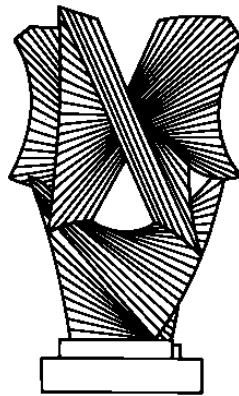


CHICAGO

JOHN M. OLIN LAW & ECONOMICS WORKING PAPER NO. 544
(2D SERIES)

PUBLIC LAW AND LEGAL THEORY WORKING PAPER NO. 341



MAKING WILLING BODIES:
MANUFACTURING CONSENT AMONG PRISONERS AND SOLDIERS, CREATING
HUMAN SUBJECTS, PATRIOTS AND EVERYDAY CITIZENS

Bernard E. Harcourt

THE LAW SCHOOL
THE UNIVERSITY OF CHICAGO

February 2011

This paper can be downloaded without charge at the John M. Olin Program in Law and Economics Working Paper Series: <http://www.law.uchicago.edu/Lawecon/index.html> and at the Public Law and Legal Theory Working Paper Series: <http://www.law.uchicago.edu/academics/publiclaw/index.html> and The Social Science Research Network Electronic Paper Collection.

MAKING WILLING BODIES:
MANUFACTURING CONSENT AMONG PRISONERS AND SOLDIERS, CREATING HUMAN
SUBJECTS, PATRIOTS, AND EVERYDAY CITIZENS

THE UNIVERSITY OF CHICAGO MALARIA EXPERIMENTS ON PRISONERS AT STATEVILLE
PENITENTIARY

Bernard E. Harcourt[†]

“I assume all the risks of this experiment and declare that I absolve the University of Chicago and all the technicians and researchers who take part in the experiment, as well as the government of Illinois, the directory of the State penitentiary and every other official, even as concerns my heirs and representatives, of any responsibility.”¹

I was struck when I came across this medical release at the end of Giorgio Agamben’s book, *Homo Sacer: Sovereign Power and Bare Life*. The human experiments, I would soon learn, began in March 1944 and, indeed, were conducted by doctors at the University of Chicago on prison inmates in custody at the Illinois State Penitentiary at Stateville.² The first batch of human subjects—432 convicts, to be exact—would be deliberately infected by malaria-carrying mosquitoes of the most virulent type under the supervision of physician researchers from the Department of Medicine. The doctors not only oversaw the incubation of the malaria-infected mosquitoes, but also the transmission and inoculation of the parasites, and, for some prisoners, the administration of experimental drugs.

Each of the inmates had consented to be part of the experiment and signed a standard release form. Ernest Beutler, one of the University of Chicago doctors stationed at Stateville, recalled several years later: “I would talk to a group of eight or ten people, and we would tell them what we’re going to do. Do you have any questions? Then there were mimeographed forms and they would sign them. There was a guard there and he would witness the signature. That was it. Then it would be filed.”³

Agamben writes that “The obvious hypocrisy of such documents cannot fail to leave one perplexed.”⁴ That seems right, of course. But as I began to learn more about the experiments, my original sense of outrage turned into morbid curiosity and genuine perplexity—and a haunting feeling that I had to keep looking into this tragic incident.

[†] Professor and Chair, Department of Political Science, and Julius Kreeger Professor of Law and Criminology, University of Chicago.

The rationale sounded so familiar. The malaria experiments were conducted during a period of active military engagement of American troops in subtropical regions and were presented to the Stateville inmates as a vital part of the war effort. The principal investigator, Dr. Alf Sven Alving, a nephrologist at the University of Chicago, would tell the prisoners that “This was the number-one medical problem of the war in the Pacific” and that “we were losing far more men to malaria than to enemy bullets”—as reported by Nathan Leopold, the notorious Stateville inmate of Leopold and Loeb fame, or infamy, who would participate actively in the human experiments as lab technician, as researcher, and as volunteer subject.⁵ The war in the Pacific was raging and medical problems like malaria were a top priority. “Between 1942 and 1945,” a historian reminds us, “American forces reportedly lost some eight million mandays to malaria. In 1943, General Douglas MacArthur reportedly exclaimed, ‘Doctor, this will be a long war if for every division I have facing the enemy I must count on a second division in hospital with malaria and a third division convalescing from this debilitating disease!’”⁶

The country needed volunteers for these kinds of experiments, *human* volunteers because laboratory animals would not suffice. Bodies, *human* bodies were necessary. Chimpanzees could not be used. “They had to use human subjects,” Leopold explained, “*vivax* malaria won’t take in a monkey; they tried it!”⁷ Prisoner volunteers were as badly needed, it turned out, as battlefield soldiers. Leopold explained in his memoirs:

“In some not too farfetched sense our bodies would be the battlefield in a not unimportant war. Shaking the bed with your chills, saturating the mattress with the sweat of a 107° temperature weren’t nearly so dramatic as shouldering a tommy gun, but maybe they were just about as important in the long run. And beggars can’t be choosers. Here was something we could do as well, maybe better, than civilians. A malaria parasite isn’t a bit snobbish. It would just as soon set up housekeeping in a con’s blood cells as in anyone’s. And the time we lost from our jobs while in bed with malaria wasn’t an economic loss to anyone.”⁸

The convicts—at least some of them, reportedly—spoke of themselves and viewed themselves as sacrificial soldiers in the war effort. Leopold referred to them as “good soldiers.”⁹ When they caught malaria, Leopold explained, the fevers were high, and the control subjects were not allowed to have the anti-malarial drugs administered until they had suffered five consecutive days of a temperature not less than 102°. “That 102° was easy; nearly everyone had at least 106° before he started on the drug,” Leopold recounts. “They were pretty uncomfortable boys for a while, but they got the best of nursing care and there wasn’t a single complaint. Every last one of them was a good soldier.”¹⁰

Dr. Alving and Nathan Leopold were rehearsing a way of talking about prisoner experimentation that would pervade the malaria project, the news media, and the

government communications: experimenting on live prisoners was necessary to win the war. So, when the National Research Council lifted its “curtain of secrecy” and publicly announced the malaria research program a year after its inception, in March 1945, the federal agency portrayed the experiments, precisely, as central to the war effort: “These one-time enemies to society appreciate to the fullest extent just how completely this is everybody’s war,” the NRC declared.¹¹ “Instead of being deterred by [the risk],” the Report continues, “many of the volunteers actually invite danger, in order to share in some measure what their friends and relatives are experiencing on the various battlefronts. Upon learning that, through their cooperation, thousands of GI’s might be spared the ravages of the tropical malady, the prisoners respond immediately and enthusiastically.”¹²

The media took the same angle. On page one of a front-page article on March 5, 1945, the *New York Times* presented the experiments as an effort “to determine whether the chemicals can safely be given to our fighting men exposed to malaria and how large a dose can be tolerated by the human system.”¹³ The *Chicago Daily Tribune* portrayed the researchers as “a corps of four army doctors” and added that “The prisoners do this without any promise of reward.”¹⁴ *Life* magazine, in its June 4, 1945 issue—an issue that carried on its front cover an exclusive urging readers to invest in War Bonds—laced its photo-spread with war and enemy motifs. “In three U.S. penitentiaries men who have been imprisoned as enemies of society are now helping science fight another enemy of society,” the article began.¹⁵ The first photo caption read: “Army doctor watches malaria-carrying mosquitoes bite stomach of Richard Knickerbocker, serving 10 to 14 years at Illinois State Prison.”¹⁶

The prisoners, it turns out, were good soldiers—no more, no less than the conscripted men who would put their lives at stake for their country. In fact, I began to wonder, perhaps the prisoners were getting off relatively easy compared to the GI’s who would be sent to fight at Okinawa or land on the Normandy beaches. Was the consent of the prisoners any more or less informed or free than the willingness of these heroic men called for military service and shipped off to land on enemy beaches? Naturally, we don’t seek the informed consent of conscripted citizens. We just draft them into the war and expect that they will fight, willingly. So why wouldn’t we simply “enlist” these prisoners to serve in the war effort as well, with or without their consent—willingly or unwillingly? Surely

malaria parasites and anti-malarial drugs were less dangerous, in a supervised setting, than military combat.

