43.
- ⁵¹Skinner will recall: “*When I was quite small my father and mother took me to Milford, a resort town on the Delaware River, and they were asked to leave the first hotel in which they registered because I cried all night.*” *Particulars of my Life*, *op. cit.*, p. 23.
- ⁵²B. F. Skinner, *Particulars of my Life*, *op. cit.*, p. 64. Given their family name, the remark must have been particularly impressive on the young Skinner.
- ⁵³B. F. Skinner quoted by Daniel W. Bjork, *B. F. Skinner: A Life*, Basic Books, 1993, APA, 1997, p. 21.
- ⁵⁴B. F. Skinner, *Baby in a Box*, *Ladies' Home Journal*, October 1945, http://www.uni.edu/~maclino/cl/skinner_baby_in_a_box.pdf.
- ⁵⁵James Dobson, *Dare to Discipline*, Tynale House Publisher, 1970, 1973, pp. 67-68.
- ⁵⁶James Dobson, *Dare to Discipline*, Tynale House Publisher, 1970, 1973, pp. 76-77.
- ⁵⁷James Dobson, *Dare to Discipline*, *op. cit.*, p. 79.
- ⁵⁸“*Growing up*, explained one of Dobson’s cousins, *there was no going to movies, no wine, no card playing, no buying or even going to lunch on Sunday—many times not even the taking of a Sunday newspaper or the wearing of a wedding band.*” H. B. London, quoted by Dale Buss, *Family Man: The Biography of Dr James Dobson*, Tyndale House Publishers, 2005, p. 17.
- ⁵⁹Martin E. P. Seligman and Steven F. Maier, *Failure to Escape Traumatic Shock*, *Journal of Experimental Psychology*, May 1967, p. 1-9.

- ⁶⁰Christopher Peterson, Steven F. Maier and Martin E. P. Seligman, *Learned Helplessness: A Theory for the Age of Personal Control*, Oxford University Press, 1993, 1995, p. 310.
- ⁶¹Martin E. P. Seligman and al., *The Optimistic Child: A Revolutionary Program that Safeguards Children against Depression & Builds Lifelong Resilience*, Houghton Mifflin, 1995. This book has known fifteen editions.
- ⁶²Jane Mayer, *The Experiment*, New Yorker, 11.7.05.
- ⁶³Jane Mayer, *The Dark Side: The Inside Story of How the War on Terror Turned into a War on American Ideals*, Double Day, 2008, Anchor Books, 2009, pp. 163-164.
- ⁶⁴Gerry J. Gilmore, *Rumsfeld Confirms Capture of Senior Al Qaeda Leader*, American Forces Press Service, 2.4.02, <http://www.defense.gov/news/newsarticle.aspx?id=44203>.
- ⁶⁵Quoted by Ali Soufan, in Michael Isikoff, “We Could Have Done This the Right Way”, *Newsweek*, 25.4.09, <http://www.thedailybeast.com/newsweek/2009/04/24/we-could-have-done-this-the-right-way.html>.
- ⁶⁶Jay S. Bybee and John C. Yoo, *Interrogation of al Qaeda Operative, Memorandum for John Rizzo, Acting General Counsel of the Central Intelligence Agency*, U.S. Department of Justice, Office of Legal Counsel, 1.8.02, declassified on April 6, 2009, <http://www.fas.org/irp/agency/doj/olc/zubaydah.pdf>. Quotes are excerpts of this document.
- ⁶⁷*Counterterrorism Detention and Interrogation Activities (September 2001-October 2003)*, Central Intelligence Agency, Office of Inspector General, 7.5.04, p. 90. Document declassified in August 2009, http://www.gwu.edu/~nsarchiv/torture_archive/20040507.pdf.
- ⁶⁸Abu Zubaydah quoted by the *ICRC Report on the Treatment of Fourteen “High Value Detainees” in CIA Custody*, February 2007, p. 30, <http://www.nybooks.com/media/doc/2010/04/22/icrc-report.pdf>.
- ⁶⁹Abu Zubaydah quoted by the *ICRC Report, op. cit.*, p. 31.
