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**QUESTION THE AUTHORITY OF TRUTH**

Welcome to the University of Chicago!

It is fitting that at the threshold of your next educational journey, we should pause together for a solemn moment to meditate about the coming voyage. It is a tradition, a rite of passage at this great university, something that we have done together for the past 50 years. We stop for a moment before crossing this threshold and explore our common mission for the next four years. We reflect on what brings us together, intellectually and morally. We come together to ask and explore what are the aims of education.

That question—perhaps one of the most burning questions of our time—deserves a precise and direct answer. I say “burning question” because education across the globe is undergoing significant structural transformation as a result of the general economic downturn, government deficits across the globe, and our increasing need to rely on private benefactors, to whom we are deeply grateful, but who may have their own expectations, sometimes their own demands, but certainly their own aims of education.

So in these times it is especially important to state our aims of education as precisely and succinctly as possible. Tonight, I will argue that the aim of a liberal education is to learn to question the authority of truth.

Let me touch briefly on some of these words. First, “the aim.” You will notice that I am using the singular. I have but one aim that I would like to discuss with you. Second, “a liberal education.” The educational journey we propose and that you have come to seek at the University of Chicago is a liberal as opposed to a professional education at a school of law or medicine, to a technical education at a school of engineering, or to a practical education in more specialized disciplines. Liberal here does not have a political valence as in progressive versus conservative. If anything, the term connotes “critical.” Critical in the Kantian sense of discovering the limits of reason, but also in the Kantian sense of liberating oneself from any “self-incurred immaturity” or “inability to use one’s own understanding without the guidance of another.”<sup>1</sup> The root term comes from the Latin *liber*, and one my predecessors, Professor Robert Pippin, traced the “very first usage of the word ‘liberal’ in English” to 1375, where it

was used specifically as an adjective in the term ‘the liberal arts’ and “designated ‘*the objects of study worthy of a free person.*’”<sup>2</sup>

Liberal here should be interpreted in its critical meaning, which takes us then, thirdly, to the next two verbs: “to learn to question.” I could have said “to explore.” I could have said “to challenge.” I mean “to question” in precisely this sense of challenging. I also intend it, specifically, *as opposed* to answering. There are far too many answers in this world and too few good questions. It is questioning that I will advocate tonight. Notice, importantly, I am also not saying “to learn to discover truth.” Nor to learn *how* to discover truth. That is too easy. Sadly, we are all far too good at that—especially you, an exquisite community of thinkers hand-picked for your raw intelligence, your talent, and, of course, your very aspiration to truth.

I said instead “*to question the authority of truth.*” *The aim of education is to explore how truthful beliefs have come to be held as such—as truths—and to interrogate the implications of such truthful beliefs acquiring the force of authority.* Not to take true beliefs at face value, but to probe deeply and explore how they are embedded in, and themselves embed, distinct relations of power in society, in the family, in political economy—relations of power that have identifiable distributional consequences in terms of wealth, resources, status, stigma, recognition, and esteem.

In this endeavor, naturally, I am by no means clearing new ground, but instead myself exploring paths that have been travelled by brilliant women and men over the many centuries, from at least as far back as the Franciscan friar William of Ockham to Friedrich Nietzsche, and forward to remarkable contemporary thinkers such as Michel Foucault and Ian Hacking. This evening, though, I will focus our discuss of the aim of education on four historical episodes that are all deeply linked to the history of our great university.

#### I. Robert S. McNamara and “PPBS”

Let’s begin, then, in January 1961. John F. Kennedy had just been elected President and had appointed Robert S. McNamara to be his Secretary of Defense. McNamara headed to the Pentagon with a business background. He was president of Ford Motor Corporation at the time, and was perceived as a very successful manager—which is why Kennedy tapped him. But he had relatively little military experience. During World War II—almost twenty years earlier—McNamara had helped establish the statistical arm of the Air Force as an assistant professor at Harvard Business School and after that, had served for a few years, until 1945, as a Statistical Control Officer in the Air Force in the Pacific theatre. But that had been a long time ago, and by 1961, McNamara was decidedly a *civilian* bureaucrat taking over a *military* organization.

Now, what McNamara was especially good at—and I suspect you have already figured this out—was statistical control, a form of management that had evolved in the field of business science during the 1930s, on which the Air Force had drawn during WWII, at which the RAND Corporation would excel after the war, and upon which McNamara had anchored the production and sale of automobiles at Ford.

“Statistical control”: During the war, it was called “operations research.” It was the technical use of data and statistics to master military weapons systems. It was the use of data and analyses to figure out, for example, how deep to explode depth charges to maximize the targeting of enemy submarines, or what altitude to fly bombers to maximize the accuracy of sorties and minimize casualties.

“Statistical control”: After the war, it began to be called “systems analysis,” especially by the analysts at the RAND corporation, which extended that method of mathematical analysis beyond weapons systems to larger strategic issues such as public policies regarding, for instance, the use of nuclear weapons. Systems analysis was pioneered by the RAND Corporation, at the time the premier independent defense research contractor with deep ties to the Air Force.

“Statistical control”: By the 1960s, it was called “PPBS” or, more formally, Planning-Programming-Budgeting Systems analysis. And it is under this rubric that McNamara had taken control at Ford, and would do the same at the Pentagon.

Today, it is what we call “economic cost-benefit analysis.” It is an approach that has been perfected here at the University of Chicago by our law-and-economics faculty in association with the Chicago School of Economics. It is an intellectual approach that many of us have internalized. It’s an approach, also, that dominates the White House today, with our former colleague, Cass Sunstein, now the director of OIRA (the Office of Information and Regulatory Affairs). OIRA is the very heart and pulse of our cost-benefit governance and has come to dominate federal oversight in our contemporary regulatory state.

Now, back in 1961, McNamara turned to the then-new mode of analysis, cost-benefit analysis or PPBS as it was called at the time, for a reason: in order to gain civilian control of a military organization. The method itself was simple. So simple in fact that it could be represented in a single figure—an outline drawing of a public policy machine that would spit out the ranking of different policy alternatives. All that was required was a clear objective. The model was neatly represented in Figure 1 of Edward S. Quade’s RAND Report P-3322 on “Systems Analysis Techniques for Planning-Programming-Budgeting” from March 1966. The figure captures the five key steps of the new analytic decision-making method:

(See Figure 1)

Standing behind this policy-machine, and motivating it, would be an agreed-upon objective—a narrow objective that we can all endorse. Step 1, the input, is a set of promising public policy alternatives. Each alternative policy is then filtered through a model or a set of models to assess its individual attributes in terms, for example, of maintenance costs, manpower requirements, communications abilities, etc. This would produce each policy’s level of effectiveness and cost, which could then be compared using a metric, “the criterion,” which would turn out, as the

output, the relative measures of each policy. Those measures could then be compared to give a ranking of “The ALTERNATIVES in order of Preference.”<sup>3</sup>