Indeed, the war rationale not only sounded so familiar, it was so very productive—for everyone involved. Leopold himself would rely on it heavily when he sought executive clemency in 1949. “Leopold told the [parole] board of his role as guinea pig for malaria tests for army doctors,” the *Chicago Daily Tribune* reported in April of that year in an article subtitled “Hopes Malaria Test Aid Will Benefit Him.”¹⁷ Like the other volunteers before him, Leopold hoped to get a reduced sentence from his participation in the experiments. And so, “he related his part in the malaria tests and told of how he had two small infected pieces cut from his legs. ‘If the ladies were not in the room, I would be glad to show you the scars, sir,’ he chuckled. At another time he chuckled as he tried to describe for the board how ‘hot a malaria fever of 105 appears.’”¹⁸

A few years earlier, in February 1947, the Illinois Governor, Dwight H. Green, had announced that the 445 convicts who had participated in the war-time malaria experiments would be “given special consideration for paroles or executive clemency.”¹⁹ For prisoners who were sentenced under the indeterminate sentence law, the Illinois Parole Board scheduled special hearings; and for convicts serving longer terms under definite sentencing, terms up to 199 years, the Governor asked the Division of Corrections to consider recommending executive clemency.²⁰ One historian reports that the next governor, Adlai Stevenson, commuted or paroled 317 of the prisoner volunteers, including 24 men convicted of homicide and one convicted of rape. According to the *Chicago Daily Tribune*, “the usual allowance by the parole board for malaria guinea pigs has been two calendar years’ shortening of time.”²¹ Leopold hoped to get his just recompense: “I hope I will get the same reward as the other men in this malarial project. That is all I have to say, gentlemen. Thank you.”²² The war effort was his strongest suit.

For medical research more generally, the war rationale was productive and helped initiate a wave of experiments on prisoners. Allen Hornblum, a historian of human experimentation, observes in an essay in the *British Medical Journal* that “The war years had become the transforming moment for human experimentation in America and particularly for penal institutions as a site of such scientific endeavors. What had once been a small, under-funded, unsophisticated cottage industry had blossomed into a well financed, broad

clinical research programme investigating avant garde procedures, cures, and treatments.”²³ As Hornblum suggest, “The overriding goal was to win the war in Europe and Asia; everything else was secondary, including research ethics and the issue of consent. Millions of American fighters were risking life and limb daily; at the very least, lawbreakers could contribute to the war effort with similar commitment. And they did. One close observer described it as ‘another shining light in the galaxy of wartime achievement’ by imprisoned Americans.”²⁴

The war-time malaria project, in fact, helped put in place a new model for medical research that would ultimately lead to the National Institutes of Health. The idea of combining governmental and private university research and funding dedicated to one particular disease was the formative model for today’s NIH.²⁵ The war rationale was also useful to the Allied prosecutors at the Nuremberg Medical Trial. The accused Nazi doctors at Nuremberg brought up the Stateville malaria project in their defense, and it was vital to the Allied prosecution—through its expert, Dr. Andrew Ivy, and his Green Committee report—to emphasize the consent of the prisoners and the idea that they were engaged in a patriotic act.²⁶ In addition, “From a strictly military perspective, medical R&D was also a success. World War II was the first major US ‘conflict in which fewer of our troops died of disease than of battle injuries and wounds.’ The manufacture and use of [anti-malarial drugs] kept the total number of cases of malaria in the US military below half a million.”²⁷ In this sense, the malaria project was “a productive undertaking.”²⁸ As the *New York Times* editorialized in April 1946, the malaria project was “proof that war accelerates the progress of science and technology.”²⁹

Human experimentation on prisoners also turned out to be a remarkably efficient and productive way of conducting medical research. Think of how convenient it must have been to experiment on captive subjects—available at all times, under surveillance at every minute, controlled and isolated. The researchers knew what they ate, when they slept, where they had been, what they had been exposed to for every waking and sleeping moment of their participation in the tests. They were as close to lab animals—to caged lab animals—as one could possibly hope. The University of Chicago doctors reported in their research, published in 1948, that “Follow-up observations could be made in nearly 100 per cent of the subjects.”³⁰ The experimental conditions could not have been better. Ernest Beutler

remarked, “how would you get people to come back every day for two or three months, hospitalized for two or three weeks at a time? You couldn’t do that with people who were working.”³¹ One doctor familiar with another prisoner study referred to inmates as a “stable group of people” that contributed to the ‘assurance of continuity.’ Researchers, he argued, clearly found it ‘more difficult to work with unrestrained, unrestricted’ test subjects.”³² No doubt.

Today, we no longer run such experiments in the United States—or at least, that’s what I believe or would like to believe. The University of Chicago malaria research ended around the time that the federal government announced it would no longer use federal prisoners for medical research.³³ Since then, we no longer knowingly expose prisoners to harm as experimental subjects in order to further scientific knowledge or national interest. We no longer inflict disease intentionally on sacrificial bodies—even with their full consent. Human subjects committees and institutional review boards now police that domain of research and ensure that human subjects are not treated as laboratory specimen. We do things differently today in the field of human subject research. And this narrative is important to many of us—myself included. The Nuremberg Code and the standards adopted by the American Medical Association are significant protections for these more vulnerable populations, safeguards against potential abuses. It is meaningful that we would no longer experiment on prisoners.

And yet. Though the practices of prisoner experimentation have changed—or at least, I would like to think—the same rationale lives on and continues to thrive. No one today would hesitate, for instance, to conscript young men and women to sacrifice their bodies to the war effort. Every day, in fact, young men and women enlist to serve the country in the struggle against terrorism in the wars in Afghanistan and the surrounding region. We continue to expect that our fellow compatriots will sacrifice their bodies willingly to fight our wars, to protect our country, to secure our homeland.

It suddenly dawned on me that, for each and every one of those men and women who enlist, their willingness to serve the country is fabricated in the very same way that the prisoners’ consent at Stateville had been manufactured. Consent and willingness to serve is fabricated by tying the sacrifice of the body to the categories—those noble categories—of

citizenship, patriotism, and humanity. The Stateville prisoners, I had begun to see, were no different than soldiers landing on the Pacific beaches and fighting heroic battles. Giving their bodies, sacrificing their lives for the nation, for the greater good, for society, for their children, for the war effort—that is what gave meaning to their acts and to the human experiments.

I do not say this lightly and I do not mean, in any way, to demean the heroism of the genuinely brave men and women who sacrificed their lives to liberate Nazi concentration camps. As the son of a Jewish refugee from France and life-time admirer of the heroism at the Normandy beaches, I do not say this in a cavalier manner. But the longer I picked at the scab of prisoner experimentation, the clearer it became that the consent of those convicts was fabricated in the same way as the willingness of our heroes to land on armed beaches—the only difference, perhaps, was that it was achieved in a more disturbing way. It was achieved under conditions of coercion.

Incarceration in Stateville prison had stripped these inmates of much of their humanity and practically all of their citizenship rights. Not allowed to vote, and having no voice in politics or in the war, the convicts had been demeaned, demoted, downgraded for their crimes to something less than men, to inferior compatriots. By volunteering to be infected with malaria, these inmates at Stateville were able to become fully human again, patriots once more. In sacrificing their bodies and health to the war effort, they were able to claim, once again, their citizenship. By their patriotic act of self-sacrifice, they were able to regain their political voice and membership in society.

If consent could be achieved among these men, surely it could be achieved anywhere. The trick was to portray the experiments in the right way, to anoint them properly, to pull on the right strings. I say “trick,” but I do not mean to be disrespectful. For the experiments to work, for the convicts to volunteer, the project simply had to be infused with patriotism. It had to be made part, in everyone’s mind, of the war effort. Even if the prisoners were participating because of their own pure self-interest, in the hope of leniency or commutations, those outside the prison had to place the experiments under the rubric of war—to appease their own conscience, to make them feel good about themselves, to justify infecting someone intentionally with a virulent strand of malaria. Not just for the convicts, but for the physician researchers as well, it was important that they take comfort in the fact

that they were advancing science in the interests of the war effort and humanity. It was important that they be able to view themselves as dedicated public servants finding cures to diseases in furtherance of a just war.

