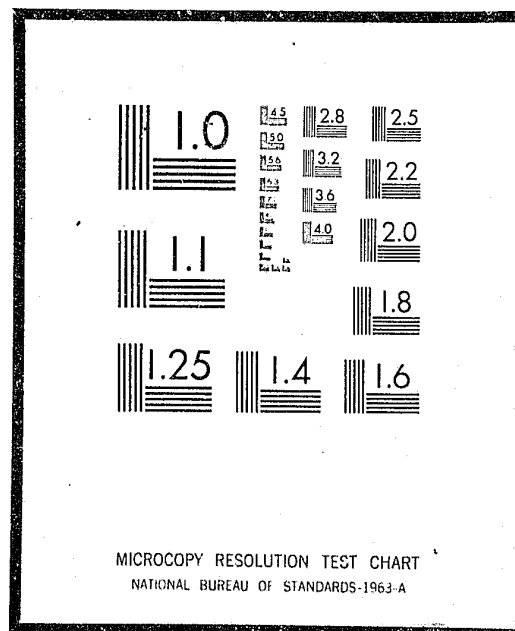


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Final Report

Part 1. RESEARCH PRIORITIES IN CORRECTIONAL ARCHITECTURE

Project Dates: July 1, 1970 - December 30, 1970

Principal Investigator: Robert Sommer, Chairman
Psychology Department
University of California
Davis, California 95616

Architectural Consultants: Murray Silverstein
Max Jacobson
Sim van der Ryn

Secretary: Margaret Hill

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Part 1 of this Report was prepared by R. Sommer, Part 2 by M. Silverstein and M. Jacobson.

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READING ROOM

In correctional architecture there are more questions than answers. One simply cannot test out every new idea with a new building and see how it works. Although present prison construction would indicate that this idea has been tried, it is both expensive, wasteful, and damaging to the inmates and staff. Part 1 of this report will outline the important areas in correctional architecture where answers can be generated quickly and economically. In Part 2 some major design recommendations will be stated in the form of hypotheses or patterns. These two sections overlap greatly in content but are kept separate since they appeal to different audiences; Part 1 to those who will underwrite or undertake research in correctional architecture and Part 2 to those whose primary concern is the design of correctional facilities on the basis of the best available knowledge.

Research priorities involve practical decisions about available resources and gaps in our information. Most behavioral research remains irrelevant to practical problems because it did not arise from those problems and its implications for action are unclear. The reader is left with the idea that the research is interesting but not particularly helpful. Some of the studies proposed, such as those involving the urban resources center and flexible security, relate to the design of new facilities, while others are intended to improve existing facilities. It is as important to make the best use of what is already there as it is to develop new facilities on the basis of the best available knowledge.

No matter how much money is spent on new construction, most existing prisons are going to be used for a long time to come. We believe that there are specific and tangible steps that can be taken to improve the living and working conditions in them, and this task is as urgent as developing proper guidelines for new institutions. At the least, we hope that existing facilities can become laboratories and workshops for developing a solid body of information about the proper environment in a correctional facility. Unless we generate such information, we are likely to repeat many mistakes of the past. Evaluational research in existing facilities will tell us what is good as well as what is bad.

We come now to the question of how the Department of Justice can stimulate such research. The obvious answer is to get good people, give them adequate financial support, and encourage them to apply their creativity to important problems. This is easier said than done. Good researchers are in short supply and they need the kind of work situation that encourages experimentation and innovative thinking. It is not easy to accommodate this approach in institutions concerned mainly with carrying on day-to-day activities with a minimum of disturbance and friction. This point applies generally--it is not limited to corrections. We know of no educational research unit stationed permanently in elementary or high schools. Those research units stationed in universities devote their time to general problems of education and ignore the problems of the host institution.

Without denying the importance of basic research, there is an urgent need for serious examination of existing institutions

on an applied level as well. We are quite pessimistic about the long-term results of hit-and-run studies by outside investigators. Teams of visitors, even if they stay several days in a single institution, may be able to undertake some general statistical surveys but they aren't likely to do much about defining the problems of the institution or recommending how they can be solved.

It is unrealistic to visit a setting for a few days, make some recommendations, depart, and expect that the recommendations will be followed. Correctional staff must be involved in the data gathering phase and feel some involvement with the research if they are to be expected to apply the results. There is need for more continuity and accumulation in correctional research. Often an outside team approaches a problem as if no one had ever researched a prison before. They are unfamiliar with the background literature and the history of the particular institution. A better solution is to hire special research people and station them in institutions where the administration offers encouragement and assistance.

Section I
Information Sharing

Let us review some of the specific programs that can be used to develop a body of useful and shareable knowledge in the corrections field.

- A. Information Clearing House
- B. Monograph Series on Change Programs
- C. Prison Improvement Projects
- D. Research Correctional Facilities
- E. Consumer Testing

A. Information Clearing House

The U.S. Bureau of Prisons Handbook which was published in 1949 reviewed the most important developments in prison design. The rapid rate of technological and social change has meant that the handbook is out of date in many respects. There still remains an urgent need for a comprehensive source of material on prison design. It is inefficient at best to have prison officials in one state visit institutions in adjoining states whenever a new prison is planned, or to write the same plaintive requests for information on new developments elsewhere. Site visits and letters of inquiry have their place, but they are no substitutes for a comprehensive source of material on new developments on prison design.

When it comes time to plan new facilities, local architects and administrators are often in the position of "reinventing the wheel" since no firm body of knowledge exists about the best developments in prison design. The availability of an information bank covering such matters as ventilation, flooring, and food preparation areas will permit them to devote more attention to major issues of size, location, siting, halfway houses, parole programs, integration with neighborhood facilities, and the other important issues which often get neglected in the concern with detail problems which have been the subject of expensive and exhaustive trial and error solutions elsewhere.

In view of the great volume of material to be covered, it would be desirable to replace the handbook with a series of

small pamphlets, each dealing with a single aspect of prison design-- windows, locking devices, heating and ventilating systems, food preparation areas and so forth. A good precedent to follow would be the pamphlet series on school design issued by the Educational Facilities Laboratories, an offshoot of the Ford Foundation concerned with school problems. The pamphlets in the E.F.L. series deal with practical problems in a non-technical but accurate manner, well-illustrated, and distributed free to interested school officials and institutions. Some titles in the E.F.L. series are New Campuses for Old: A Case Study of Four Colleges that Moved, High Rise or Low Rise? A Study of Decision Factors in Residence Hall Planning, Conventional Gymnasium Versus Geodesic Field House, and A Divisible Auditorium. As the titles indicate, each pamphlet deals with a separate practical issue of school design. In the correctional field, such pamphlets could be distributed at nominal cost by the Department of Justice, the American Correctional Association, or a foundation interested in correctional problems.

In addition it would also be helpful to develop an open-ended information clearing house such as that suggested by Norman Johnston. This would contain a data bank of user evaluations and outcomes as well as plans. The clearing house would have a small staff of site investigators who evaluate facilities or programs using a prepared format suitable for easy storage and retrieval in the data bank. A good precedent for the evaluational approach to institutional architecture would be the team of architects, engineers, teachers, that systematically rated English schools.

Their findings are summarized in the book The Primary School: An Environment for Education. An information clearing house can supply the source material for the pamphlet series described above or a series of patterns following the approach of Christopher Alexander and his associates. Patterns consist of single loose-leaf pages concerned with specific design issues containing a distillation of explanations, a statement of research needed to support or modify the recommendation, references to work bearing on the problem, and a key for cross referencing between patterns dealing with related issues.