The output, at Step 5, is the correct ordinal ranking of the policy alternatives. No need for political wrangling, for value judgments, for practical experience—no need for those Aristotelian virtues of *phronesis*, nor for Machiavellian notions of *virtù*. The right answer would emerge from the machine-model that evaluates cost and benefits. All that was needed was a narrow and precise objective. And in order to perfect the results, the operation could be reiterated, testing for sensitivity, questioning assumptions, refining objectives, reformulating the problem, and tweaking the models a bit further—as evidenced in Figure 2:

(See Figure 2)

To give you an illustration, if you look at the third figure, you will see a set of outcomes, Step 5, from a RAND study—actually from the New York City RAND Institute (which only lasted a few years in the late 1960s). This figure is drawn from a study entitled “Reducing Crime in Apartment Dwellings: A Methodology for Comparing Security Alternatives.”<sup>4</sup> The study took a “broad operational view of a security system” and analyzed fifteen alternative policies, including tenant training and education, tenant patrols, extended recreational opportunities for teenagers, rent rebates, elaborate building-entry restrictions, weapon detectors, surveillance, and increased police or guard manning—everything from education, to recreation, to policing. The study developed “effectiveness criteria” to analyze the different measures and then coupled those to cost criteria to derive estimates of the ratio of effectiveness-to-cost for each policy. The report then generated a graph of the cost-effectiveness of all fifteen alternatives.

This was precisely the policy-machine that Robert McNamara would impose on military decision making upon taking office at the Pentagon. By the first of February 1961, at the very first meeting of the National Security Council presided by President Kennedy, McNamara argued for PPBS. At his first press conference the next day, on February 2, 1961, McNamara told the media about PPBS—having already established, as he told the press, “an office for management planning and organizational studies.”<sup>5</sup>

McNamara’s objective was not just to do things better. He needed to gain control of the military. As a civilian, he needed to find a way to rein in military generals. And that is precisely what he was doing by imposing, in the Pentagon, this new form of reasoning. You need not trust me here, McNamara himself repeatedly stated this in later interviews:

“I was determined to get control of [the Defense] Department... I thought that could be done by recruiting the proper kinds of people, by laying out the approach to formulation of security policy..., and by developing the tools to apply that set of intellectual concepts. One of the tools was the program, planning, and budgeting system.”<sup>6</sup>

McNamara was proud of it: PPBS was instrumental, he maintained, in seizing control of the Department of Defense and the military establishment. And if one listened carefully to the emerging controversies, one could hear critical echoes of this fact in other circles. Admiral Hyman G. Rickover, one of the more vocal opponents of PPBS, condemned the approach for its centralization of power among civilians. Rickover compared the civilian PPBS analysts to “spiritualists” and protested:

The social scientists who have been making the so-called cost effectiveness studies have little or no scientific training or technical expertise; they know little about naval operations .... Their studies are, in general, abstractions. They read more like the rules of a game of classroom logic than like a prognosis of real events in the real world. . . . In my opinion we are unwise to put the fate of the United States into their inexperienced hands. If we keep on this way, we may find ourselves in the midst of one of their cost effectiveness studies when all of a sudden we learn that our opponents have ships that are faster or better than ours.<sup>7</sup>

Congressmen also remarked on the shift in power. Senator Henry M. Jackson would state, in hearings on PPBS in 1967, “I see a very real danger that systems analysis staffs, some of them only a year or two out of business schools, I might add, who are clearly not equipped to exercise wisdom, intuition or judgment based on experience in the relevant field of endeavor, will have too much influence over key decisions.”<sup>8</sup>

As these acts of resistance testify, McNamara may well have believed—or at the very least, represented that he sincerely believed—that statistical control by economics-oriented technocrats would be better for the country; but those beliefs in cost-benefit analysis had significant effects in terms of centralizing and redistributing power within the Pentagon and more broadly.

Was PPBS correct, you may ask? Or, more formally, do we have good reasons to believe that the cost-benefit approach achieves better social results? I would argue not—and have an extensive list of reasons why and could spend the rest of my valuable time with you trying to convince you—but will refrain, because our time together is too limited. In short, the cost-benefit approach inverts the relationship between politics and policy-making, by transforming political goods into mere instrumentalities of public policy decision-making. With a slip of a hand, it displaces politics. If you look quickly at Figure 3, you will notice that in that RAND study the fifteen different measures—which range the political spectrum from education for low-income project tenants to recreational facilities for urban teenagers, to subsidies for poorer tenants—are arrayed along two-dimensions only, cost and effectiveness. All the other political dimensions—equality, liberty, an educated citizenry—they all vanish. We agree on a narrow, apolitical objective and, ta-da, all our political values are displaced.

But I’m not here to argue the merits of PPBS. You are too good at that. You already know how to do that. In part, that is precisely how you got here. (And in any event, truth is, it is probably

impossible to really know. When he retired from the Pentagon in 1968, under a shroud of controversy, Robert McNamara had engulfed the country in a war in Vietnam from which it would only extricate itself under abysmal conditions several years later. Surely PPBS had not prevented that disastrous outcome). The important question, though, is different, and it goes something like this: How did those truthful beliefs distribute resources and shift relations of power? What work did they—that is, the truthful beliefs in cost-benefit analysis or PPBS—do?

And to that question, I think we can venture a whole area worth exploring: those beliefs redistributed authority, power, decision-making ability, and agenda-setting to a certain privileged category of economics-oriented, statistically trained young men. “The best and the brightest,” they were called. But don’t be mistaken. It was a certain subcategory of the best and the brightest: as Senator Jackson would observe, “economists in the decision-making process, especially economists with a heavy mathematics background and recent graduates of business schools.”<sup>9</sup> It centralized decision-making within the Pentagon and shifted its location. As another acute observer noted, “PPBS and other waves of reform have had the effect of centralizing power at higher levels of organization; and this has usually been their intent, whether or not this was so articulated.”<sup>10</sup> It redistributed power within the organization, creating a new professional elite of young economics-oriented analysts, predominantly, white, let’s face it, and predominantly men, who would become the arbiters of truth in military strategy and spending. The generals, it turned out, could not speak that language. They could not engage that discourse. It produced a very different distribution than on the battlefield or in military organizations. The strongest, I take it, came with certain knowledges and techniques. Techniques of analysis that shifted relations of power.

The aim of a liberal education is not just to *learn* those techniques (though you certainly will be given the opportunity while you are at the University of Chicago). Nor is it simply to learn how to *adjudicate* between truthful beliefs (though again, these are skills that you will hone here). Instead, the aim of a liberal education is to question the very authority of those truthful beliefs. To see how and at what price one set of knowledges would come to displace another. What were the effects of the displacement? How did they affect relations of power, distributions of resources, status, recognition, and esteem? Those are the critical questions that, I would hope, our liberal education will teach us to ask.