For the project to *work*, for doctors to participate, for men to volunteer, there had to be a dominant framework of sacrifice for the soldiers fighting in the Pacific. And it did work. As Ernest Beutler, one of the Chicago doctors reported, “there was really no reason to try to coerce people or to mislead people because there were always more people who wanted to do this than we really had slots.”³⁴ In manufacturing consent, the doctors, the government, the warden, and the inmates were engaged in a political economy of the body—a productive enterprise. The prisoners’ bodies were needed to find a cure to malaria, just as they needed waves of soldiers on landing beaches to invade foreign territory, or bodies to staff the prison hospital ward, the military hospitals in the field, the amphibian landing vehicles, and the munitions plants. The prisoners were fulfilling a vital role in this larger political economy.

Even more—though far less dramatically—the prisoners’ willingness to sacrifice themselves was produced in a very similar way that we produce willingness in our everyday lives to accept the daily and banal routines of service, work, family life, and citizenship. Like the prisoners at Stateville, we are made to feel the need to sacrifice ourselves—to serve, to abide, to agree—through associations of bodily self-sacrifice with fidelity, citizenship, and patriotism. To be sure, we make our willing bodies in our everyday lives in far more delicate and subtle ways. We use advertising, marketing to shape people’s desires in a far more skillful manner. But again, if it is possible to manufacture consent in the prison, it is indeed possible to produce willing subjects in everyday life. We are made to believe that there is a connection between sacrificing our body and the ideas of citizenship and humanity.

These associations—of bodily sacrifice and country, or beyond that, humanity—are the techniques of governance that produce willing subjects. They help produce experimental subjects in prison, perhaps the extreme space for consent-making. But they also produce daily acts of service to others. Not for everyone, of course, not exclusively, and not for every act. But the idea that we are serving others, especially in times of war or social conflict, is a productive way of speaking—as is the larger ideal of doing things for the betterment of mankind or humanity. The new mother who stops working or goes off her chosen career path in order to care for her children or the family hearth; the very act of childbearing as a

sacrifice of one's body for one's family; the wage-earner who accepts a night shift or takes on a double shift to provide more for the children—all of the compromises that we make in our daily lives and to our ideals of equality or liberty more largely, how often are they placed within the rubric of making sacrifices or compromises for the stability of the larger society, for the good of others?

Are we deluding ourselves? Or are we, on the contrary, simply masking more base desires and selfish instincts? Or are we protecting ourselves from the ugly truth of our unerring self-interest? These questions are, essentially, beside the point. Whether the sacrificial rationale, whether that justification and way of speaking is *actually* the motive of our actions and decisions is not the issue. Surely someone may ultimately volunteer because they believe that their apparent selflessness will benefit them, for instance through leniency or a commutation in the case of the Stateville prisoners; and others may genuinely be motivated by a desire to do good for others. That is, however, beside the point.

What is significant is that this way of speaking frames and envelopes our projects, desires, and daily decisions in such a way as to make them more acceptable. The Stateville malaria experiments became possible, conceivable, because of the war rationale. It could not have been marketed as a way for the convicts to get out of prison faster. It could not have been presented as a pure financial exchange.

We justify things to ourselves in this way—ordinary decisions, everyday choices, as well as life altering steps like catching malaria. The sacrifice of the body for the common good is a productive way of thinking and talking. It produces willing bodies. And so, when the United States invaded Iraq in March 2003, service to the nation framed the debate—on every side. Not only among those who volunteered to enlist; but as well among those opposed to the war. For instance, as you may recall, there was a lot of talk that those who opposed the war had to be careful how they expressed their dissent so as not to undermine American soldiers who were risking their lives in battle. Many commentators argued that internal opposition to the war could harm combat morale and undermine the war effort. It was important to be careful about what you said and did, even if you did not agree with the War in Iraq. There were men and women sacrificing their bodies for the greater good of the country. Service to one's country permeated the choices they made and formed an integral part of governance.

In the end, those Stateville prisoner volunteers, they too were good soldiers, and in the process, they became, once again, upright citizens. Volunteering to catch malaria redeemed these men. As Leopold suggested, the experiments “put the administration and the cons on the same side of the fence, partners in a common endeavor.”³⁵ In a symbolic way, these convicts had regained their citizenship and demonstrated their loyalty.

The “first bite day” was March 8, 1945.³⁶ The procedure took longer than expected. The plan was to bite sixteen prisoners on that first day, and “each man had to have the same number of first bites, second bites, and third bites.”³⁷ Each mosquito was in a little cylindrical cage that was placed up to the skin of the inmate: “You took a mosquito, placed its cage on A’s forearm and watched carefully until the mosquito bit him. Then, when you were sure that the mosquito had inserted its proboscis well under the skin, but before it had had a chance to fill up with blood, you lifted the cage gently from A’s arm and placed it on B’s. Here, too, the mosquito must have a chance to bite, but not to fill up with blood. Then you placed the cage on C’s arm, and here you let the mosquito ‘bite out’—drink its fill.”³⁸

Easier said than done, naturally. Many of the mosquitoes did not cooperate, others were not sufficiently infected after dissection, and so it took until 3 a.m. that first day to get the job done—with all the doctors and researchers gradually leaving, eventually letting Nathan Leopold and one doctor finish to the last bite.³⁹ In all, each of the inmates “received the bites of ten infected mosquitoes.”⁴⁰

The prisoners at Stateville had not been chosen at random. They had to satisfy certain criteria: they had to be white and in good physical health, and they had to be confined for 18 or more months so that the follow-up observations could be made.⁴¹ The subjects were nearly all between the age of 21 and 40. And they had to have had a medical or genetic history that excluded prior exposure to malaria or certain immunities. As the doctors explained, “Volunteers who had lived in known malarious areas, or who gave a history suggestive of previous malarial infection, or who belonged to one of the colored races, were excluded in order to minimize the factors of acquired or natural immunity.”⁴²

Each candidate underwent a full physical examination and gave their medical history, and were routinely subjected to the following battery of exams:

complete blood count, urinalysis, urinary urobilinogen concentration, phenolsulfonephthalein excretion, cephalin-cholesterol flocculation, serum bilirubin, blood nonprotein nitrogen, blood Kahn, blood typing, chest x-ray, electrocardiogram, and, where indicated, erythrocyte sedimentation rate.⁴³

The mosquitoes were also carefully selected and cultivated. *Anopheles quadrimaculatus* mosquitoes, they were carefully infected with the strand of malaria—the Chesson strain of *P. vivax*—by being allowed to feed on the psychotic patients at the Manteno State Hospital in Manteno, Illinois, and on Stateville prison volunteers—and not on any, but on those patients

“whose gametocyte densities were such as to insure a reasonably high incidence of infection in the biting mosquitoes.”⁴⁴ These mosquitoes were then “incubated” at the “mosquito insectory at the University of Chicago.”⁴⁵

Once the mosquitoes had bitten the prisoners, they were then dissected and studied under the microscope to determine if their salivary glands had the sufficient degree of infection.⁴⁶ The process was fascinating and is described in obsessive detail by Leopold in his memoirs.⁴⁷ There were then prophylactic tests and curative tests administered on the prisoner subjects in order to assess the effectiveness and toxicity of new anti-malarial drugs.