Recommendation. It is the writer's feeling that a major revision of the handbook would be out of date before it was published and would be extremely unwieldy to use as a working tool. As a stop-gap measure the inexpensive pamphlets, each one devoted to a single area of correctional architecture would be extremely helpful. The Center for Environmental Structure in Berkeley would be in a position to develop patterns for correctional institutions which could be used to generate working drawings in many different settings. It is much easier to up-date looseleaf sheets than books or pamphlets. The writer's experience in the school design field has indicated that the E.F.L. pamphlets get re-issued even though they are clearly labelled preliminary documents. For example, the series "Profiles of Significant Schools" shows the blueprints and programs for several schools prior to their being opened. Some of these buildings have now been in use over 5 years and it would be very helpful to know how they work in practice. Some form of open-ended information system seems

desirable. As Norman Johnston indicates, this could be located in the social science sections of the United Nations Secretariat, the Federal Bureau of Prisons, the American Institute of Architects, or some foundation or agency concerned with correctional issues.

Another alternative would be to locate such a clearing house in a university department of architecture or school of criminology. Precedent here would be the comprehensive file on alcohol use and problems maintained at Rutgers University. As I understand it, the Smithers Foundation pays the cost of maintaining the alcohol abstracts but the tie-in with Rutgers is helpful in obtaining library facilities and skilled personnel. A similar sort of arrangement could be made with a school of architecture or criminology to compile and maintain an information clearing house devoted to correctional architecture.

B. Monograph Series on Social Change

It seems clear that there is almost as much trouble in getting promising innovations accepted as in getting unsuccessful ones dropped. Innovations discussed at correctional congresses often get lost somewhere on the journey back to the individual institutions. This situation is not unique to corrections. Twenty-five years ago it aptly described the situation in America's mental hospitals which were in a deplorable state of neglect and inertia. The improvement over the past decades had been credited to the new tranquillizing drugs and increased appropriations for buildings and personnel, but none of these would have reached their potential without an openness to change. The National Institute of Mental Health not only supported basic research into improving hospital conditions, but also publicized those changes through workshops and publications. Particular credit goes to the Russell Sage Foundation which has dedicated itself to making social research findings useful to practitioners and bridging the gap between social research and the professions. Among their accomplishments in the mental hospital field was the publication of a monograph series describing some of the most successful changes and how they came about. Two books of this sort are aptly titled From Custodial Care to Therapeutic Treatment in Mental Hospitals and Remotivating the Mental Patient. Not all the changes described were profound or far-reaching--some involved the development of a volunteer program or the acquisition of a halfway house. What gave these books their impact was not the specific changes, but

how they came about within the institutional structure--how it was initially begun, the efforts that were needed to get it accepted, and its effects upon other aspects of institutional life.

There is need for a similar monograph series in the correctional field. The emphasis is on process and change, who did what to whom with what effect, rather than fixed points or statistics. Some of these programs have already been described in the popular press or in the American Journal of Corrections. However, based on the experience of mental hospitals and other institutions, it will be desirable to collect them into several separate books dealing with social change in prisons across the country.

Recommendation. The Russell Sage Foundation should be approached to see if they would be willing to underwrite a monograph series in corrections similar to what they sponsored in mental hospitals. They would be asked to establish fellowships in correctional institutions dealing with social change. It should be noted that these fellowships are not intended for original work but rather examining and chronicling changes that have already occurred. The Russell Sage Foundation with its long experience in bridging the social sciences and the professions is in a good position to sponsor such a program.

C. PIP (Prison Improvement Program)

The present state of behavioral research in corrections is similar to that in mental hospitals a few decades ago. Up until the 1950's there simply wasn't much research and what there was tended to be trivial. The real breakthroughs from the standpoint of mental hospitals were the pilot programs with open wards, drug therapies, extensive use of volunteers, total push therapy, and ward renovation.

Recommendation. It is likely that the same kind of programmatic approach will bear fruit in corrections. We recommend that the Department of Justice establish a Prison Improvement Program (PIP) which has a strong action orientation. Awards should be made to facilities submitting acceptable proposals for three-year periods, renewal for an additional two years, for programs that would actually improve the circumstances of the prison and generate knowledge that could be shared by other institutions. Grants will be made available for programs or facilities that have not been available before. It would be unrealistic and impractical to insist that all such programs be completely novel or unusual. For some institutions, a program of conjugal visiting or a halfway house would be an exciting innovation, while for others it would be old hat. Selection criteria would involve the existing situation at the institution with the goal of moving it up from that level, wherever that level happens to be.

D. Research Correctional Facilities

It is unlikely that even the largest state correctional system can undertake the necessary research and development work in corrections within its own jurisdiction. No single state has the necessary investment to justify a large scale program of basic and applied research. The result has been the duplication of small studies and the neglect of larger issues. Research has also proceeded on a project-by-project basis according to the whims of particular investigators and lacks a programmatic quality.

Recommendation. Two special research prisons should be built, with perhaps 80% funding by the federal government and 20% by the host state. Each research institution would be located within an hour's travelling time of an existing correctional facility, to assist in the transfer of inmates as well as to permit the research staff to maintain contact and extend their work into existing institutions. Each institution would also be near a major educational institution that includes a medical school as well as training facilities for social workers, psychologists, and other service professions. These two institutions would be officially designated as research and development facilities. It has been clear during the last decades that the scientific and academic communities have placed too much emphasis on pure research and too little on applying the knowledge that already exists. The two R and D prisons would be charged by the Department of Justice with the task of evaluating facilities as well as programs.

The rehabilitation potential of an R and D facility should not be overlooked. In the mental hospital field, there was an adage that research was therapeutic. Patients got well on special research units no matter what therapy was being evaluated. Part of the explanation was the intellectual excitement and commitment on the wards, the experimental approach to issues other than therapy, the availability of specialized services in a research institution, and the high morale of both staff and patients on research wards. Similar attitudes could be expected in a research correctional facility.

In the long run, the construction of two research facilities should do more for corrections than four or five conventional facilities capable of housing more inmates. A research facility should have an innervating effect upon other correctional institutions. There is some precedent in the mental hospital field for making it both a research and training facility. Its tie-in with a university makes it a likely place for workshops and continuing educational programs for corrections staff.

E. Consumer Testing

There is need for an applied social research unit in the federal correctional system. This would not simply be "another research team" undertaking whatever studies they pleased but rather a team specifically organized and funded to evaluate existing products and develop new ones. Selected inmates would form the nucleus of a social research unit and handle many of the intramural arrangements. The prison is almost an ideal place to establish an applied research unit, in view of the availability of consumer panels. The applied unit could then publish bulletins similar in format to those of Consumer Reports. They might, for example, evaluate user satisfaction with such items as chairs, tables, stoves, floor waxes, and shower fixtures. This would help generate recommendations about whether dining room tables should be wood, plastic, or stainless steel, or how reuseable plastic utensils work. At present, each institution or state system has to learn these things for itself, often at considerable expense and bother to inmates and staff alike, or rely on manufacturers representatives who are trying to sell particular items.

Such a service would be extremely valuable for other state agencies. Correctional institutions share many common problems with schools for the retarded, the blind, the deaf, the elderly, and county hospitals. At the present time, there is no impartial testing service for institutional products. It is conceivable that such an evaluation service could be run on a self-sustaining

basis, based upon contracts with governmental agencies and manufacturers interested in use testing their products for the institutional market.

There are many inmates, particularly in federal institutions, who are well educated and motivated in the areas of social research and would find this work far more challenging than many of the other chores that they are currently doing. For well educated inmates, the rehabilitation potential of consumer testing should not be overlooked. Giving inmates a voice in product selection, testing, and evaluation should help reduce alienation and depersonalization.

To get such a program started, we recommend that the Department of Justice award one or two grants to develop applied research units in federal correctional facilities. It would be most reasonable for the testing to begin with items of direct concern to correctional authorities--utensils, stoves, coffee makers, shower fixtures and dining room furnishings. Standard rating forms and questionnaires perhaps in a format resembling those in Consumers Report would be the first order of business.