- ⁷⁰*Experiments in Torture: Evidence of Human Subject Research and experimentation in the “Enhanced” Interrogation Program*, Physicians for Human Rights, June 2010, p. 8, https://s3.amazonaws.com/PHR_Reports/Experiments_in_Torture.pdf.
- ⁷¹*Counterterrorism Detention and Interrogation Activities (September 2001-October 2003)*, *op. cit.*, p. 91.
- ⁷²“During the harshest period of my interrogation I gave a lot of false information in order to satisfy what I believed the interrogators wished to hear in order to make the ill-treatment stop... I’m sure that [such false information] wasted a lot of their time and led to several false red-alerts being placed in the U.S.” Khalid Sheikh Mohammed interviewed par the Red Cross, *ICRC Report, op. cit.*, p. 37.
- ⁷³Report of the Committee on Armed Services of the U.S. Senate, *Inquiry into the Treatment of Detainees in U.S. Custody, op. cit.*, pp. 6-7.
- ⁷⁴Scott Shane, *2 U.S. Architects of Harsh Tactics in 9/11’s Wake*, *New York Times*, 11.8.09, <http://www.nytimes.com/2009/08/12/us/12psychs.html>.
- ⁷⁵Journalist Jane Mayer compared SERE training to “a repository of the world’s knowledge about torture, the military equivalent, in a sense, of the lethal specimens of obsolete plagues kept in the deep-freeze laboratories of the Centers for Disease Control.” *The Dark Side, op. cit.*, p. 158.
- ⁷⁶David J. Morris, *Cancel Water-Boarding 101*, *Slate*, 29.1.09, <http://www.slate.com/id/2210059/>.
- ⁷⁷Dr Eric Anders interviewed by Amy Goodman, “The Task Force Report Should Be Annulled” –Members of 2005 APA Task Force on Psychologist Participation in Military Interrogations Speaks Out, *Democracy Now!*, 1.6.07, http://www.democracynow.org/2007/6/1/the_task_force_report_should_be.
- ⁷⁸Kimberly Johnson and Kelly Kennedy, *Almost Half of Survey Troops Say Torture OK*, *Military Times*, 10.5.07, http://www.marinecorpstimes.com/news/2007/05/marine_ethics_070503/. Also read Gen. James T. Conway, *Mental Health Advisory Team (MHAT) IV Brief*, 18.4.07, <http://www.militarytimes.com/static/projects/pages/mhativ18apr07.pdf>.
- ⁷⁹It should be noted that jurist Jay Bybee who signed the infamous “torture memos” is also a member of this church. He served as a Mormon missionary in Chile, after the putsch of 1973 and earned a law degree at Brigham Young University (Utah), the United States’ largest religious college run by the Mormon Church. Randy James, *Jay Bybee: The Man Behind Waterboarding*, *Time*, 29.4.09, <http://www.time.com/time/nation/article/0,8599,1894309,00.html>.
- ⁸⁰Jay Bybee, *Interrogation of al Qaeda Operative, Memorandum for John Rizzo, op. cit.*, p. 5.
- ⁸¹Jay Bybee, *Interrogation of al Qaeda Operative, Memorandum for John Rizzo, op. cit.*, p. 18.
- ⁸²*JPRA Prepares Draft Exploitation Plan in Inquiry into the Treatment of Detainees, op. cit.*, pp. 14-16.
- ⁸³SERE instructor Joseph Witsch, quoted in *Inquiry into the Treatment of Detainees, op. cit.*, p. 45.
- ⁸⁴LTC Morgan Banks, quoted in *Inquiry into the Treatment of Detainees, op. cit.*, p. 53.
- ⁸⁵*Interrogation plan for Khatani*, November 12, 2002, *Inquiry into the Treatment of Detainees, op. cit.*, p. 76.
- ⁸⁶*Ibid*, p. 82.
- ⁸⁷Paul Owen, *George Bush Admits US Waterboarded 9/11 Mastermind*, [guardian.co.uk](http://www.guardian.co.uk/world/2010/jun/03/george-bush-us-waterboarded-terror-mastermind), 3.6.10, <http://www.guardian.co.uk/world/2010/jun/03/george-bush-us-waterboarded-terror-mastermind>.