The same kind of experimentation would take place in the 1960s, including infecting the prisoners with new resistant strains of malaria that were first observed in South Viet Nam in 1962.⁴⁸ “Some of the volunteers are infected to test the effect of various drugs on malaria. Others are infected to become ‘carriers,’ that is, to carry the disease for a period of time so mosquitoes can be infected by biting them.”⁴⁹ As in the 1940s, the inmate volunteers also staffed the research during the Vietnam War: “the project has a permanent 18-man inmate staff. It includes four nurses, six laboratory technicians, two clerks, four equipment maintenance men, and two men who run the insectory—the hot, humid room where mosquitoes are raised.”⁵⁰

The war rationale also proved exceptionally productive during the Korean and Vietnam Wars. The warden of Stateville prison, Frank J. Pate, told reporters in 1966—in the middle of the Vietnam War—that prison inmates volunteer even more enthusiastically “during wartime.”⁵¹ “During World War II, Korea, and now, the inmates have been more receptive to the project than they are during years of peace,” Warden Pate stated.⁵² “I think it gives these inmates a great chance to do a service to humanity. It’s definitely a morale factor because it increases their self-esteem.”⁵³

Not surprisingly, it was precisely during the Vietnam War that the malaria project got renewed attention. “The project has taken on renewed urgency recently because of drug-resistant malaria in Vietnam and Southeast Asia,” Stuart Kaminsky of the Office of Public Relations at the University of Chicago reported on March 4, 1968.⁵⁴ “The reaction of the inmates to the project is enthusiastic support. As their reason for participation, they frequently cite having relatives in Vietnam or the desire to do something useful.”⁵⁵

One inmate, Earl Hanson, who worked in the hematology lab at Stateville, reportedly told the Office of Public Relations at the University of Chicago that “I think they’re depending on this work more and more now with all the fighting going on in Viet Nam.”⁵⁶ Another inmate, Barrett Ingram, reportedly told the OPR from his hospital bed, “I wanted to volunteer because I felt I was doing something good, something for the boys overseas fighting.”⁵⁷ “I read quite a bit about the project, and when they asked for volunteers, I did it as a Good Samaritan, to try to prevent malaria from getting worse.”⁵⁸

The war theme was prevalent throughout. According to the OPR, “Other inmates participating in the project report motives ranging from helping humanity, to impressing the parole board, to escaping boredom. Some have relatives serving with the armed forces in Viet Nam.”⁵⁹ Warden Pate himself emphasized the connections to Vietnam. “I’ve been through the South Pacific, and I have some first-hand knowledge of what malaria can do to a man,” he told the Chicago media folks.⁶⁰

The malaria experiments were portrayed as simply indispensable to winning the Vietnam War. “According to Dr. James V. McNamara, Research Associate at the University [of Chicago] and a Major in the U.S. Army, malaria cannot be eradicated in Vietnam or elsewhere with our present knowledge of the disease,” the OPR reported. “In Vietnam, according to Dr. McNamara, the problem is further complicated by alien strains of malaria being carried into South Vietnam by infected North Vietnamese regular army soldiers. Estimates have been made, he continued, that if Americans were to be in the field in Vietnam for three months, 90 per cent would have malaria.” The University of Chicago underscored the importance of its research to the war effort: “The University of Chicago-Army Medical Research Project has developed a drug which is now being tested in Viet Nam against the resistant forms of malaria now affecting American servicemen there,” opens their press release dated March 12, 1966.⁶¹ Highlighted in the press release, were the contributions during World War II and “for the treatment of returning Korean war veterans exposed to vivax malaria.”⁶²

I am by no means suggesting that the war rationale was what truly made any of the prisoners volunteer, nor that it was the only way in which the experiments were framed. The war discourse dominated to be sure, but there were many other dimensions to the Stateville malaria experiments and many other ways that the project would be discussed. There were certainly other reasons why an inmate might volunteer. There was, for instance—and unmistakably—a racial dimension. At Stateville, in 1944, the inmates were not chosen at random. They were all white—more specifically, they were “white male” volunteers between the ages of 21 and 40, with longer prison terms. Inmates who belonged to the “colored races” were not allowed to participate “in order to minimize the factors of acquired or natural immunity.”⁶³ There was a certain racial prestige in being allowed to be infected by malaria-carrying mosquitoes.

There were also financial incentives: each man who volunteered was offered somewhere between ten and one hundred dollars to participate in the experiments.⁶⁴ That may have seduced some of the inmates—though it also, at least reportedly, disturbed others. Leopold was among the latter: “To this a number of the early volunteers, including me, objected strongly. We did not want to be paid for undergoing the experiment; we wanted to be volunteers in the literal sense of the word.”⁶⁵ Leopold took the issue up with the head researcher, Dr. Alving, who argued that compensation was necessary to make the contract legal, that the money was available and he wanted the inmates to receive it, and that no one

would think they were volunteering for the money. This, Dr. Alving suggested, would be crazy. If they were doing it for the money, he argued, “[they] ought to have [their] heads examined.”⁶⁶ And anyway, he added, they can give it to charity if they desired. That’s exactly what Leopold did: “The payment was made in two parts; as soon as the checks arrived I endorsed them and sent one to the Red Cross and the other to the Salvation Army.”⁶⁷ But others, perhaps, did it for the money.⁶⁸

For some, it was an opportunity to have contact with women—indeed, for some, the first contact they had had with women in years: “for the first time there were several ladies on the floor—nurses and laboratory technicians. That was an innovation, indeed; many of the fellows had not been that close to a woman for years, and everyone felt a little shy and strange.”⁶⁹ Leopold notes: “the first week the nurses were present everyone’s blood pressure rose.”⁷⁰ Leopold would have known, he was the lab technician and took all the vitals. “The average rise was twenty points.”⁷¹

The more general point, of course, is that being on the hospital ward may well have been more entertaining and enjoyable than being locked down in general population. As Ernest Beutler noted, “It was really probably more pleasant for them to be in this hospital unit, where they could play cards with their friends, than being on the rock pile or the laundry or whatever else their work assignment would be.”⁷² Many of the inmates, like Leopold—or so he reports—also got an intellectual charge out of the experiment. At the suggestion of Dr. Alving, Leopold began setting up a microscope on bite day for the volunteers to see what malaria (more specifically, the sporozoites and trophozoites) looked like. “This little lecture and demonstration became a standard part of bite day, and nearly all the fellows were intensely interested.”⁷³

Norval Morris, professor and dean of law at the University of Chicago, spent a significant amount of time visiting and studying prisons, including Stateville. He knew prisoners well, and recognized the myriad motivations that could lead an inmate to volunteer in such an experiment:

Prisoner motivations, in fact, are many and complex. Machismo, which leads prisoners to exaggerate the risks they take, is one. The altruism of community service is another, carrying with it for the prisoner the assurance that he is as virtuous as those outside who have banished and rejected him. And if he sees himself as having wronged others by his crimes, here is a chance of expiation, of making restitution. Participation in experiments also provides an immediate temporary escape from the pervasive fear, endemic brutality and total anonymity of the typical American mega-prison. (When we visited Stateville, nearly 40 men were in solitary because they had asked to be—for their own safety.) Other motives are obvious and more prosaic, the hope of earlier release, the reward of payment.⁷⁴

In truth, there is no good reason to believe that any one of the prisoners at Stateville was *really* motivated to volunteer because of the war or patriotic sentiment.

By the same token, it is important to emphasize that prisoner experimentation more generally has not always, nor only been discussed in terms of the war effort. By the time the malaria research started at Stateville in 1944, prisoners in this country had been used in experiments involving dengue fever, gonorrhoea, gas gangrene, and tuberculosis—to name just a few⁷⁵—as well as in more esoteric medical research, and in all this the rationales had varied. Some experiments were so eccentric as to defy rational discourse entirely. Charles Wittmann-Todd, a graduate student at the University of Chicago, is researching the experiments of Dr. L. L. Stanley, the resident physician at San Quentin Prison in California, who was “transplanting testicles from recently executed convicts to senile and devitalized men” in the period 1918 to 1922.⁷⁶ Under Dr. Stanley’s supervision, “Hundreds of San Quentin inmates received injections of animal testicular substance; some received a piece of ram’s testicle the size of a silver dollar, which was implanted into the scrotum or abdominal wall.”⁷⁷

Other experiments occurred entirely during peace time, and had no tie to a war effort. In fact, prisoner experimentation flourished during peace time. As the historian Allen Hornblum documents, there was “tremendous expansion in prison experimentation in postwar America. Federal prisoners, for example, were enlisted in a broad range of clinical studies that included athlete’s foot, histoplasmosis, infectious hepatitis, syphilis, and amoebic dysentery, and in additional malaria experiments. State prisoners were considered to be equally valuable and were soon utilised for studies of syphilis, malaria, influenza, viral hepatitis, and flash burns ‘which might result from atomic bomb attacks.’”⁷⁸

And in other human experiments—inside and outside the prison—the subjects themselves often did not even know they were being experimented on. That was certainly the case in the Tuskegee syphilis study (not a situation involving prisoners) which was well under way in 1944 and would continued through 1972. There, the African-American male subjects were not only denied the opportunity to consent, but were actively withheld information and in some cases prevented from accessing treatment elsewhere. They were never given the opportunity to need a story.