Section II

Studies to be Done

We turn next to proposals for specific studies in correctional architecture. We have deliberately omitted studies of parole practices and alternatives to incarceration as outside our immediate purview, even though such practices significantly effect what goes on in correctional institutions. Our immediate concern is with studies which will provide useful information about the effects of correctional environments and how these environments can be improved. Some of the recommended studies involve task forces or survey teams rather than experiments. The value of the pilot program has been firmly established in the mental hospital field. One can say clearly that activity programs, the use of community volunteers, and staff training have had beneficial effects even though the specific mechanisms of change remain unclear.

Projects

- F. The Pathology of Crowding
- G. Cell Environment and Stimulus Deprivation
- H. Space Standards
- I. Privacy
- J. Time in Prison
- K. The Soft Cell
- L. Behavior Modification
- M. Locations of Prisons
- N. Urban Resource Centers
- O. Service Vocations
- P. Custom Production
- Q. Visitor and Mail Policies
- R. Conjugal Visits
- S. Living-Learning Units
- T. Television
- U. Layout and Communication
- V. Flexible Security
- W. Involving Self-help Groups in Prison Programs

F. The Pathology of Crowding

Prisoners have a selfish interest in research into crowding, since they are so often unwilling victims of it. But the long range benefits of such research go far beyond the prison system. Thanks to the work of biologists such as John Calhoun and J. J. Christian, we are coming to know a great deal about the effects of crowding on animal populations. Death rates increase, reproductive cycles are disrupted, signs of sexual perversion including homosexuality appear, and the customary social structure breaks down. Although it is tempting to generalize from these studies to human populations, the practice is not generally warranted. On the other hand, we have very little systematic and useable information on effects of crowding on human populations. Virtually every descriptive study of extreme overcrowding--slave ships, concentration camps, or mine disasters--involved outside stresses of such magnitude that it would be illogical to credit a significant portion of the resulting pathology to the crowding itself. (Biderman) Crowded slums also have high unemployment, bad schools, inadequate health services, and virtually every other indication of social disruption, and it is impossible to say what proportion of these effects can be traced directly to crowding. Laboratory investigations of crowded rooms or civil defense shelters have not fared much better. Generally they involve such short time periods that the volunteer subjects are able to put up with the crowding without ill effects. (Freedman)

As one inmate described the Women's House of Detention in New York City, "The building was simply not built for all these living bodies. . . . In my corridor we were two in a very small cell. Whenever you were in your cell you were either on the toilet or in bed." (Paley) This suggests the possibility of systematic research into the long term effects of crowding within correctional facilities. However there are some serious moral questions that must be considered when one proposes to study the effects of noxious conditions on human beings. Fortunately there does exist some precedent in other areas of medical research for dealing with this type of situation. One approach is to survey existing instances of crowding using matched sample techniques between crowded and uncrowded cell blocks and try to isolate out the effects of crowding. This is an economical and fruitful approach if one can find instances where cell blocks with similar facilities have different degrees of crowding. The limitation of this approach is that assignment to crowded or uncrowded cell blocks is not random and there may be other pre-existing differences between the crowded and uncrowded inmates. The second possibility is to systematically assign inmate volunteers to crowded and uncrowded cells and monitor the results using physiological as well as social psychological measures.

Recommendation. The Ford Foundation has already made several grants for studying the effects of crowding. At Stanford famed biologist Paul Ehrlich is already researching the problem, but he is undoubtedly too busy to take on additional responsibilities,

while one of his former associates Jonathan Freedman at Columbia University is conducting studies with high school and college students in crowded rooms for brief periods. It seems clear that further survey work that documents incidents of extreme overcrowding in county jails or federal prisons--is not going to be of much value since crowding is associated with so many other destructive influences that its effects cannot be seen clearly. The most fruitful approach now would be a frankly experimental one. Focus should be on the long term effects of crowded living on attitude, behavior, and physiology.

Specifically we would recommend that professors Paul Ehrlich of Stanford and Jonathan Freedman of Columbia University be contacted regarding their interest in conducting research into human crowding in correctional institutions. If they are unable to undertake these studies themselves, they would know other people in this area capable of carrying out this research. This is a high priority project, not only from the standpoint of the prisoner, but of many urban residents, particularly those in slum areas.

G. Cell Environment and Stimulus Deprivation

There is a considerable amount of research showing the negative effects of sensory deprivation, ranging from an inability to concentrate to hallucinations and delusions in extreme cases. The internal world seems to compensate for the impoverishment of the external. In the sensory deprivation research at McGill, students at first volunteered to be subjects in the belief that they would be able to get a lot of studying done. Instead they found themselves unable to concentrate.

The need for a stimulating and pleasing environment is most urgent in maximum security and isolation areas. Inmates in a community facility who can work in town or visit outside can obtain their quota of stimulation this way. But in isolation or locked up in a cell all day, the inmate's mind will wander. Often one hears the lack of reading in cells attributed to the "kind of inmate" who is there--uneducated and unintellectual. At least some of this inertia may be due to the drab institutional surroundings. Here is a statement of an educated prisoner who found himself unable to do much reading:

The thought of leaving prison a well-read man was smugly satisfying. Then I discovered that reading--reading intelligently--in prison is not easy, because one of the most difficult things to do in prison is to concentrate. (Heckstall-Smith, page 76)

Research required.

a. Specific studies devoted to the effects of cell environment on mental functioning. This problem is amenable to experimental

investigation. Match inmates according to performance on one form of a mental test, some spend the next weeks in barren isolated cells, others in cells with access to the outside, rich in media, and amenities. Compare intellectual functioning as well as attitudes and outlook on a re-test one week and one month later.

b. Some research should be directed towards sensory acuity and how it is affected by prison environment. Autobiographies of several prisoners (Wildblood, Molt, Norrell) report that their senses became keener in prison--particularly smell and hearing. Many complaints about noise in the evening or about odors from food or toilets may be partially due to sensory enhancement--the inmate is more sensitive to auditory and olfactory stimuli. Very little is known about the effects of long-term confinement on sensory acuity.

c. Following studies a and b above, it would be desirable to undertake some experimental studies of the effects of stimulating surroundings upon intellectual functioning and mental outlook. Cells that were previously barren and unstimulating would be brightened and well furnished. Occupants of these cells as well as a control group would be tested before and after the renovations were made.

Recommendation. There are a number of laboratories where research in sensory deprivation is currently taking place. It is likely that some of these investigators would be interested in extending their work into correctional facilities. Professor D. O. Hebb at McGill University has pioneered research in this area and he would be a good person to contact about people to conduct particular projects.

4. Space Standards

Many prisons are plagued with the twin problems of over-concentration--too many people for one place under a single management--and overcrowding--less than adequate levels of square footage per inmate. Overconcentration can be handled somewhat by administrative and architectural decentralization but overcrowding remains a persistent problem. Even when single cells are designed to be small and asymmetrical, it is always possible for someone to crowd in a second man.

The only feasible solution as well as the most economical is administrative rather than architectural. It is absolutely impossible to design an adequate single cell that can't be used for two inmates. Instead, one must develop clear standards specifying adequate living space and defining the conditions for temporary exceptions. According to Richard McGee, the former Director of the California Department of Corrections, army prisons define standard living space as 72 square feet per inmate which may go down to 55 square feet if necessary. It cannot go down below this for periods of more than 14 days, and not below 40 square feet in any event. The prison director must report immediately to the base commander if the square footage per inmate goes below 55 square feet.