I will close this first episode by noting that four years later, in 1965, President Lyndon B. Johnson would direct all federal agencies, civilian as well as military, to implement the Planning-Programming-Budgeting Systems (“PPBS”) method across the board—to universalize the decision-making method that Secretary McNamara had imposed on military procurement and strategy a few years earlier. Today, all federal regulations—our regulatory state, in effect—are processed through this lens. We live in a cost-benefit administrative state.

## II. Ernest W. Burgess and Prediction Methods

Let me move the clock back to 1927 and take you into the Social Science Building next door, up to the third floor, into Room 313. It is the research office of Professor Ernest W. Burgess, the preeminent sociologist, and founder, with his equally prominent colleague and co-author, Professor Robert E. Park, of the Chicago School of Urban Sociology.<sup>11</sup>

Drawing on sociology's new statistical rigor, Ernest Burgess would turn his attention in the late 1920s to prediction—to the prediction of individual outcomes in the area of delinquency, marriage, and employment. In part, what turned his attention to delinquency was the fact that he had been appointed in 1927 by the Illinois governor to review the parole system in this state. Burgess, along with two law professors, conducted extensive research on parole procedures, and produced a 306-page report published in May 1928 in the *Journal of the American Institute of Criminal Law and Criminology*.<sup>12</sup>

For his particular contribution, as a sociologist, Professor Burgess conducted a study of 3,000 inmates paroled in the four-to-five years prior to December 31, 1924, and explored whether there was any statistical relationship between success on parole (as defined by the limited achievement of not violating parole) to some two dozen independent variables. The idea was to see which factors were associated with the likelihood of success on parole. The twenty-two variables included such things as an inmate's father's race or nationality, mental age, social status, personality type and psychiatric prognosis, in addition to the circumstances of the crime and prior criminal records.

Burgess's findings were interesting. With regard to national origin, for instance, Burgess discovered that “more recent immigrants like the Italian, Polish and Lithuanian” had “the smallest ratio of violations” and “the older immigrants like the Irish, British and German” had “the highest rates of violation.”<sup>13</sup> Burgess also relied on a number of other unique variables, including for instance social type and psychiatric personality type. Let me show you Burgess's tables regarding social type and psychiatric personality, as reproduced exactly from his Report:<sup>14</sup>

(See Figures 4 and 5)

You may find the categories amusing, and I will allow you to self-diagnose! But do remember, of course, that this was the height of scientific knowledge at the time, the very pinnacle of the social sciences. And note also that the categories were so well understood, so well established, that nowhere in the 306-page report did any author feel the need to define the terms “Ne'er-do-well,” “Hobo,” or “Socially Inadequate.” We all knew, back then, who the ne'er-do-well was.

On the basis of his research, Professor Burgess created a twenty-one factor test to grade each inmate, and applied the test to his sample of 3,000 cases. He assigned points for each factor on which the inmate would have been above the average (high likelihood of success), and then ran an analysis to determine the percentage of violators. And when he ran the numbers, the system worked. “[P]redictability is feasible,” Burgess declared.<sup>15</sup> Burgess recommended that the parole

decision be based on this multi-factor analysis using these variables—which became known as the “Burgess method.”

Professor Burgess was a lucky man and a few years later, his research assistant, John Landesco, was appointed a member of the Illinois Parole Board. At Landesco’s urging, the Illinois legislature passed a bill in 1933 requiring that these kinds of prediction be used “in the cases of all men being considered for parole.”<sup>16</sup> Ferris F. Laune, Ph.D., was hired to perform this task at the Illinois State Penitentiary at Joliet.<sup>17</sup> His title: “Sociologist and Actuary.” Figure 6 is reproduced from the cover of Dr. Laune’s book—and it reflects the truly amazing fact that Stateville penitentiary had hired an actuary, just like the insurance industry would do and had done for several decades. Actuaries would compile the inmate’s information and prepare a report—called a “prognasio”—that predicted the likelihood of success on parole.

Today, we live in an actuarial world. Predictions of risk surround us and govern us. Actuarial logics permeate the field of justice and enforcement—and not just that. Let’s be honest, it permeates everything we do. We used prediction on you—and you used prediction on us! It is prediction that has brought us together in Rockefeller Chapel tonight, and it represents, in the United States, one of the most striking trends of the early twenty-first century: actuarial methods have grown exponentially and dominate our educational, justice, penal, and political systems.

Do these methods predict correctly? Are they beneficial? Is it just to use them to reach individual outcomes? Here again, we can have fruitful discussions—and many of you must already have had such debates at school or among friends. I have argued at length, elsewhere, that prediction is actually counter-productive to the goals that we have usually set ahead of time. But again, let me set those questions aside because, once again, reaching the correct answer—getting to the truth—well, that is the easy part. We do it all the time, you are already good at that.

The more vital question is how did we come to believe in this actuarial way of thinking and what are its effects? Because, you see, with these true beliefs come a whole set of distributional consequences. You are indeed fortunate to be here for a liberal education, but with that, you have already automatically achieved certain privileges on our actuarial tools. You will benefit from prediction. Others will lose out, just by being who they are. No more, no less. These tools distribute opportunities and hardships, punishment and rewards, advantages and disadvantages, and we need to scratch beneath their truth to see what work they do.

Figure 7 is a frightening illustration. It is a sentencing grid from the state of Virginia for someone convicted of sexual assault. It predicts future dangerousness, places the convict in a category at the bottom of the page, and sentences more harshly depending on the risk level. Level 1, the highest risk level, results in a 300% increase in the upper end of the sentencing range.<sup>18</sup> Notice that if the convicted individual has less than a 9th grade education, they automatically get 4 points. If they are not regularly employed, they get 5. Younger than 35 years



of age: 12 points. These are automatic, they cumulate, and ultimately they will produce a longer criminal sentence. Prediction metes out punishment with severe consequences.

(See Figure 7)

You may respond, “Well, Harcourt, those predictions are just right. That’s why we use them. They just work!” But that is, ultimately, inadequate. It is inadequate because many things are right and work. It is also just, for instance, to sentence someone more if they committed an act intentionally. Or if they had malice—or as they say in the California penal code, a “malignant heart.” It is also just to sentence someone more if their crime committed more harm. In what sense is the failure to go beyond 9th grade any more just or proper as a basis for punishment?

Curiously, if we had developed a way to measure intentionality before we perfected the Burgess method, if University of Chicago biologists had invented, for instance, a thermometer for intent, if we could put a thermometer in a suspect’s mouth and measure their intentionality, perhaps we would punish differently today. Or if we could pluck someone’s head hair and, instead of determining whether they have used drugs, we could identify how angry they were, or scared, we might sentence in a very different manner. We might base our punishments more on moral culpability, or *mens rea*, or anger. But we did not develop those technologies, and justice followed a different path. As you can tell from figure 7, it is a path with distinct distributional effects based on education, on employment, on discipline, on parenting, on privilege. We have come to believe that prediction is just—but we need to question the authority of that truth, to examine how we came to believe it, and most importantly how it shapes the world around us.