Many of these studies—wartime and post-war—put the volunteers at serious risk of health. According to the official story and the news media, none of the Stateville prisoners suffered fatal injury as a result of the malaria experiments. According to the *Chicago Daily Tribune*, “None of the volunteering convicts died but many were made violently ill as a result of their infection with vivax malaria and subsequent treatment with drugs then in the experimental stage.”⁷⁹ Leopold’s memoir, though, tells a slightly different story and does include one inmate death directly associated with the testing of anti-malarial drugs.⁸⁰ For those inmates who didn’t die, the experiments were extremely painful. The malaria was a virulent strain, one of the most potent—the Chesson strain of *Plasmodium vivax* malaria. When Leopold had it, he claimed, it caused headaches “unlike any other headache in the world. You think from moment to moment that your head is going to split, and you wish to gosh it would!”⁸¹ As Nathaniel Comfort notes, “No longitudinal study was performed on the

Stateville prisoners to assess the long-term effects of these regimens. Heart failure is now a known side effect of some synthetic antimalarials. Leopold suffered two heart attacks while on the malaria project and eventually died of heart failure in 1974.”⁸²

Other prisoner studies seemed even more risky. Hornblum reports that “The Ohio state prison system, for example, allowed researchers from the Sloan-Kettering Institute for Cancer Research to inject over 100 inmates with live cancer cells. The study was designed to examine ‘the natural killing off process of the human body’; inmates were informed they faced ‘no grave danger. Any cancer that took would spread slowly ... and could be removed surgically.’”⁸³ Another prisoner experiment Hornblum reports involved a certain Dr. Austin Stough, who engaged in wide-ranging series of drug tests and blood plasma projects in Oklahoma, Arkansas, and Alabama, which “resulted in inmate volunteers receiving the wrong blood type and as many as 30 inmates a month contracting viral hepatitis.”⁸⁴

I don’t want to be misunderstood. The war rationale may not have motivated any of the Stateville prisoners and was not present in all prisoner experimentation. It would be far too simple to attribute the Stateville inmates’ willingness to sacrifice their bodies to any single factor such as the war effort—just as it would be far too naïve to characterize the prisoners’ willingness as “obvious hypocrisy” or to cast doubt, with Agamben, on the very *possibility* of consent.

What matters, really, is what sounded right: what sounded like a good reason for catching malaria. And here, no doubt, the war effort was one of the better, more productive stories. For the Stateville inmates, for the doctors, for the government, the war effort made for a good story. For some inmates, perhaps, there was a genuine element of patriotism and fidelity—and perhaps also of guilt, maybe, at not being on the front. Other men, it seemed, were free to volunteer to die for their country. Other men could prove their commitment and become heroes by sacrificing their bodies on the landing beaches of Normandy or Okinawa. Other men could give themselves to their country and to the greater good of humanity. But more importantly, the narrative provided a means of fabricating willing bodies. It provided a way to present the malaria research as a fully legitimate enterprise.

Could the prisoners at Stateville then consent, *really* consent to catch malaria? The question raises conventional ethical issues of informed consent under coercive conditions. Can a prisoner *ever* consent? Can anyone in a coercive situation ever consent to anything? Is it better to simply avoid the ethical dilemma entirely because of the moral hazard and preclude the very possibility of consent? Perhaps. But there is, in truth, no easy or absolute way to resolve these complex ethical puzzles.

Norval Morris, a true humanitarian, someone who dedicated much of his life to improving prison conditions and who was himself a genuine humanitarian penal reformer, took the position that prisoners *should* be allowed to volunteer for medical research under properly supervised conditions—that there should be no flat ban on human subjects

research in prisons. “The free consent of the unfree *can* be protected,” he urged in the op-ed pages of the *Wall Street Journal* in April 1974.⁸⁵ “[R]esearch in prisons can with appropriate safeguards make a useful contribution to the prisoner’s welfare, to reform of the correctional system and not least to medical progress.”⁸⁶

Morris emphasized that prisoners *want* to participate, or at least say they do and often say so vehemently. “For example, last April, 96 of the 175 inmates of the Lancaster County, Pa., prison wrote to the local newspaper protesting the state’s decision to stop all medical experiments on state prisoners. The disgruntled prisoners made the point that they were unharmed and that this project allowed them to pay off their fines and court costs.”⁸⁷

Beutler agrees: “it’s my feeling that it’s really wrong not to allow prisoner volunteers to participate in research projects. I think this is just part of the politically correct over-reaction now to biomedical ethics. I think it’s perfectly all right to use these people. Obviously, they shouldn’t be forced to do it, but there are people who want to do it, and they’re an ideal population for studying certain kinds of problems.”⁸⁸

Do we, in effect, harm or demean prisoners by denying them the ability to consent? Do we fail to treat them as fully human? Should they not be allowed to make judgments about their own well-being, choices about what they value most—their health or their finances, or their likelihood of a commutation? Should they not be entitled to game the system like everyone else?

And in the end, they did sign consent forms—for whatever that is worth. Ernest Beutler, one of the Chicago doctors at Stateville, emphasizes: “Nowadays, when I talk about prisoner volunteers, people sort of wink and sneer as if these people weren’t really volunteers. But again, people didn’t force prisoners to undergo medical experiments. And they really were volunteers. They actually signed informed consents that were witnessed.... There were less constraints, but certainly nobody was ever forced to do this.”⁸⁹

Nathan Leopold recalls that the Nazi defendants at the Nuremberg medical trials brought up the Stateville malaria project as an example of involuntary human experimentation. “That was absolutely false,” Leopold adamantly states. “The docs explained in great detail to each and every volunteer before he was used just what it was planned to do. We were told that there was danger, that we might be sick, that we might die. No man was coerced or even persuaded. If anything, the Army officers threw their weight the other way. Every man who went on the project at Stateville did so because he wanted to, almost because he insisted on it.”⁹⁰ At least that was how Leopold felt: “I really had to twist their arms to get my own chance to go on the project.”⁹¹

The way Nathan Leopold tells it, he not only consented, he fought to catch malaria. From the moment he first heard about the malaria experiment, Leopold desperately wanted to volunteer—or so he says, but emphatically and repeatedly. In his memoirs, *Life plus 99*

Years, Leopold insists that he not only wanted to participate in the experiments, but that he desperately wanted to catch malaria. From the minute he heard it was possible.

Leopold had been a prisoner for several decades by the time September 1944 rolled around, and had earned a respected position in the penitentiary. With his intelligence, social upbringing, and motivation, Leopold had held several trusted positions at the penitentiary, and was considered by the prison authorities and by his peer inmates as a voice of reason. At the time he first met Dr. Alf Alving of the University of Chicago, in September 1944, Leopold was a trustee working in the X-ray room at the hospital of the penitentiary. And it was as a trusted spokesman that he was approached.

The United States government was interested in running some human experiments to test malaria drugs, Leopold and a handful of other inmates were told. “This was the number-one medical problem of the war in the Pacific,” Dr. Alving said, “for we were losing far more men to malaria than to enemy bullets.”⁹² The question to Leopold and his small cohort was whether inmates might volunteer. Leopold had no doubt:

I had been looking around for a way of being useful in the war effort; this was made to order. Further, I had heard quite a number of fellows express themselves; they'd feel as I did, I knew. Then, in general, the cons have never been slow in doing their part. I asked Dr. Alving how many volunteers he contemplated using, and he answered that he might need as many as two hundred. I told him that I was confident there would be no difficulty in getting twice or three times that number.⁹³

About two weeks later, the prison authorities asked for volunteers and the very first day 487 inmates volunteered.⁹⁴

Leopold himself volunteered, and was thrilled to no end to be part of the malaria research project. “I wanted to work on the project so bad I could taste it,” Leopold recalls.⁹⁵ “Working on the project was one of the biggest breaks I’ve ever had in my life,” Leopold would write.⁹⁶ “The coming of the malaria project was probably the most stirring and exciting event of my prison term,” he added.⁹⁷ It was “providential”: “Here, without any question, was a real chance to be useful. This time a fellow could be sure it wasn’t mental mud pies he was making. This was a real problem, a real challenge.... Here was something we could do as well, maybe better, than civilians.”⁹⁸