Recommendation. A small working group consisting of members of the legal profession as well as correctional officials should be assigned the task of drawing up model space standards. Many states already have standards which they use in programming new

institutions. In California a new dormitory in a juvenile hall is expected to have 50 square feet per inmate exclusive of toilet and service areas. The standards for juvenile halls states that the majority of sleeping rooms should be single, with a minimum of 500 cubic feet per room. Many of the existing standards deal with averages and have no meaning for the individual inmate. At this time, the actual capacity of California's penal institutions is 24,355 inmates, which is somewhat under the rated capacity of 25,538 inmates. However, examining the figures more closely, one finds that the minimum security institutions are under their rated capacity, while the maximum security institutions, particularly Folsom and San Quentin, are overcrowded. Statements about averages carry no legal force, they are merely recommendations about optimal average densities. What are needed are environmental standards, particularly in regard to minimum spatial requirements. It will be the task of the task force to seek ways of developing standards that have some teeth in them, almost an environmental bill of rights for prisoners. It would be ironic if such standards could be developed first in corrections and then spread outwards to the rest of society. When the minimal spatial requirements are not met, and two prisoners are placed in small single cells for extended periods, the prisoners would be able to exert legal pressure to obtain decent living conditions which in turn would allow the prison officials to pressure the state for additional facilities or faster processing by

the courts or other measures to relieve overcrowding. It is not our task here to develop such a code or predict the form it would take. Whether it would be most feasible to write it as a statute, an administrative rule of the Bureau of Prisons, or a model code to be adopted by states would be matters for the Task Force to decide.

I. Privacy

The lack of privacy, even in institutions containing only single cells, is an almost universal feature of prison life. There have been many efforts to counteract this by giving inmates keys to their own cells and lockers, designing smaller dining rooms, and reducing the size of cell blocks to manageable proportions. However the economics of dormitory living, particularly in minimum security institutions, are always tempting to the budget conscious administrator. Other considerations such as reducing conspiracies or homosexuality and encouraging social relationships buttress the arguments for dormitory accommodations. The trade-offs in terms of reduced privacy are known but are not clearly documented.

Architectural considerations have great influence on the amount of privacy that inmates will have. However the physical barriers that may shield inmates from staff may foster the development of a strong inmate culture with criminal values. Norman Johnston recommends against "honor dormitories" and squad rooms since they tend to increase the strength of the inmate culture. Most wardens object to double cells because of the problems involving assault, homosexuality, exploitation of weaker inmates, etc. Some good market-type research on different sized cells would be a valuable addition to correctional literature. Several accounts written by San Quentin prisoners on the topic "My Home, the Prison, the Cell" expressed the concern inmates feel about the partner with whom they must share a closet-sized cell.

To see a stranger standing on the tier outside your cell one day with a bundle or box containing his belongings, is similar to what must have been felt by the young Indian brides or husbands when, according to Margaret Mead, they meet for the first time after they have been married!

These same crowded and barren cells represent a haven for many prisoners against the tension and potential violence of the San Quentin yard. On their free hours and during weekends, many inmates return to their cells for a voluntary lock-up for a modicum of privacy and freedom from the tension of the yard.

Privacy in a single cell is something different than privacy in a dormitory, and freedom from constant staff surveillance may leave the inmate open to exploitation from other inmates. Sometimes privacy means absolute solitude but other times it means a person getting together with one or two other friends and chatting or playing cards. The technological means exist to create micro environments which allow some degree of privacy even in group living. Students in college dormitories place their desks so as to minimize eye contact when they are studying. In a prison dormitory, the use of individual high intensity lamps may permit each inmate to regulate his own visual environment without disturbing his neighbors. The placement of the TV set and the location of the bathroom will also affect privacy. Different layouts of dormitories should be studied and compared specifically on the dimension of privacy.

Recommendation. It is specifically recommended that several social scientists who are already working in the area of privacy be approached to enlarge their studies to include correctional facilities. In addition, Professor Alan Westin of the Columbia University Law School, the author of the book The Right to Privacy, be invited to approach the topic from a legal and historical standpoint.

J. Time in Prison

In books and articles about prisons, time is at least as important as space. The prisoner constantly calculates how much longer he has to serve; sometimes he knows this to the day and the hour. Cells contain rows of X's and check marks showing time served and time to go. "How long are you in for?" is one of the first things a new prisoner is asked. The prisoner speaks about his sentence as pulling time or doing time, and there are special qualities attached to easy time and hard time. In one of the few serious studies of time perspective, Farber found that the prisoners' morale was seriously worsened when he was uncertain when parole might be granted. His suffering was less related to his immediate situation than to his time perspective. As noted social psychologist Kurt Lewin has indicated, the life space of an individual, far from being limited to what he considers his present situation, includes his future, his present, and also his past. Actions, emotions, and morale at any instant depend upon a total time perspective. As one prisoner wrote "While you are locked up, your main concern is to keep cool and pull your time. . . . The way to make this time is to ride with it. . . . But the time counts. Even the dullest hour is an hour, and after enough of them you're through." (Davis) I regard time as an environmental issue since it is clear that time in confinement is very different from time outside. What we are dealing with is a particular kind of space-time rather than either time or space in isolation.

Being forcibly confined and isolated from society changes an inmate's outlook in many ways. The inmate's virtual obsession with time is not easy for an outsider to understand. Knowing it, we can begin to grasp the strong negative reaction that many inmates show towards the indeterminate sentence. When I first heard of the indeterminate sentence it sounded like a very humane and logical device. Yet from the inmate's standpoint, it takes away his single anchor, his one way of measuring reality. He doesn't know whether he will have to serve 2 more years or 5. It is debatable whether the possibility of earlier release outweighs the anxiety and uncertainty generated by the indeterminate sentence.

There is an urgent need for research on the time world of prisoners. To an outsider it seems irrational that a man would choose a flat 5 year sentence over a sentence of from 1 to 5 years, but many prisoners feel this way. The explanation seems to go beyond a fear that parole officials will be capricious and prejudiced. It is connected with the experience of confinement and the need for order and structure in one's world. Not only must there be an end to suffering but a person wants to have a clear idea of when that end will be. As an inmate in a California institution wrote:

Under the indeterminate sentence law, there is no fixed plan, no task, no specific date or goal towards which a prisoner can aim. There is no incentive for the prisoner to make plans of any kind. There is no indication to the inmate of what he

might do to mitigate his sentence and there is no apparent rhyme or reason for the disparity between what happens to him and the fate of other inmates.

This inmate believes that the indeterminate sentence keeps men from thinking about the future. They live in a present world of gambling, sports, reading, courses, and anything else to "kill time." When the parole board finally does set their time for release, they begin to make plans with frenzied haste. All the years and months behind them now seem meaningless and purposeless. Nor can the corrections officials make reasonable plans for job or school training without knowing how long an inmate is going to be with them.

The administrative officer of the California Adult Authority in a recent interview described his views in this way, "A man who was sentenced for five-years-to-life is serving a life sentence until or unless the adult authority decides it should be something else." Many inmates take a very different view of the same sentence, considering it a five-year sentence unless the inmate by his present behavior warrants further incarceration. These are obviously two sides of the same coin.

The indeterminate sentence is too useful as a device to be discarded because of our ignorance about the time worlds of prisoners. Yet at this moment California prisoners are demanding its abolition. Research on time concepts in prison may seem esoteric but it is actually a high priority item. Unless we can

understand how time is experienced in confinement, society cannot respond intelligently to the prisoners' demands. It would not be difficult for correctional officials to abolish the indeterminate sentence--it doesn't affect their own lives--but it would be the inmates, their families, and the taxpayers who would be paying in the long run.

The research would be phenomenological rather than experimental. There would be need for long-term participant observation in order to gain the rapport necessary for lengthy interviews. Time is a medium, something that things happen inside of, and is intangible. It is not easy to discuss time itself, only the coordinates or events in time. However it can be researched. Julius Roth wrote an excellent book, Timetables, subtitled "Benchmarks in the life of a TB patient." Time was an essential category in the TB patient's attitudes towards his disease, his family and job outside, and the institutional routine. It seems likely that research will show areas where further clarification and definition will help dispel the inmate's feeling that he is caught in a revolving door of unsuccessful visits to the parole board. We are aware of fairly authoritative reports that some parole boards automatically turn down a man on his first visit. If this is the case, then the man's hopes should never have been raised in the first place and the first-visit procedure eliminated. Clarifying the criteria used in parole decisions would support the legitimacy of the board making such decisions.