### III. The Supreme Court and “Individualized Suspicion”

Quickly, let me take you through a third illustration. This one has to do with the rise of another rhetorical device, a concept—one that has become very important today and justifies a tremendous amount of surveillance. It is what justifies, as some would call it, our police state.

The United States Constitution provides, as I am sure you are aware, certain protections against unreasonable interferences with our privacy and liberty. One of those protections is against unreasonable searches and seizures. It is contained in the Fourth Amendment, a text that mentions specifically the idea of “probable cause”: searches are not reasonable unless they are based on this standard of probable cause.

Now, although the Constitution specifically mentions the term, it does not define probable cause, and the courts—from the United States Supreme Court all the way down to the state trial courts—have never given any specificity to the concept. Still today, we don’t know whether probable cause is a 10%, 20%, 50%, or more or less probability of wrongdoing.

At some point in the early 1960s, though, courts latched on to the term “individualized suspicion” as a way to capture the constitutional standard, and slowly, but steadily, courts began to hold that probable cause is satisfied when there is “individualized suspicion”—and not when it is lacking. Slowly but steadily, courts began to use that term in their decisions—guided in part by our own University of Chicago jurists—and litigants began to argue its presence or absence. Figure 8 illustrates the evolution of the use of the term in state and federal courts.<sup>19</sup> As you will notice, usage has grown exponentially, and today the term has come to dominate the discussion of probable cause and reasonableness in constitutional adjudication.

(See Figure 8)

The trouble is, the term is meaningless, really. Suspicion is practically never individualized. Suspicion attaches to group traits—as the actuarial models we just discussed suggest. Most individuals arouse suspicion because of group-based behavior that they exhibit or the fact that they belong to readily identifiable groups—sex and age are two examples, race, tragically, is another. It is not because of unique individual traits that people come to the attention of the police. Typically, individuals become suspects because they are young, or male, or running away from the police, or have a furtive glance or a bulge in their pocket. The proper way to think about suspicion is with reference to a probability scale of 0 to 1, *not* as either individualized or not.

Now, you need not take my word for this. But here again, the important question is not so much the truth of the matter. What we should ask, again, is what function it serves to deploy the new term? And here, I would argue, it has allowed us to resolve a deeply contested and deeply ambiguous political problem—the difficult dilemma of freedom and justice, the tension between order and liberty, the conflict between security and civil rights—by means of a simple device, one that defuses political pressure. It is no different than PPBS: with a hat trick or a slight of the hand, there is no longer a difficult political question, there is simply an issue as to whether “individualized suspicion” exists or not (a term, honestly, that does not mean anything). The jurists arbitrate, with their expertise, and their unique ability to fathom individual suspicion. The device allows us to bridge political divides. As Figure 8 suggests, the term is useful. It does a lot of work.

#### IV. Dr. Alf S. Alving and the Chicago Malaria Experiments

Let me take you then to a fourth and final episode. For this one, we need to go further down 59th Street to the medical school. It is March 1944, and Dr. Alf Sven Alving, a nephrologist at the University of Chicago Department of Medicine, has just begun conducting a series of malaria experiments on prisoners at Stateville penitentiary in Joliet, Illinois. The first batch of

prisoners, 432 in all, will be infected with the most virulent type of malaria—the Chesson strain of *Plasmodium vivax* malaria—under the supervision of our university’s physicians.<sup>20</sup>

The first “bite day” is March 8, 1944. The plan is to bite sixteen prisoners, each one to “receive[] the bites of ten infected mosquitoes.”<sup>21</sup> The mosquitoes are each, individually, in a little cylindrical cage that is placed up to the skin of the prisoner. Here is a first-hand account from Stateville inmate Nathan Leopold, the infamous and brilliant young Hyde Parker spared the gallows by Clarence Darrow: “You took a mosquito, placed its cage on [the first man’s] forearm and watched carefully until the [malaria-infected] 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 [the first prisoner’s arm] and placed it on [the second]. Here, too, the mosquito [would] have [the] chance to bite, but not to fill up with blood. Then you placed the cage on [the third prisoner’s] arm, and here you let the mosquito ‘bite out’—drink its fill.”<sup>22</sup>

A lot easier said than done. Many of the mosquitoes, it turned out, 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. Each prisoner was to have “the same number of first bites, second bites, and third bites” for a total of ten infected bites.<sup>23</sup> 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. The volunteers, for their part, had to endure five consecutive days of a temperature not less than 102°. Then the doctors would administer experimental and often debilitating anti-malarial compounds to the prisoner subjects in order to assess the effectiveness and toxicity of new anti-malarial drugs.<sup>24</sup>

Each of the Stateville prisoners had agreed and consented, they had volunteered to be part of the experiment. Each had signed a standard release form. Ernest Beutler, one of the University of Chicago doctors stationed at Stateville, explained what it was like: “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.”<sup>25</sup>

Now, some of you may be thinking to yourself that this was wrong. Some of you may not. The Italian philosopher, Giorgio Agamben argues, with regard to the consent forms, that “The obvious hypocrisy of such documents cannot fail to leave one perplexed.”<sup>26</sup> In some sense, that seems correct. Doubly so because these human experiments were taking place at exactly the same time as the infamous Nazi medical experiments in concentration camps that we would all rightly condemn.<sup>27</sup> Agamben equates the two,<sup>28</sup> and there is, perhaps, a way in which that too may be right—at least with regard to the less extreme forms of Nazi experimentation that did not involve intentional homicide, cruelty, maiming, and psychological battery. Surely, the justification for the prisoner’s detention (being a convicted criminal)—or the lack thereof

(being Jewish or homosexual or Roma)—should not matter to the issue of consent under inherently coercive conditions.

But let's not be too quick to condemn. Because, you see, it was 1944, and the country was at war in subtropical regions in the Pacific theatre. Our country needed to win the war—and malaria, it turned out, was one of our greatest enemy, which is precisely how the experiments were presented to the men at Stateville. We needed human volunteers.

The principal investigator, Dr. Alving, would tell the prisoners just that: malaria “was the number-one medical problem of the war in the Pacific” and “we were losing far more men to malaria than to enemy bullets.”<sup>29</sup> The war in the Pacific was ravaging our soldiers. The disease was a top priority. “Between 1942 and 1945, American forces [had] reportedly lost some eight million man-days to malaria.”<sup>30</sup> Experimental volunteers were as badly needed, it turned out, as battlefield soldiers. And as Leopold recounted in his memoirs, the prisoners *became* in some sense soldiers in battle:

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.<sup>31</sup>

The convicts—at least some of them, reportedly—viewed themselves as sacrificial bodies in the war effort. Leopold referred to them as “good soldiers,” and that is exactly what they were. The war rationale, it turns out, was extremely productive. It helped make willing bodies. Of course, there were other reasons to volunteer—the hope of a commutation, some money, the possibility of being in contact with female nurses for the first time in decades. There were other motivations. But the war rationale helped manufacture consent and the willingness of these prisoners. And it made the doctors, the administrators, other sensible human beings, comfortable with infected these men with such a virulent strand of malaria.