Leopold had special reasons to enjoy working on the project. He was a bright man and loved to learn and be with other intelligent people. “You were working shoulder to shoulder with wonderful people,” Leopold explained.⁹⁹ The young doctors assigned to the research team, Leopold found, were “brilliant,” “among the finest people I’ve ever met.”¹⁰⁰ They’d been “picked for their brains” and they were, in his own words, “the kind of guys you’d want to have for younger brothers.”¹⁰¹ “Not only were they very pleasant to be around; they were always willing to take time out to explain something you did not understand. And that was plenty; I was learning more new things than I ever had before. This was a completely new field to me: I had a vague idea that perhaps malaria might be a

bacterial disease, and I hadn't looked through a microscope since I was a kid in high school."¹⁰²

"For me it was," Leopold explains, "a liberal education, especially as all the doctors were most generous in explaining all the details."¹⁰³ Leopold bought medical text references and taught himself about malaria and heart disease. He also, in fact, engaged in research and purportedly wrote a research article on measurement of parasite concentration, which Dr. Alving recommended be published in the *Malaria Bulletin*.¹⁰⁴

But he also wanted *desperately* to catch malaria. Not just to work on the experiment, but to *be a human subject*. When the experiment was enlarged to include infecting volunteers with malaria, Leopold fought tooth and nail to be among the first. "This was what I wanted for myself," Leopold explains.¹⁰⁵ "I went to Captain Craige and asked if I might not include myself in the first group to be bitten by malaria-infested mosquitoes."¹⁰⁶ No luck, at least not at first. He was too valuable to the researchers in his capacity as research assistant and all-around supervisor of the operations.

Even after Leopold had seen his peers suffer through temperatures of 106° or 107°, shaking in bed with chills, saturating their sheets with sweat, he *wanted* to get infected. "Having seen the actual workings of the experiments with malaria and having infected other men myself," Leopold reflected, "I was more eager than ever to become a subject. I went to Captain Craige and renewed my plea to be allowed to be a member of the next bite group."¹⁰⁷ Still no luck, apart from a cooked up experiment involving the ingestion only of anti-malarial drugs.¹⁰⁸ But Leopold was still not content. "I wasn't satisfied. I was determined that I was going to have malaria too—the real thing. But I'd have to bide my time now."¹⁰⁹

When a specially toxic strand of antimalarial drugs was being tested—a family of drugs called 8-amino quinolines that had been known to be very dangerous to patients—Leopold jumped on it. "This was one of the times I was clamoring to be used as a volunteer."¹¹⁰

"My desire to take malaria myself continued to grow, and early in June I determined to force the issue."¹¹¹ So he approached the medical captain in charge: "This is the seventh time I have volunteered," he emphasized. "I want very much to take malaria; I feel very strongly about it. In fact, Captain, if you can't see your way clear to giving your consent, I'm afraid I'll have to quit my job here, go to the coal pile, and volunteer from there. Then you'll have to take me."¹¹² On that seventh try, Leopold finally succeeded.

"I was jubilant," Leopold reported.¹¹³ He had just volunteered to have the glands of malaria-infected mosquitoes injected subcutaneously in his thigh on two subsequent days; to have his thighs then cut open and a tissue the size of a silver dollar then removed from each thigh and inserted into another man's; and then to suffer through temperatures of 105° continuously over five days. "I carry a scar on each leg to this day. They're not very pretty, but I'm rather proud of them."¹¹⁴

Leopold loved being a human subject, he said, because he finally could be of use to society and no longer despised. “I knew no one would hate us for what we were doing here,” he explained.¹¹⁵ “If we did this job and did it well, it might conceivably soften public opinion with respect to convicts. It might even help us here and now.”¹¹⁶

Maybe Leopold was lying or embellishing in his memoirs. Nathaniel Comfort at Johns Hopkins University, who has written about the Stateville malaria research, refers to Leopold, in passing, as a “savvy manipulator.”¹¹⁷

Nathan Leopold, savvy manipulator of the system that he was, understood that the surest route to freedom was to convey to the prison and to the public not only that he was no longer dangerous but that he was positively useful. Interviews, memoirs, public-relations statements, and newspaper articles all portray the Stateville project in a positive light, as putting the prisoners to good use. The public nature of such statements supports ... [the idea that] we read them as persuasive rhetoric rather than literal truth.¹¹⁸

Persuasive rhetoric, indeed. Leopold was keenly aware of that himself. And only a few years later, in 1949, he would base his plea for clemency on his participation in the Stateville malaria experiment. Leopold never denied that self-interest played an important role in his decision to participate in the malaria experiments. Although he knew there was no assurance that it would benefit him or other inmates, Leopold could not put it out of his mind: “the possibility did exist that there would be time cuts. And that was a chance I could not afford to miss.”¹¹⁹

But in the same breath, Leopold asserted his genuine patriotism:

I have said before that as a boy of fourteen I was bitterly disappointed that I was too young to take part in World War I, in which all three of my brothers saw service. And the advent of World War II increased greatly the punishment of being in prison. I wanted very badly to do my bit. Patriotism is not highly thought of among cons. I think way down deep a pretty large percentage are, in fact, patriotic, but somehow, in the face of the prevailing bitter cynicism, it's an emotion you don't dare mention aloud.... O.K., let's face it: I was and am patriotic; I love my country. Giving blood to the Red Cross, X-raying the men being considered for induction into the Army, helping register the fellows for the draft—all these I enjoyed because they gave me some slight sense of participation in the common effort. But they were such little things. The moment I grasped the scope of what was being attempted, I knew that being a malaria volunteer represented by far the best opportunity to do my bit in this thing. That's why I was so determined to be a subject; that's why I was willing to battle the whole staff and take a chance on losing my job in order to ensure that I would be allowed to take part. Opportunities like that come once in a term in prison; they have to be grasped when available.¹²⁰

Leopold knew he would be taken for a manipulator. “There would no doubt be snide references to my participation in the experiments as a ‘play for sympathy,’” Leopold

recognized. But he didn't really care. He knew some people would give him credit nonetheless. "They couldn't get away from the cardinal fact that I was participating, and I was sure no one would hate me for that. I felt that I had some reason to hope that public opinion in my regard might be softened to some degree."¹²¹

In a passage in *The Things They Carried*, an autobiographical novel about Vietnam, Tim O'Brien, the author, is on the brink of fleeing to Canada to avoid the draft, and invites the reader to step in his shoes and experience what it was like to face that life decision. At that moment, O'Brien is on a fishing boat, twenty yards from the Canadian shore, free to jump into the Rainy River and avoid being sent into combat. "What would you do?" O'Brien asks. "Would you jump? Would you feel pity for yourself? Would you think about your family and your childhood and your dreams and all you're leaving behind? Would it hurt? Would it feel like dying? Would you cry, as I did?"¹²² O'Brien would sit there for what seemed like an eternity, the aluminum boat swaying beneath him, paralyzed at having to make the decision. He ultimately tried to jump, but couldn't. "It just wasn't possible," O'Brien writes. "I couldn't endure the mockery, or the disgrace, or the patriotic ridicule. Even in my imagination, the shore just twenty yards away, I couldn't make myself be brave. It had nothing to do with morality. Embarrassment, that's all it was."¹²³

What must it have felt like to be Nathan Leopold in 1944, several years into World War II, locked up at Stateville, guilty of one of the most notorious and heinous crimes committed in Chicago? Would you have felt embarrassed that other men were enlisting to serve in the Pacific theater and that you could do nothing worthwhile for your country? Would you have felt, in some sense, useless? Would you have wanted to redeem yourself? Would you have been desperate to prove your willingness to serve for others? Would you have sacrificed your body and put it at the service of army doctors? Would you have embraced the idea of partaking in "the war effort"? Would that have been consent? And how would you have felt like if you and all other prisoners had been barred outright from participating in human experimentation?

These are intriguing questions, but in the end, the issue is not so much whether the prisoners really consented, or whether they could consent, but how they were transformed into consenting subjects. How their apparent willingness to catch malaria was fabricated. And here, the answer turns out to be somewhat more routine than expected: by an ordinary means of governance: by associating the sacrifice of the body to citizenship and country. It is a device that is, as we have seen, productive.