K. The Soft Cell

Expressed in architecture, maximum security means a steel cage, stainless steel toilet bolted to the floor, ventilator shaft covered with a heavy wire mesh screen, and a minimum of furnishings. The objective of the hard cell is to minimize the possibility that the inmate, in his anger or confusion, might destroy the furnishings and injure himself or others in the process. The long-range solution involves developing mutual trust and respect on the part of both inmates and staff. We are concerned in this section with the specific environmental issues. Henri Hediger, the curator of the Zurich Zoo, in his excellent books Wild Animals in Captivity and The Psychology and Behavior of Animals in Zoos and Circuses has pointed out that captive animals have specific spatial needs. When these are not heeded and the animal is given too much, too little, or the wrong kind of space, he is likely to become sick, lose his body sheen, fail to reproduce, and eventually die. The spatial needs of a wild beast are no less applicable because the animal is angry or confused about his captivity.

Psychiatrist Humphrey Osmond has argued cogently that isolation rooms in mental hospitals should be the most pleasant and best furnished rooms in order to bring the patient's mind and body back to tranquility as quickly as possible. The need to isolate the prisoner because he will hurt himself or others, does not require that he be placed in barren, cold, or hard surroundings.

This kind of environment is not likely to calm him or make him more reasonable. It is also doubtful that denial of amenities will reduce the chances for self-injury. If an inmate wants to injure himself, he can do it sooner or later no matter what steps are taken. As a last resort he can always throw himself on the floor or bang his head against the bars. During one prison visit it was explained to us that inmates in one disciplinary unit tried to injure themselves in order to be transferred to the infirmary where living conditions were more pleasant. A better solution would be to make the isolation cells more habitable so that people would not want to injure themselves in order to get to the infirmary. Any object, whether it is the Bible or a tin cup can become a weapon if the prisoner is angry or disturbed. Rather than place him in a barren environment, it would seem desirable to place him in an environment where he could work out his anger rather than direct it at an institution which is treating him worse than society treats its zoo animals. Fortunately there exist new materials--particularly styrofoam, plastics, and inflatable items which are inexpensive and have minimum security implications. One can purchase an inexpensive albeit not very long-lasting, air mattress at the variety store for less than one dollar. Most of these plastics melt rather than burn. For slightly more money one can buy durable canvas coated air mattresses. Styrofoam has many possibilities for tables and chairs. These are easy to destroy, but the replacement costs are negligible. It can be noted that most security furnishings were developed prior to the advent of the new soft material.

Recommendations.

1. Several departments of interior design or working groups of designers be approached about the possibilities of designing "soft furnishings" which would have a minimum potential for aggressive acts or self destruction. The Department of HUD has just begun a design competition for furnishing low income buildings. The judging is under the auspices of the Washington Center for Metropolitan Studies and involves a distinguished panel of designers and housing experts. A similar competition might be developed for various sorts of prison furnishings. In this section we are particularly concerned with the security or isolation cells, but there is no reason why the program cannot be extended to many other areas of correctional design. We would recommend that the Department of Design and Environmental Analysis at Cornell University be approached to develop prototypes of "soft cells" with particular attention to the use of new materials.

2. We would also recommend that the Department of Justice award three demonstration grants to institutions for full renovation of their isolation cells. Perhaps it is too much to hope that these cells would become "the best accommodations in the prison" but there is no reason why they cannot be well-lit, properly ventilated, include inexpensive amenities which can easily be replaced, and have adequate access to TV receivers outside the bars. We could even see some value in a punching bag in an isolation cell so the inmate can vent his rage as well as keep fit without damaging himself or the institution. At face value,

there seems something incongruous in providing the best accommodations for people who have broken the rules or act irrationally, but if one gives some second thoughts to the matter, it becomes clear that the person who is hurt, confused, or angry has the most need for decent accommodations, particularly if he is denied contact with other prisoners on the outside. We realize that any single warden would have difficulty in convincing his superiors that the isolation cells should be superior to those in the rest of the prison or have more privacy than, for example, an army barracks, and this is where the need for a federal program with courage and imagination is clearly warranted.

L. Behavior Modification

The working philosophy of most prisons is that an inmate will be given increased freedom, responsibility, and amenities as soon as he shows that he can handle them in a socially acceptable way. It is up to the inmate to demonstrate this through conformity to rules, good work habits, and participation in training and rehabilitation activities. Although this more or less tacit agreement works well with some inmates, there are others who have difficulty handling delay or in seeing beyond what is immediate, concrete, and tangible. Indeed their problems in outside society frequently stem from an inability to look beyond short range gain to the long-range consequences. These inmates are not likely to be moved by a vague and unwritten agreement that good behavior may produce rewards at some future time, particularly when they have less than complete trust in the prison administration or who have found that a commitment made to them by one official or board was not honored by another. What is needed is some system whereby desired behavior is specified clearly and rewarded promptly. Both clarity and promptness are essential to the development of trust on the part of the inmates that the administration will honor its commitments. For his part, the prison administrator does not believe that commitments to the prisoner should be open-ended. When an inmate conforms to prison rules for a designated period, he may be eligible for transfer to the honor section but not necessarily to a work furlough program. There are gradations in privilege and amenity

that must remain matters of administrative judgment without appearing arbitrary and capricious to inmates.

The behavior modification approach pioneered by Skinner and extended to mental hospitals (Ayllon and Azrin) and work-training programs for delinquents (Harold Cohen) has much to offer in this area. Basic to this approach is the idea that reward must be objective and prompt, following immediately upon the completion of the desired act. When used in institutions, behavior modification has taken the form of the token economy. In an institution for retarded children, an inmate might receive one token for making his bed, another for returning his tray after he finishes eating, two tokens for cleaning his room, and so forth. The tokens are redeemable for canteen purchases, as well as additional amenities such as curtains or posters, and in some cases, for outside visits or weekend passes. The program is most effective where behavior can be divided into clearly specified and graded units of complexity and desirability.

We do not feel that a token economy has much value in a minimum security installation or even an honor unit of a medium security prison where inmates regulate their own behavior according to a rather abstract and unwritten accommodation with institution authorities. Most honor units already require inmates to have work assignments and maintain their own quarters or else they will be transferred elsewhere. There is not a pressing need for techniques to gain conformity with institution rules in these places.

However the situation is quite different in maximum security prisons or in the segregation areas of medium security institutions. Here one finds an almost complete breakdown of trust on the part of both inmates and authorities. In the most extreme cases, one finds inmates in virtually barren cells and permitted outside only for brief exercise periods. The authorities believe, with some legitimacy, that if the inmate is given privileges he will abuse them. This applies especially to environmental improvements--if he is given a mattress, he is likely to tear it apart or burn it; if he is given books he will tear them up and flush them down the toilet, and so forth. The anger and resentment of the inmate at being treated this way makes this a self-fulfilling prophecy.

Is there a way out of this impasse? It seems reasonable that the behavior modification approach would be helpful here. Let us consider the extreme example of the difficult inmate in the barren segregation cell. Officers believe that if he were given a book or magazine, he will tear it up and stuff it down the toilet. A behavior modification might run something like this, assuming that the inmate has some interest in reading. The inmate might be told that he will be given the inmate newspaper, or another two or three-page periodical at 10 a.m. If he returns this intact after lunch, he will receive a larger article, such as a seven or eight-page article from Life or the Readers Digest which he can retain until 4:00 when it is to be returned. Each time the conditions of the specific contract are known to both

inmates and guards. If the inmate is able to fulfill his contract and returns the article intact, at the end of the week he is given two articles, then to a magazine, books, and so on. Perhaps the easiest and cheapest reinforcement schedule would involve the amount of time the inmate can watch TV in his cell.