Was it the right thing to do? Did we really need to experiment on prisoners to win the war in the Pacific? Was it fair to seek volunteers in prison—men who were under forcible coercion, who had every reason to hope they might get out of prison early if they took malaria? Were they in a position to volunteer?

Again. You are good at debating those questions. You know how to do that. You are not here by accident. And we'll help you develop those skills—your logic, your rhetorical abilities, your reasoning, the moral principles, the mathematical computations, the costs, the benefits, the data. Yes, you will get all that here. You will learn to persuade.

But that, I take it, is not the aim of education. The aim of education, rather, is to help you question the authority of truth: what work did those truthful beliefs—believing, here, in the justice of the war effort—do? How did they distribute power, privileges, resources. Because, you see, the willingness of the prisoners to take malaria was constructed by those beliefs in the very same way as the willingness of other men and women to sacrifice their bodies for the country. The consent of the prisoners was fabricated in much the same way that we fabricated the enthusiasm of our enlisted men, or for that matter, of the soldiers in Germany, or Italy, or the Soviet Union. Their consent and willingness to serve was manufactured by tying the sacrifice of the body to those noble categories of citizenship, patriotism, and the greater humanity.

Looking back, Nathan Leopold was entirely right: the Stateville prisoners *were* “good soldiers”—no more, nor less than the conscripted men who would be sent to fight at Okinawa or land on the Normandy beaches and put their lives at risk for their country. The consent of the Stateville prisoners was no more, nor less informed or free than the willingness of the heroic men in uniform, called for military service, and shipped off to foreign lands. If anything, the prisoners may have had the better of the deal: surely, malaria parasites and anti-malarial drugs were less dangerous, in a supervised hospital setting, than firefights and active military combat. And in fact, we did not ask citizens to volunteer to fight, we just conscripted them into the army. We just drafted them into the war and expected that they would fight, willingly. We fully expected that they would land on foreign beaches under what amounted to, often, suicidal conditions. Just as the Axis powers fully expected that their young men would fight with enthusiasm for their homelands.

Not surprisingly, the war rationale blossomed during the Korean and Vietnam Wars. As the warden of Stateville, Frank J. Pate, would tell the university’s Public Relations Office in 1966—in the middle of the Vietnam War—prison inmates volunteer even more enthusiastically “during wartime.”<sup>32</sup> We ran those malaria experiments on prisoners at Stateville throughout the Vietnam War until the mid 1970s.

Those truthful beliefs—the war rationale, human sacrifice, citizenship, patriotism, our greater humanity—they had significant effects. They gave us prisoners’ bodies to find a cure to malaria, they gave us waves of soldiers to charge across a no-man’s-land and to land on hostile beaches, they gave us bodies to staff military hospitals, to fill munitions plants, and to carpet bomb foreign cities. They made the butchery at the Normandy beaches possible.

Now, I do not say these things lightly. My family and I personally owe an enormous debt to those men and women who sacrificed themselves for the country. In fact, I might not be here but for their sacrifices—nor my daughter, Isadora, sitting among you. My father was a Jewish refugee, born in Paris, who escaped France in June 1940 at age thirteen—tragically not everyone in our family was able to get out in time—but my father did, miraculously, and nine years later, would have the great fortune and remarkable opportunity to sit where you are and

attend the College of the University of Chicago, and a few years later our law school across the Midway. It is indeed hard for me, of all people, to challenge the war rationale. But, I would argue, it is crucial to explore all the work those beliefs did—and still do today. They have effects. They produce sacrificial bodies.

Hidden in the details of the malaria experiments is the fact, for instance, that the malaria infested mosquitoes were maintained and fed on mentally ill patients at Manteno State Hospital. Mentally ill patients who were committed to an asylum. I was shocked, initially, but not entirely surprised. The war rationale is a powerful force. It has effects.

This past summer, at the National Archives, I discovered that we also used conscientious objectors as human subjects. Again, I was shocked when I came across the letter, reproduced as Figure 9. But I am not surprised. Indeed, it is important to explore truthful beliefs, to constantly challenge their authority, to see what work they do. How they distribute power, wealth, resources, opportunities, privilege, recognition. How they work. What they justify.

That, I take it, is the aim of a liberal education.

You will be surrounded by truth claims while you are here. The University of Chicago is nothing less than a cathedral to truth. I urge you to walk carefully through our cathedral and always question—I urge you to seize your education, to seize your *liberal* education, and dig beneath the truthful meanings that surround you.

Truth, it turns out, is one of the strongest weapons in our arsenal. Truthful belief, and truthful speech, is what shapes social relations, divisions, distributions, resources and recognition. It is what gives meaning to our fragile world. Let me close with an excerpt from the philologist, classicist, and, anthropologist, George Dumézil’s book, *Servius et la Fortune*—a passage that Michel Foucault would often return to:

“Looking back into the deepest reaches of our species’ history, ‘truthful speech’ [*la parole vraie*] has been a force few could resist. From early on, truth was one of man’s most formidable weapons, most prolific sources of power, and most solid institutional foundations.”<sup>33</sup>

Welcome to the University of Chicago! Seize your education, and let your questioning begin!

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1. Immanuel Kant, “An Answer to the Question: ‘What is Enlightenment?’” 54-60 in *Kant: Political Writings*, ed. Hans Reiss (Cambridge, UK: Cambridge University Press, 1970), at p. 54.

2. Robert Pippin, “Liberation and the Liberal Arts,” 163-183, in *The Aims of Education: Selected Essays*, The College of the University of Chicago, at p. 165.