The excesses bear that out. Buried in one of the malaria-research articles from 1948 there is an indication that the strain of malaria was actually "maintained in psychotic patients at the Manteno State Hospital, Manteno, Illinois, chiefly by blood inoculations from donors who had manifested high gametocyte densities during trophozoite-induced infections."¹²⁴ Apparently, the malaria project "was originally set up at Manteno State Hospital for the Insane, and the experimental subjects were the insane patients confined there."¹²⁵ In other

words, patients deemed insane were given malaria in order to feed the mosquitoes. And so, on the “first bite day” at Stateville, as Leopold confirms, the doctors used “mosquitoes raised by the Department of Parasitology at the University of Chicago and infected on patients at Manteno.”¹²⁶ It is indeed hard to imagine that the psychotic patients institutionalized in that mental asylum consented to sacrificing themselves for their country. But it is not hard to believe that doctors would have felt that they were promoting the public interest and serving the country. It is not hard to imagine that the Manteno initiative was of vital importance to the war effort and to the GI’s fighting in the Pacific theatre.

Coda.

Alexander de la Paz, a graduate student at the University of Chicago, came into my office yesterday with a book detailing the wide range of medical research that is being done today using prisoners.¹²⁷ “Despite the federal, state and local level regulations governing it, and the gaze of the complex system of review and oversight monitoring it,” Alexander de la Paz tells me, “contemporary social and biomedical research on prisoners is freckled with violations. Determination letters from the Department of Health and Human Services attest to this, as do recent controversial studies from Stanford University, the University of Miami, and the University of Texas: Experiments on prisoners, clinical trials—some involving “greater than minimal risk”—are still conducted in the United States, and the pharmaceuticals tested range from Phase I HIV vaccines to Interferon-alpha therapies, Depakote and Risperidone.”¹²⁸ De la Paz is going to write his master’s thesis on the current state of prisoner experimentation. I am eager to learn more. I had thought, well, I had hoped, that we did not do this anymore.

Bibliography

- Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Palo Alto CA: Stanford University Press.
- Alving, A. S., Craige, B., Pullman, T. N., Whorton, C. M., Jones, R., & Eichelberger, L. 1948. "Procedures used at Stateville penitentiary for the testing of potential antimalarial agents." *Journal of Clinical Investigation*, 27, 2–5.
- Beutler, Ernest. 2007. Oral history. Interview by A. Maestrejuan, 8 March. La Jolla, CA: Oral History of Human Genetics Project. (Available at <http://www.societyandgenetics.ucla.edu/hgp/>).
- Comfort, Nathaniel. 2009. "The prisoner as model organism: malaria research at Stateville Penitentiary," *Studies in History and Philosophy of Biological and Medical Sciences*, 40: 190-203.
- Dörner, K., Ebbinghaus, A., Linne, K., Roth, K. H., Weindling, P., Eltzhig, J., & Walter, M. 1999. *The Nuremberg Medical Trial, 1946/47: Transcripts, Material of the Prosecution and Defense, Related Documents*. Munich: K. G. Saur.
- Freyhofer, H. H. 2004. *The Nuremberg Medical Trial: The Holocaust and the Origin of the Nuremberg Medical Code*. New York: P. Lang.
- Gostin, Lawrence O., Cori Vanchieri, and Andrew Pape, editors. 2006. *Ethical Considerations for Research Involving Prisoners*, a report written by the Committee on Ethical Considerations for Revisions to DHHS Regulations for Protection of Prisoners Involved in Research. Institute of Medicine of the National Academies. Washington DC: The National Academies Press
- Harkness, Jon M. 1996. "Nuremberg and the Issue of Wartime Experiments on US Prisoners: The Green Committee." *Journal of the American Medical Association*, Vol. 276, No. 20 (November 27, 1996): 1672–1675.
- Hornblum, Allen M. 1997. "They were cheap and available: Prisoners as research subjects in twentieth century America." *British Medical Journal*, 315, 1437–1441.
- Hornblum, Allen M. 1998. *Acres of skin: Human experiments at Holmesburg prison. A story of abuse and exploitation in the name of medical science*. New York: Routledge.
- Howard, Robert. 1947. "445 Guinea Pig Convicts May Win Clemency." *Chicago Daily Tribune*, February 1, 1947, p.10.
- Laurence, William L. 1945. "New Drugs to Combat Malaria Are Tested in Prisons for Army." *New York Times*, March 5, 1945, p. 1.
- Lederer, S. E. 1997. *Subjected to science. Human experimentation in America before the Second World War*. Baltimore: Johns Hopkins University Press.
- Leopold, Nathan. 1974 [1958]. *Life plus 99 Years*. Garden City, N. Y. : Doubleday.
- Moreno, J. D. 2000. *Undue risk: Secret state experiments on humans*. New York: W. H. Freeman.
- Morris, Norval and Michael Mills. 1974. "Prisoners as Laboratory Subjects," *Wall Street Journal*, April 2, 1974.
- O'Brien, Tim. 1990. *The Things They Carried*. Mariner Books.

- Press Release 66-121A. 1966. The Office of Public Relations, The University of Chicago, Press Release dated March 12, 1966. In University of Chicago Regenstein Library, Special Collections, Levi Administration Papers, Box 243, Folder 4.
- Press Release 66-121B. 1966. The Office of Public Relations, The University of Chicago, Press Release dated March 12, 1966. In University of Chicago Regenstein Library, Special Collections, Levi Administration Papers, Box 243, Folder 4.
- Press Release 68-141. 1968. The Office of Public Relations, The University of Chicago, Press Release dated March 4, 1968. In University of Chicago Regenstein Library, Special Collections, Levi Administration Papers, Box 243, Folder 4.
- “Prison Malaria: Convicts Expose Themselves to Disease so Doctors Can Study It.” 1945. *Life Magazine*, 4 June 1945, 43–46.
- Slater, Leo B. 2004. “Malaria Chemotherapy and the ‘Kaleidoscopic’ Organisation of Biomedical Research during World War II.” *Ambix*, Vol. LI, No. 2 (July 2004):107–134.
- Wright, George. 1945. “Bells Regulate Life in Prison at Stateville.” *Chicago Daily Tribune*, November 25, 1945, p. 18.
- Wright, George. 1949. “Leopold Seeks Shorter Term in Parole Plea.” *Chicago Daily Tribune*, April 23, 1949, p. 13.

Some of the original research findings:

- Alving, A. S., Craige, B., Jones, R., Whorton, C. M., Pullman, T. N., & Eichelberger, L. 1948. “Pentaquine (SN-13 276): A therapeutic agent effective in reducing the relapse rate in vivax malaria.” *The Journal of Clinical Investigation*, 27, 25–33.
- Alving, A. S., Eichelberger, L., Craige, B., Jones, R., Whorton, C. M., & Pullman, T. N. 1948. “Studies on the chronic toxicity of chloroquine (SN-7618).” *Journal of Clinical Investigation*, 27, 60–65.
- Alving, A. S., Pullman, T. N., Craige, B., Jones, R., Whorton, C. M., & Eichelberger, L. 1948. “The clinical trial of eighteen analogues of pamaquin (plasmochin) in vivax malaria (Chesson strain).” *Journal of Clinical Investigation*, 27, 34–45.
- Craige, B., Jr., Alving, A. S., Jones, R., Jr., Whorton, C. M., Pullman, T. N., & Eichelberger, L. I. 1947. “The Chesson strain of Plasmodium vivax malaria, II. Relationship between prepatent period, latent period and relapse rate.” *Journal of Infectious Diseases*, 80, 228.
- Edgcomb, J. H., Arnold, J., Yount, E. H., Jr., Alving, A. S., Eichelberger, L., Jeffery, G. M., Eyles, D., & Young, M. D. 1950. “Primaquine, SN-13272, a new curative agent in vivax malaria: A preliminary report.” *Journal of the National Malaria Society*, 9, 285–292.

NOTES

Special thanks to Arien Mack for organizing a remarkable symposium, to Maxwell Kampfner and Sam Lim for outstanding research, and to Isadora Ruyter-Harcourt for inspiring and insightful discussions about courage, patriotism, and Tim O’Brien’s *The Things They Carried*.