It is not our objective here to describe a full reinforcement schedule. Ideally each schedule is tailored to the needs of individual inmates. With one man it concerns food or eating utensils, with another bedding and pillows, and a third access to television. The initial goal is to develop a sense of trust or at least expectation on the part of the inmate that socially approved behaviors will yield tangible and prompt rewards. As the inmate demonstrates that he is able to perform clear-cut and specified activities, the institution demonstrates in turn that it can deliver prompt rewards. Such a reinforcement scheme becomes a social contract between the inmate and the institution. As it develops into a full repertoire of social behaviors with differential reinforcement contingencies, it becomes the basis of a token economy.

Recommendation. Several pilot programs in applying behavior modification theory in medium and maximum security facilities should be funded. There are a number of good people currently doing this work in schools for the retarded and mental hospitals. One person who could do an excellent job is Teodoro Ayllon, Professor of Psychology at Georgia State College at Atlanta, who developed the first token economy in a mental hospital. He

has worked with ghetto school children as well as withdrawn and regressed mental patients, and the prospect of extending this work into correctional settings should be quite a challenge for him and others concerned with behavior modification.

M. Location of Prisons

This is a problem involving trade-offs rather than absolute goods or bads. With a goal of bringing a service close to the clients, there are those who argue for locating correctional facilities in cities. In an urban setting, the inmate would be able to maintain contact with his family, work release programs would be easier, and the prison could draw upon a large pool of specialized technical, vocational, and professional people. Balanced against these are the high cost of land in the city, the difficulty of maintaining security arrangements in a dense urban setting, the inevitable crowding that occurs in an urban penal institution, the loss in possibilities of changed surroundings "and fresh air and exercise," and the fact that a city location does not guarantee that the particular city was the inmate's home town.

There is an urgent need for a cost-benefit analysis of rural and urban locations. Two areas which quickly come to mind are family contact and vocational readjustment. There has been considerable research showing that distance diminishes contact between people over time. Newly admitted prisoners send and receive more letters and have more visitors than long-term inmates (Clemmer) and this is also true for mental hospitals and TB institutions. (Sommer and Osmond, 1961)

Communication experts have developed a body of data concerning the effects of location and distance. Inter-city communication drops sharply as distance increases, and the same is true of

airline travel. There is a point at which a recommended facility-- whether it be a park or hospital becomes too expensive in time and money for regular use. If a patient is admitted to a hospital that is 90 minutes traveling time from his home (and it is more realistic to use minutes rather than miles as the measure) he is not likely to receive many visitors from his neighborhood. There is also a distance, perhaps involving 75 minutes of travel time, beyond which commuting to a job becomes unwieldy. An examination of visiting records at different institutions will help determine the point at which a location is likely to isolate individuals from major population centers.

Fortunately this is a very easy research problem in correctional institutions when mail and visitors are carefully monitored and recorded. A research team could correlate mail and visiting with the distance of the institution from the inmate's home town and the length of time he has been incarcerated. It seems likely that inmate clerks at the various institutions could do most of this spade work in analyzing visiting and mail records. Certain types of social research which deal with non-sensitive areas could benefit from the active participation of inmate teams. The work would be far more challenging and intellectually demanding for some inmates than the routine clerk chores to which they are presently assigned.

There is a need for comparison of work release and furlough programs in urban and rural settings. What sort of environmental support system would assist a rural institution in developing

These programs? One possibility is a scheduled bus service on a contract basis. The University of California at Davis has a bus that goes into Berkeley every morning and returns every afternoon at 4:00 which provides free transportation for students and faculty. This allows Davis people to use the excellent library and other facilities at Berkeley. Interestingly, the service is warranted economically on the basis of the books carried back and forth between the Davis and Berkeley libraries. If these had to be sent through the mails, the cost and delays would be greater than with the bus service, and the possibility of books going astray would increase. It seems reasonable that the costs of a scheduled transportation should be a line budget item in remote correctional facilities.

N. Urban Resource Centers

The conservation camp has already proven a valuable tool in the correctional field. At Camp Sierra in California selected inmates are given several months of forestry training and then sent out to minimum security camps under the joint supervision of the Departments of Forestry and Corrections. The careful selection of inmates is as important for the success of the program as is training in forestry skills. The camps provide a valuable service to the state in maintaining forested areas and recreational grounds, particularly during critical fire periods.

One can imagine urban counterparts of the conservation camp. Rather than constructing campgrounds and forest trails, their efforts would be directed to rehabilitating slum buildings, garbage strewn lots, and neglected school yards. Inmates belonging to minority groups might find this far more satisfying than cleaning up campgrounds in remote areas. A careful selection of inmates would be essential to the success of a program. As the program developed, urban resource centers might change from renewing the ghetto physically to working with human problems. There are many young children in the streets who could benefit from a relationship with adult males. It is all too tragic that a disproportionate number of minority group males are in prison while children in their districts grow up fatherless and increasingly resistant to adult authority.

There is also an urgent need for the rehabilitation and restoration of urban buildings of architectural, historical, and cultural significance. It is noteworthy that the U.S. Department of the Interior is not only responsible for the National Parks Service but for historical and cultural landmarks as well. There are many buildings listed in the National Registry of Historical Landmarks that are in great need of rehabilitation. The urban landmarks concept would be broadened to include buildings that have particular cultural significance for the community, such as an old hotel where many single and retired men live. Such decrepit and condemned structures are uneconomic for a private individual to rehabilitate. The urban resource center would work with HUD and urban renewal agencies in selecting sites for preservation and restoration.

It is possible that these urban resource centers could become the vanguard of small community based prisons. Just as park rangers and ranchers have accepted prisoners who will help control fires, it is likely that neighborhoods will be more receptive to prisons whose inmates help to rehabilitate old houses, play yards, and parks.

Recommendation: A program of grant awards should be announced to state departments of corrections to establish urban resource centers in the core areas of large cities. These centers would be small in size, perhaps no more than 50 inmates in any single one. All inmates would be convicted felons who had served time in other institutions and had been carefully selected on the

basis of willingness to obey minimum custody restrictions.

There would be a one or two-month training period to deal with such items as masonry and brick construction, plumbing and re-painting, building codes, etc.

O. Service Vocations

Finding work that is socially and vocationally meaningful, personally satisfying to the inmates, and economically justified has been a persistent problem in American prisons. Most of the emphasis to date has been upon maintenance tasks--kitchen, laundry, or farm--or upon production of items for state institutions. While maintenance tasks and production for state agencies have useful job training potentials, it is also true that the employment opportunities in production are not increasing as fast as the number of jobs in the service areas. Industrial technology has automated to the point where fewer workers are needed, while medical technology has increased life span and kept alive more infirm and disabled individuals who need personal attention. Most hospitals, particularly those for the elderly or the disabled, as well as institutions for the retarded and mentally ill are critically understaffed.

Solution. Locate a state correctional facility near a school for retarded children or a convalescent hospital. Develop entrances of both institutions so that some minimum security arrangements are possible. Attempt to develop pilot programs involving training inmates in the care and rehabilitation of the retarded, the blind, the elderly, and the physically disabled. Such work may be more satisfying as well as vocationally relevant than existing prison jobs. From a practical standpoint, state subsidized programs for employment after release are more feasible in service occupations, (since the institutions are under state auspices or are largely state subsidized) than in the production area in the private sector.