3. Edward S. Quade, *Systems Analysis Techniques for Planning-Programming-Budgeting*. RAND Report No. P-3322 (March 1966) (Santa Monica, CA: The RAND Corporation, 1966), p. 9.
4. Michael I. Liechenstein, *Reducing Crime in Apartment Dwellings: A Methodology for Comparing Security Alternatives*, Report P-4656 (June 1971) (New York: The New York City-RAND Institute, 1971).
5. McNamara Papers, Library of Congress, Container II:48, "Public Statements of Secretary of Defense McNamara 1961 Volume 1," First news conference held by Secretary McNamara, Thursday, 2 February 1961, 2:30 pm, from the Pentagon, at p. 48 (Volume I) or p. 5 of the press conference report.
6. McNamara Papers, LOC, Container I:109, Subject File "Speeches & Writings: Interviews: Office of the Secretary of Defense Historical Office: Transcripts, 1986," Oral History Transcript, First Part, April 3, 1986, p. 13.
7. Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough?: Shaping the Defense Program, 1961-1969* (New ed.) (Santa Monica, CA: RAND Corp, 2005), at p. 78-79.
8. *Planning-Programming-Budgeting. Hearings before the Subcommittee on National Security and International Operations of the U.S. Congress, 90th Congress, 1 Sess. (1967)*, at p. 38.
9. *Id.*
10. Frederick C. Mosher, *Planning-programming-budgeting: Program budgeting in foreign affairs: some reflections. United States. Congress. Senate. Committee on Government Operations. Subcommittee on National Security and International Operations* (Washington,: U.S. Govt. Print. Office, 1968), at p. 2.
11. The discussion of this historical episode draws from several chapters of a book. See Bernard E. Harcourt, *Against Prediction: Profiling, Policing, and Punishing in an Actuarial Age* (Chicago: University of Chicago Press, 2007), especially chapters 2 and 3 on the history of actuarial methods. I should note that my dear friend and colleague, Professor Andrew Abbott, is now the proud occupant of Room 313.
12. Andrew A. Bruce, Ernest W. Burgess, and A. M Harno, "A Study of the Indeterminate Sentence and Parole in the State of Illinois," *Journal of the American Institute of Criminal Law and Criminology*, Vol. 19 (1928).
13. *Id.* at 259.
14. *Id.* at 261; see generally Harcourt, *Against Prediction*, at p. 56-58.
15. Quoted in Harcourt, *Against Prediction*, at p. 1.
16. Harcourt, *Against Prediction*, at p. 59.

17. Ferris F. Laune, *Predicting Criminality: Forecasting Behavior on Parole, in Northwestern University Studies in the Social Sciences* (Evanston: Northwestern University, 1936), cover page.
18. See *generally* Harcourt, *Against Prediction*, at p. 12.
19. The graph is taken from Bernard E. Harcourt and Tracey Meares, “Randomization and the Fourth Amendment,” *The University of Chicago Law Review*, Vol. 78 (2011).
20. The discussion of this final historical episode draws from an article. See Bernard E. Harcourt, “Making Willing Bodies: The University of Chicago Human Experiments at Stateville Penitentiary,” *Journal of Social Research*, Vol. 78, No. 2: 443-478 (Summer 2011).
21. Alf S. Alving, Branch Craige, Jr., Theodore N. Pullman, C. Merrill Whorton, Ralph Jones, Jr., and Lillian Eichelberger, “Procedures Used at Stateville Penitentiary for the Testing of Potential Antimalarial Agents,” *Journal of Clinical Investigation*, Vol. 27:2–5 (1948), at p. 3; Nathan Leopold, *Life plus 99 Years* (Garden City, N. Y.: Doubleday, 1974), at p. 310-311.
22. Leopold, *Life plus 99 Years*, at p. 310.
23. *Id.*
24. Alving, et al., at p. 3; see also Leopold, *Life plus 99 Years*, at p. 310.
25. Ernest Beutler, *Oral history. Interview by A. Maestresjuan, 8 March 2007* (La Jolla, CA: Oral History of Human Genetics Project), at p. 39.
26. Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life* (Palo Alto, CA: Stanford University Press, 1998), at p. 157.
27. See *generally* Harcourt, “Making Willing Bodies,” at p. 444 and 472 n.2.
28. Agamben, *Homo Sacer*, at p. 158.
29. Leopold, *Life plus 99 Years*, at p. 305.
30. Nathaniel Comfort, “The Prisoner as Model Organism: Malaria Research at Stateville Penitentiary,” *Studies in History and Philosophy of Biological and Medical Sciences*, Vol. 40: 190-203 (2009), at p. 192-193.
31. Leopold, *Life plus 99 Years*, at p. 307.
32. Press Release 66-121B, 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, at p. 2.
33. Georges Dumézil, *Servius et la fortune: Essai sur la fonction sociale de louange et de blâme et sur les éléments indoeuropéens du cens romain* (Paris: Gallimard, 1943), p 243-244 (“Aussi haut qu’on



remonte dans les comportements de notre espèce, la ‘parole vrai’ est au contraire une force à laquelle peu de forces résistent...la Vérité est très tôt apparue aux hommes comme une des armes verbales les plus efficaces, un des germes de puissance les plus prolifiques, une des plus solides fondements pour leurs institutions.”) Michel Foucault discussed this passage from Dumézil in his lecture at the Collège de France on February 3, 1971, and used it as well to open a remarkable series of lectures at Louvain-la-Neuve delivered in 1981. *See* Michel Foucault, *Leçons sur la volonté de savoir. Course au Collège de France. 1970-1971*. Daniel Defert, ed. (Paris: Gallimard/Seuil, 2011), at p. 82; Michel Foucault, *Mal faire, dire vrai. Fonction de l'aveu en justice*. Fabienne Brion and Bernard E. Harcourt, eds. (Louvain: Presses Universitaires de Louvain, and Chicago : University of Chicago Press, forthcoming).

Figure 1: The Logic of Planning-Programming-Budgeting Systems Analysis (“PPBS”)