¹ Agamben, *Homo Sacer*, p. 157.

² The malaria experiments at Stateville have been described and discussed in Comfort 2009; Leopold 1974;

³ Beutler 2007:39.

⁴ Agamben, *Homo Sacer*, p. 157.

⁵ Leopold 1974:305.

⁶ Comfort 2009:192-193.

⁷ Leopold 1974:307.

⁸ Leopold 1974:307.

⁹ Leopold 1974:312.

¹⁰ Leopold 1974:312.

¹¹ NRC Report quoted in Laurence 1945:1. This quote has oft been attributed to the *New York Times*, though in matter of fact it was in the NRC report, reported in the *Times*. The distinction is important.

¹² NRC Report, quoted in Laurence 1945:30.

¹³ Laurence 1945:1.

¹⁴ Wright 1945:18.

¹⁵ "Prison Malaria," 1945:43.

¹⁶ "Prison Malaria," 1945:43.

¹⁷ Wright 1949:13.

¹⁸ Wright 1949:13.

¹⁹ Howard 1947:10.

²⁰ *Id.*

²¹ Wright 1949:13.

²² Wright 1949:13. According to Comfort 2009:200, Leopold's appeal for commutation was denied, but "he was ultimately granted parole in 1958, shortly after he became eligible."

²³ Hornblum 1997:1439.

²⁴ Hornblum 1997:1439.

²⁵ Slater 2004:129.

²⁶ *See generally* Harkness 1996.

²⁷ Slater 2004:128.

²⁸ Slater 2004:128.

²⁹ *New York Times*, "Control of Malaria," April 13, 1946, p. 16, quoted in Slater 2004:131.

³⁰ Alving, et al. 1948:2.

³¹ Beutler 2007:30.

³² Hornblum 1997:1440.

³³ On the federal ban, see Hornblum 1997:1440.

³⁴ Beutler 2007:39.

³⁵ Leopold 1974:330.

³⁶ Leopold 1974:310.

³⁷ Leopold 1974:310.

³⁸ Leopold 1974:310.

³⁹ Leopold 1974:310-311.

⁴⁰ Alving, et al. 1948:3.

⁴¹ This is all from Alving, et al. 1948:2.

⁴² Alving, et al. 1948:2.

⁴³ Alving, et al. 1948:2.

⁴⁴ Alving, et al. 1948:3.

⁴⁵ Alving, et al. 1948:3.

⁴⁶ Alving, et al. 1948:3; see also Leopold 1974:310.

⁴⁷ Leopold 1974:311.

-
- ⁴⁸ Press Release 66-121B, 1966, p. 2.
- ⁴⁹ Press Release 66-121B, 1966, p. 2.
- ⁵⁰ Press Release 66-121B, 1966, p. 3.
- ⁵¹ Press Release 66-121B, 1966, p. 2.
- ⁵² Press Release 66-121B, 1966, p. 2.
- ⁵³ Press Release 66-121B, 1966, p. 2.
- ⁵⁴ Press Release 68-141, 1968, p. 2.
- ⁵⁵ Press Release 68-141, 1968, p. 3.
- ⁵⁶ Press Release 66-121B, 1966, p. 3.
- ⁵⁷ Press Release 66-121B, 1966, p. 2.
- ⁵⁸ Press Release 66-121B, 1966, p. 3.
- ⁵⁹ Press Release 66-121B, 1966, p. 3.
- ⁶⁰ Press Release 66-121B, 1966, p. 5.
- ⁶¹ Press Release 66-121A, 1966, p. 3.
- ⁶² Press Release 66-121A, 1966, p. 3.
- ⁶³ Alving et al. 1948:2.
- ⁶⁴ See below. Leopold reports \$100; Comfort reports, based on Beutler 2007, that it was possibly as low as \$10 per year, and writes “between \$25 and \$100.” Comfort 2009:199.
- ⁶⁵ Leopold 1974:309.
- ⁶⁶ Leopold 1974:310.
- ⁶⁷ Leopold 1974:310.
- ⁶⁸ This raises an ethical dilemma. “Although they were technically volunteers, Allen Hornblum argued that these prisoners were coerced by being offered money, an incentive so valuable in a prison economy that it was impossible to resist. We must acknowledge, though, a double-bind: any significant incentive or reward exposes the experimenter to charges of compulsion, but withholding compensation smacks of exploitation.” Comfort 2009:192.
- ⁶⁹ Leopold 1974:309.
- ⁷⁰ Leopold 1974:309.
- ⁷¹ Leopold 1974:309.
- ⁷² Beutler 2007:30.
- ⁷³ Leopold 1974:314.
- ⁷⁴ Morris and Miller 1974.
- ⁷⁵ Hornblum 1997:1438.
- ⁷⁶ Hornblum 1997:1438 (quoting an article by Dr. Stanley himself).
- ⁷⁷ Hornblum 1997:1438.
- ⁷⁸ Hornblum 1997:1439.
- ⁷⁹ Howard 1947:10.
- ⁸⁰ Leopold 1974:320.
- ⁸¹ Leopold 1974:321.
- ⁸² Comfort 2009:195.
- ⁸³ Hornblum 1997:1440.
- ⁸⁴ Hornblum 1997:1440.
- ⁸⁵ Morris and Mills 1974.
- ⁸⁶ Morris and Mills 1974.
- ⁸⁷ Morris and Mills 1974.
- ⁸⁸ Beutler 2007:30.
- ⁸⁹ Beutler 2007:30. According to Comfort, “The consent form was almost fact-free. On paper, the prisoners agreed to participate in ‘investigations of the life-cycle of the malarial parasite’ and to ‘accept all risks connected with the experiment’. No explicit risks—or even experimental drugs—were mentioned on the form.” Comfort 2009:199. [see Pappworth 1967: 62.]
- ⁹⁰ Leopold 1974:307.

-
- ⁹¹ Leopold 1974:307.
⁹² Leopold 1974:305.
⁹³ Leopold 1974:305.
⁹⁴ Leopold 1974:305.
⁹⁵ Leopold 1974:308.
⁹⁶ Leopold 1974:306.
⁹⁷ Leopold 1974:307.
⁹⁸ Leopold 1974:307.
⁹⁹ Leopold 1974:307.
¹⁰⁰ Leopold 1974:306.
¹⁰¹ Leopold 1974:306.
¹⁰² Leopold 1974:306.
¹⁰³ Leopold 1974:315.
¹⁰⁴ Leopold 1974:316.
¹⁰⁵ Leopold 1974:309.
¹⁰⁶ Leopold 1974:309.
¹⁰⁷ Leopold 1974:312.
¹⁰⁸ Leopold 1974:312-313.
¹⁰⁹ Leopold 1974:313.
¹¹⁰ Leopold 1974:317.
¹¹¹ Leopold 1974:318.
¹¹² Leopold 1974:318.
¹¹³ Leopold 1974:318.
¹¹⁴ Leopold 1974:320.
¹¹⁵ Leopold 1974:307.
¹¹⁶ Leopold 1974:308.
¹¹⁷ Comfort 2009:201.
¹¹⁸ *Id.*
¹¹⁹ Leopold 1974:332.
¹²⁰ Leopold 1974:330-331.
¹²¹ Leopold 1974:332.
¹²² O'Brien 1990:54.
¹²³ O'Brien 1990:57.
¹²⁴ Alving, et al. 1948:3.
¹²⁵ Leopold 1974:306.
¹²⁶ Leopold 1974:310.
¹²⁷ The book in question is *Ethical Considerations for Research Involving Prisoners*, published by the National Academies Press in 2006 and written by the Committee on Ethical Considerations for Revisions to DHHS Regulations for Protection of Prisoners Involved in Research, edited by Lawrence O. Gostin, Cori Vanchieri, and Andrew Pape. As Alexander de la Paz explains to me, "it offers a very broad topography of the contemporary research landscape, and a few recommendations for reform attentive to the changing demography and health profile of inmates in this age of mass incarceration." There is a particularly helpful pie chart of all the types of research being done at page 61.
¹²⁸ Communication with Alexander de la Paz, February 5, 2011.