P. Custom Production

Prison factories and workshops have been criticized because they compete with private labor and the jobs tend to be routine and uninteresting. In their defense are the economic gain to the state from the items produced, and the possibilities of teaching good work skills such as punctuality, attention, and patience, as well as the need to keep prisoners active, and allowing them to make small amounts of money. The ideal industry for a correctional facility is one that requires a lot of unskilled or semi-skilled labor and where the market is either within the government agencies or consumers whose needs are not being satisfied through existing channels. Manufacturing license plates avoids competition with outside agencies, and there are many other activities such as printing school textbooks which could be done in prison shops. To make optimal use of the prison setting, one can go several steps beyond the production line into what we would call custom production. For example, for an extra \$25 fee, a California motorist can obtain personalized license plates that say "HIP" or "FRED." Each item is customized; there is special labor and bookkeeping involved but it is not of a highly abstract or difficult nature, and there are some interesting twists and variety to the work. It would be desirable to find analogues to the situation--situations where industrial production could be personalized--where the prison surplus of available labor can effectively customize items already on the mass market. Some examples would be braille

textbooks and pre-recorded tapes--in Spanish and other languages as well as English. With the available labor, a prison could fill a custom order for a tape of any book or pamphlet needed by a school, hospital, or private charitable organization. Standard textbooks in all fields could be tape recorded and available in a master library. When one is requested by a school district in Oklahoma or Massachusetts, a copy is made from a master and sent off on the same day. A federal correctional facility is ideally suited to develop a comprehensive audio tape service.

Q. Visitor and Mail Policies

Up until recently, most medical hospitals had restricted visiting hours. These were justified by the need to keep visitors from interfering with hospital routine, protection of the patient against overstimulation, and the desire to minimize the spread of infectious diseases. However in recent years the trend has been to liberalize visiting hours in the patients' rooms and also to create comfortable visiting areas on various floors of the hospital, as well as provide a coffee shop where patients and visitors can purchase refreshments. Penal institutions vary greatly among themselves in the number, length, and circumstances of visits permitted. It seems clear that what is an over-riding security consideration in one institution is considered a minimal problem in another. A properly designed visiting area with inspections for contraband taking place in an intermediate zone between the secure prison area and the visiting area can reduce many of the difficulties.

Letters to prisoners also maintain contact with family and friends outside, but these are often slowed down or limited in number for security reasons. Again institutions differ greatly among themselves in their mail restrictions and policies. It might be possible to design a letter form comparable to the overseas air letter, perhaps with open sides and light paper, that would be virtually contraband-proof. Such letters might go directly to the prisoner without any sort of staff surveillance. Such a policy might be very good for prisoner morale and also for his family who would not feel that their letters were read by strangers.

Recommendation. There should be a comprehensive examination of visiting and mail policies among various institutions. This would be a good project for an applied social research unit in the federal correctional system. As in the hospital field, we believe that visiting hours particularly can be liberalized without creating problems of great magnitude. Many restrictions on visiting rest on the fear that the institution would be swamped with visitors on week days or evenings as is often the case on weekends. Several pilot programs on open visiting hours, might help dispel these fears or perhaps reveal that they are indeed justified.

Another possibility, suggested by Mr. Richard McGee is to explore the use of tapes and leased telephone wires for contact with the outside. Through leased wires a relative could phone the prison at any hour and the message would be recorded on tape and then passed on to the inmate sometime during the next day. Many inmates have difficulty writing letters and a tape system would be an excellent way for them to maintain contact with their families outside. It is possible that the Bell Telephone Co. or one of its subsidiaries would help develop a pilot program exploring the use of a leased wire-tape storage system for contact between prisoners and their families.

R. Conjugal Visits

The architecture of many prisons makes a program of family visits difficult if not impossible. Apart from programs where the spouse would stay overnight or over a weekend, there are even problems bringing in children or having play areas available when they come to visit. A number of prisons in the United States, Mexico, and other countries, have conducted successful programs of conjugal visits for many decades. (Hopper) They cannot substitute for home visits, but for many prisoners without outside privileges they are the next best thing. On the basis of their years of experience with conjugal visits, prison officials in Mississippi believe that such visits keep down tensions that might erupt in violence, reduce homosexuality, maintain family contact, and give prisoners an additional incentive to maintain good behavior. Prisoners and their spouses are aware that smuggling in contraband or disruption within the prison could not only affect their own visiting privileges but the entire program.

We would like to emphasize that there is a difference between conjugal living and conjugal visiting that should be expressed clearly in architecture. Conjugal living emphasizes a residential pattern, a house or apartment for the inmate and his family where they would stay for several weeks before he is formally discharged. In most cases these could be located in the city and make use of existing houses or apartments. Conjugal visiting, on the other hand, implies temporary one-day or weekend visits by wife and

family, often to inmates who have no outside privileges. Here one would want motel type units within the same sort of security perimeter that enfolds the visiting areas. At present, many visiting areas are inside security control of the main gate, but outside the security of the inmate areas. This is the proper location for a conjugal visiting area which should have play facilities as well as sleeping and dining accommodations for the inmate and his wife.

Recommendation. A small planning grant should be given to an architectural firm or a school of architecture to work with correctional officials in developing several alternative plans for conjugal visiting areas which take into account the needs of spouses, inmates, and children as well as security considerations. The conjugal visiting programs that exist in the United States are not well publicized. Frequently one finds the officials in charge of such programs attempting to avoid publicity to prevent adverse community reactions. The experiences of these institutions as well as the reactions of the inmates and their families deserve systematic investigation. A monograph or pamphlet by the Department of Justice or one of its sub-units might help legitimize and "make respectable" some of these programs which are now operating sub-rosa. A small planning grant could be given to one of the correctional centers--and again we would like to suggest that a social research unit involving inmates within an institution might be of considerable assistance--to undertake a survey and review of existing conjugal visiting programs and prepare an appropriate pamphlet.

S. Living-Learning Units

Educational programs in correctional institutions have always been handicapped by a shortage of trained instructional staff and classroom space. There would be tremendous value in self-instruction techniques, not only to compensate for shortages of staff and space, but also to fill some of the idle hours. Programmed instruction is currently being used in correctional institutions, and one (Lompoc) has developed a teaching machine used extensively in the federal system and elsewhere. However it does not seem that any parts of the prison were architecturally designed to include the new educational technology. The result is that inmates often have to wait until they can be escorted to the educational area of the prison before they can work on their materials, and in these areas there is an exclusive emphasis on classroom instruction in basic skills.

Recommendation. Development of adult education programs for prisons would be a very good project for a research and development institution. There would be many applications of such educational programs for other sorts of institutions. Another possibility would be to award several pilot grants for living-learning units in existing facilities which would combine scheduled instruction with individual programs the inmate can work on at his own pace during his free time. Individual cells in this unit would be equipped with teaching machines, a library of program material, and the other accoutrements of a self-instruction learning system. Workbooks would be brought back to individual cells. Scheduled

classes, which would complement the individual programs, would help foster an educational atmosphere around the learning unit and a sense of cohesion among the residents. Even a single course in American history, social studies, or geography would contribute to this kind of educational culture as a unique experience. Some of the correctional officers assigned to this unit would have part-time appointments in the prison's educational center. The program could be evaluated using standardized objective tests comparing the performance of these men with those in other living units.

The extensive use of programmed instruction in correctional facilities would require some changes in state education codes. For example, to award educational credit the California Education Code requires 108 hours of classroom instruction. It is apparent that these codes were developed prior to standardized and valid self-learning devices. Programmed instruction does not require separate classrooms, although it is usually beneficial to supplement self-learning with consultation with teaching staff. Several firms that manufacture teaching machines and programmed workbooks should be contacted about developing pilot programs in correctional institutions. Such firms would have ready access to the means of evaluating the programs using standardized achievement tests. Kaiser and Litton Industries as well as other private firms have shown some interest in educational hardware. There is also reason to believe that the United States Office of Education would engage in a cooperative evaluational program in this area. John McKee of the Draper Correctional Center (Elmore, Ala.) is already doing some interesting work in this area, and this work deserves continued support and extension.

T. Television

The use of television in prisons has been limited by the layout of cells and corridors. Virtually all dayrooms were planned prior to TV and efforts to let prisoners congregate outside their cells in a dark corridor bring many security problems. The value of a closed circuit TV system for educational programs has not been exploited for the same reasons. Television can also play an important role in the behavior reinforcement system described previously. Perhaps the cheapest and easiest reinforcement schedule for an inmate would be the time he is permitted to watch TV in his cell.