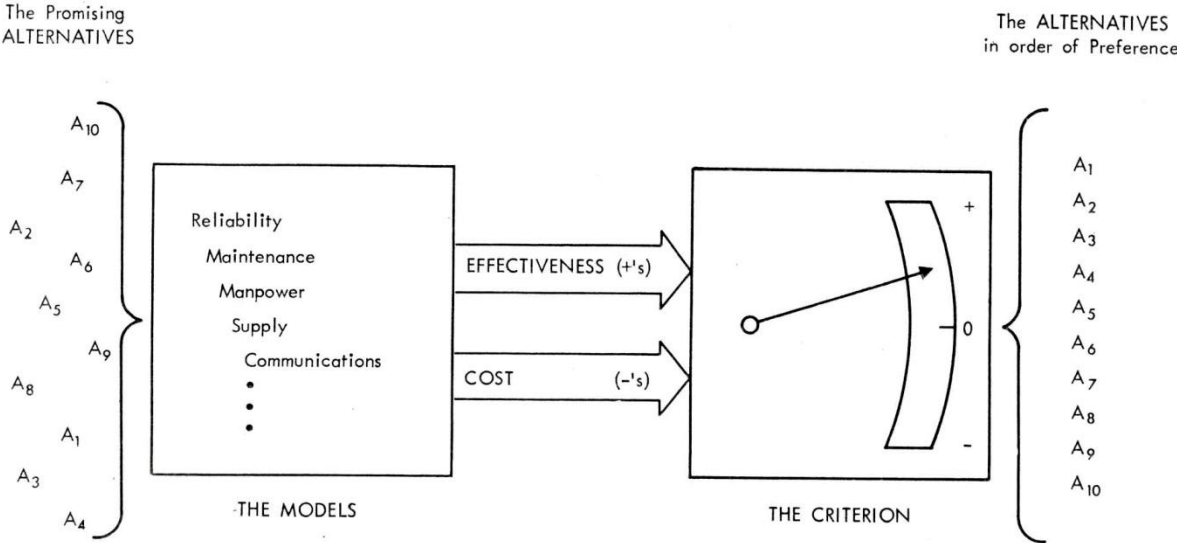


Fig.1—The structure of analysis

Figure 2: Reiterating the PPBS Analysis

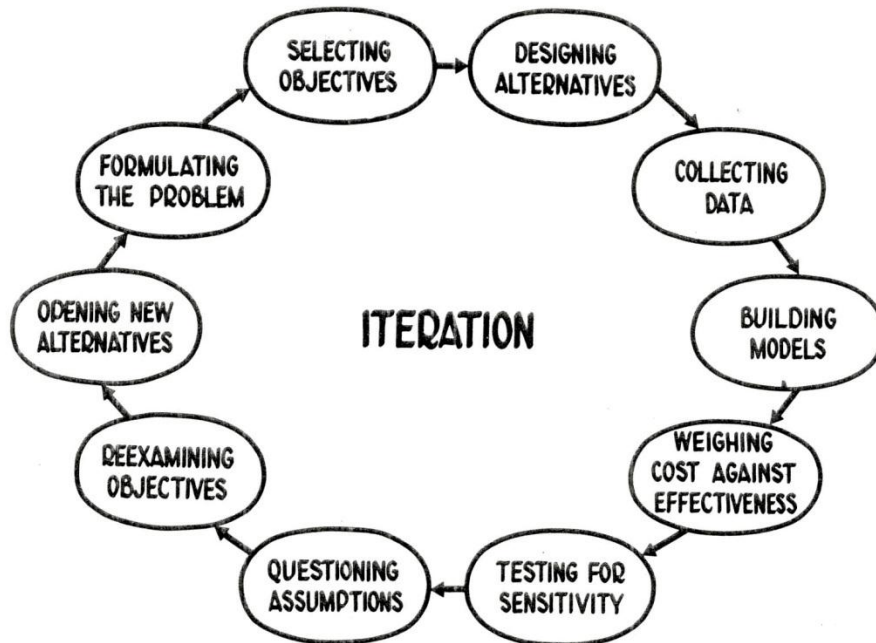
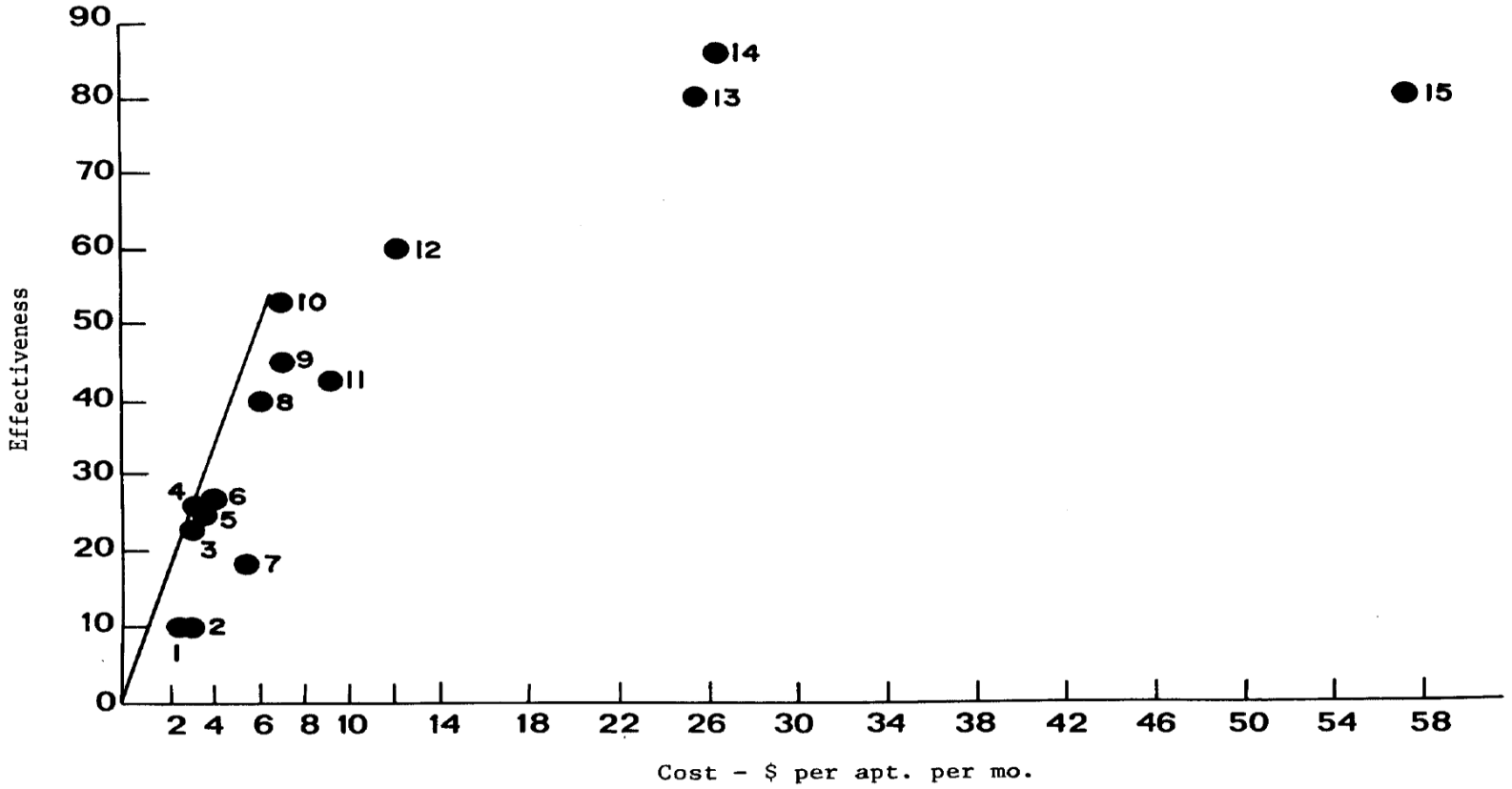


Fig.2—The key to analysis

Figure 3: An Example of Systems Analysis: Effectiveness-Cost of Security Measures

AVERAGE EFFECTIVENESS/COST RATIOS OF SECURITY OPTIONS



**Figure 4: Professor Ernest Burgess's Table of Social Types (1928)**

Social Type.	Violation Rate by Institutions.		
	Pontiac	Menard	Joliet
All Persons .....	22.1%	26.5%	28.4%
Hobo .....	14.3	46.8	70.5
Ne'er-do-well .....	32.8	25.6	63.0
Mean Citizen .....	.....	30.0	9.5
Drunkard .....	37.5	38.9	22.7
Gangster .....	22.7	23.2	24.1
Recent Immigrant .....	36.8	16.7	4.0
Farm Boy .....	11.0	10.2	16.7
Drug Addict .....	4.3	66.7	83.3

**Figure 5: Professor Burgess's Table of Psychiatric Personality Types (1928)**

Personality Type.	Violation Rate by Institutions.		
	Pontiac	Menard	Joliet
All Persons .....	22.1%	26.5%	28.4%
Egocentric .....	24.3	25.5	38.0
Socially Inadequate .....	20.0	24.7	22.6
Emotionally Unstable .....	8.9	*	16.6

\*Number of cases insufficient for calculating percentage.