Recommendation. Several manufacturers of television equipment should be contacted about instituting pilot programs in correctional facilities. The method used on some airplanes of having small individual sets in each cell is one possibility, another that is also used on airlines is to have sets at fixed locations in the corridor to be seen from a number of cells with earphones in the individual cells. If the cost can be brought down within reason, prisons would be a ready market for large numbers of TV sets that could also be used for educational programs. With a closed circuit system, an adult equivalent of Sesame Street could be used for teaching reading, foreign languages, geography, and the verbal component of courses in electronics, machine repair or computer programming where TV is tied in with complementary classroom and laboratory experience. The possibilities of using

television for an extensive in-house educational program are enormous. It seems quite reasonable that the television manufacturers and broadcast industry would see the market possibilities of a small, inexpensive, single channel, no frills TV receiver for institutional use.

U. Layout and Communication

Different ideas about the nature of custody and rehabilitation have given rise to specialized architectural forms. Some of the purer types are the (a) circular model along the panopticon proposed by Bentham, (b) the long linear grid or telephone pole system, (c) radial spokes coming out from a central point, and (d) cluster or campus type layouts. Prison administrators have accumulated considerable experience with the way these layouts work from the standpoint of lighting, heating, and security, but there is virtually no systematic knowledge about the way each arrangement affects social relationships within the inmate society, and between inmates and staff. The existence of the different physical arrangements, firmly buttressed by restricted entry and security systems, provides a superb natural laboratory for studying the effects of building layout on communication networks.

In the social sciences, there is already a growing body of literature on the connection between physical form and communication. In army barracks, Blake et al. found that recruits in an open-plan barracks had more acquaintances but fewer close friends than recruits in closed cubicle barracks. Gullahorn found that partitions in an office increased contact between members of individual work teams but reduced contact between teams. Studies in office buildings and college dormitories have shown that contact and communication are affected by the distance people are located from one another (Whyte, Wilensky), particularly if they are on separate floors of the same building or in different

buildings. On a larger scale the work encompasses communication between housing units and apartments in urban projects. There is little question that the physical layout of living units affects who talks to whom, how often, and even what is said. Although the regulation of communication networks is only one factor in prison planning, and certainly not the deciding one, it should still enter into decisions about whether to use a linear, radial, or a cluster type layout. A major focus of the study would be the way gradients of influence are related to location. How far down a long row of cells does a person's acquaintances extend? Studies in college dormitories show a gradient of influence on either side of the student's room, moderate influence one room away, and then a sharp drop in influence after that. Within prisons, there is little systematic knowledge about communication networks or groupings as related to single cells, two or four-man cells, or dormitories of various sizes. To what extent does overcrowding produce cocooning or withdrawal from social contact?

Recommendation. Over the next few years, several studies should be undertaken of the connection between physical layout and communication networks in prison. With appropriate modifications for the prison setting, the methods can parallel those used in other institutions. Interview and observational records can map out the range of contact of the inmate during the day. The effects of crowding as well as the size of living units can be determined. It would also be useful to know how quickly information

can spread in each type of arrangement. How long does it take for inmates to learn that someone has been transferred or a new man is on the wing, or a particular guard is absent one day? It would be helpful for administrators to know how location influences human groupings in a meaningful rather than an arbitrary sense. There is undoubtedly a point at which a dormitory breaks down into smaller cliques. What are the upper limits in size in which the men identify their unit as a cohesive whole.

There are many good sociologists who would be capable of undertaking this sort of research. A necessary attribute would be familiarity with field methodology. One simply doesn't walk blindly into a prison carrying a printed questionnaire. There has to be an awareness that local conditions may require that some items be changed or deleted or that a biased sample may be worse than none at all. One name that comes to mind is Dean Barnlund, a sociologist at San Francisco State College who did an excellent study of communication patterns in dormitories and fraternity houses.

V. Flexible Security

Whatever figures and projections in terms of number and type of inmates are used in designing a new institution, it is likely that they will be changed at one time or another. The demands upon a correctional facility change over the years as society's needs change or as new sorts of institutions are built that take over some of its functions. A good example is the treatment of the criminal offender with psychiatric problems where working philosophy and the legal regulations are in a constant state of change. Even if one is able to transfer inmates to specialized institutions, there will still be a need for some differentiation system within a single institution. Unless the correctional administrator can apply rigid selection criteria, and few are in this position, he will not know in advance how many people are going to need what sorts of programs or security arrangements. Buildings must have some capacity to respond to shifts in inmate population and correctional programs. To design a fully flexible institution, where living units would be combined or separated, would be very expensive.

Recommendation. A promising compromise between the need for flexibility and economy is the idea of flexible security.

Although individual living units cannot be changed or combined easily, the security arrangements can. Hardware is located in the buildings so extra doors or bars can be located at various points along a corridor or row of cells. When minimum security

is needed, the doors or bars can be removed and inmates can circulate within and between areas. When maximum security is called for, additional rows of bars and doors can be added easily. This is a different concept of flexibility than most architects use. It is not the building itself--the walls or the structure--that is designed for changing conditions, but rather the security hardware of the interior. The building must be specifically designed to facilitate the easy installation and removal of security hardware. This is the sort of problem well suited to a systems approach such as that used in the SCSD school design package. The SCSD system did not provide the super-flexibility of doors and partitions that the teacher could move around at will. Instead it employed demountable partitions that could be removed or rearranged overnight or over a weekend by the janitorial or maintenance employees. A flexible security system for a prison would also involve one or two day's time for a conversion to a new level of security.

W. Involving Self-Help Groups in Prison Programs

One of the most heartening developments in rehabilitation is the organization of people who had once suffered from the abuse of alcohol or drugs for the purpose, not only of helping themselves, but of assisting others. In the drug abuse field there are several successful institutions for treating addicts with the assistance of professional staff.

Recommendation. As part of prison decentralization, several buildings or wings can be set aside for specialized programs by A.A., Synanon, Daytop Village, or the Seventh Step Foundation. Security arrangements would remain the responsibility of the prison administration, but the sponsoring organization would have considerable latitude in the physical arrangement and layout of the experimental unit. The plan would require considerable advance discussion and agreement between state officials and the sponsoring organization. Contrary to what is often believed, many of these organizations are quite decentralized themselves and there is considerable variation between local chapters in the activities and interests of the membership. While some local units of A.A. would be reluctant to supervise the day-to-day operations of a prison rehabilitation program, others would be pleased to do it.

It would be worthwhile to have at least one or two pilot programs involving a substantial number of ex-inmates as rehabilitation counselors. They should not be recruited as individuals but as members of self-help organizations. In order to resist the temptation of bringing in contraband or relaying messages, both

of which they are likely to be asked to do, they will need commitment to group goals and purposes which can best be supplied through organizations such as Synanon or Seventh Step.

It would be logical for the self-help groups to develop marketing facilities for craft work produced inside the prison-- jewelry, leather goods, and paintings. Many prisons do much more art work than they are able to sell at the prison itself. A Seventh Step house in a downtown area would be a good location for a craft shop. Synanon has developed several retail and wholesale operations which are economically successful and they would be in a good position to advise on marketing prison craft work.

Postscript: Statement of Priorities

Taking an overview of the field, the information sharing programs, such as the clearing house, the monograph series on change, the prison improvement projects, the research correctional facilities, and consumer testing would have the greatest long-range effects on correctional environments. We are not using all the information that we have now. This task then--developing a body of information in corrections and using it wisely--seems a higher priority task than generating new information that we don't know how to use.

If we do make a commitment to share and apply existing information, the gaps in what we know will become apparent and the quest for new data will begin in earnest. This time we will know what we are looking for as well as how to apply the findings.

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