**Figure 6: An Actuary at Stateville Penitentiary**

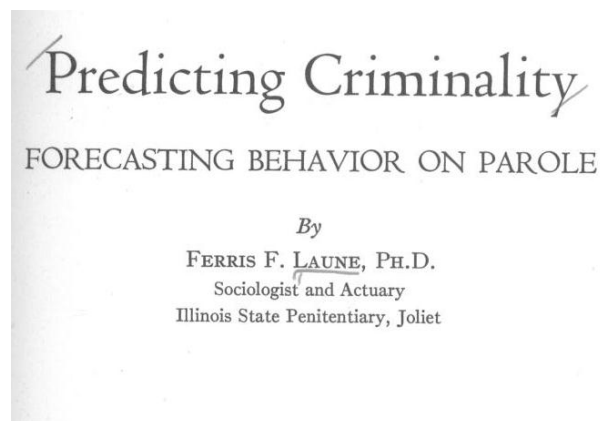


Figure 7: State of Virginia Judicial Sentencing Scheme for Sexual Assault

# Rape Section A

Offender Name: \_\_\_\_\_

◆ **Offender's Age at Time of Offense** \_\_\_\_\_

Younger than 35 years .....	12	
35 to 46 years .....	4	
Older than 46 years .....	0	

◆ **Less than 9th Grade Education** \_\_\_\_\_ If YES, add 4 → 0

◆ **Not Regularly Employed** \_\_\_\_\_ If YES, add 5 → 0

◆ **Offender's Relationship with Victim** \_\_\_\_\_

Victim Under Age 10	Relative .....	0	
	Known to victim (not relative or step-parent) .....	4	
	Stranger .....	4	
	Step-parent .....	9	
Victim Age 10 or more	Relative .....	2	0
	Known to victim (not relative or step-parent) .....	3	
	Stranger .....	8	
	Step-parent .....	2	

◆ **Location of Offense** \_\_\_\_\_

Place of employment .....	0	
Shared victim/offender residence .....	3	
Outdoors .....	3	
Motor Vehicle .....	4	
Victim's residence (not offender's) .....	5	
Offender's residence or other residence .....	9	
Location other than listed .....	3	

◆ **Prior Adult Felony/Misdemeanor Arrests for Crimes Against Person** \_\_\_\_\_

Number: 0 Felonies	1 - 3 Misdemeanors .....	1	
	4+ Misdemeanors .....	8	
1 Felony	0 - 2 Misdemeanors .....	5	
	3+ Misdemeanors .....	8	
2+ Felonies	0 - 3 Misdemeanors .....	8	
	4+ Misdemeanors .....	15	

◆ **Prior Incarcerations/Commitments** \_\_\_\_\_ If YES, add 3 → 0

◆ **Prior Treatment** \_\_\_\_\_

Prior mental health commitment .....	0	0
Prior mental health treatment .....	2	
Prior alcohol or drug treatment .....	3	
No prior treatment .....	4	

**Risk Score** \_\_\_\_\_ →

- Risk Level** (Risk Score)
- 44 or more ..... Level 1
  - 34 - 43 ..... Level 2
  - 28 - 33 ..... Level 3
  - up to 27 ..... No Adjustment

Go to Section C

Figure 8: Combined state and federal cases using the term “individualized suspicion”

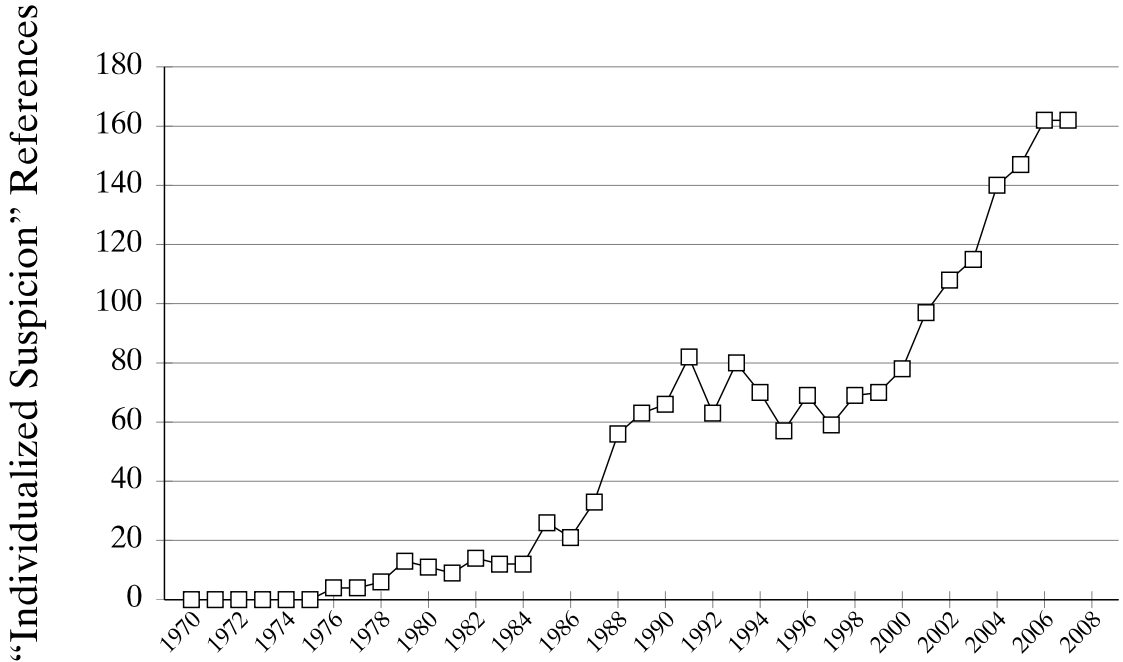


Figure 9: Letter Requesting Four Additional Conscientious Objectors dated Oct. 14, 1944

October 14, 1944

Re: Contract OEMcmr-450

Colonel Lewis F. Kosch  
Assistant Director - Camp Operations  
Selective Service System  
Washington 25, D. C.

Dear Colonel Kosch:

*Alving*  
We are enclosing an endorsed request for four (4) additional conscientious objectors submitted to this office by Dr. Alf S. Alving of the University of Chicago, under Contract OEMcmr-450.

According to our records, Doctor Alving now has eight (8) conscientious objectors working under this project and this additional request would bring his quota up to twelve (12) men.

This office wishes to express approval of the assignment of these additional men to Doctor Alving's project for use as experimental subjects.

Sincerely yours

Chester S. Keefer, M.D.  
Medical Administrative Officer

n/  
Enc.