



FEATURE ISSUE

Institutional Design and Correctional Environments

A Psychological Perspective on the New Design Concepts for William Head Institution

Personal Space and Privacy: Implications for Correctional Institutions

Management Focus The Relationship Between Architecture and Operations

Research Across the Correctional Service of Canada



Service correctionnel Canada ORUM ON CORRECTIONS RESEARCH is published quarterly in both English and French for the staff and management of the Correctional Service of Canada.

It reviews applied research related to corrections policy, programming and management issues. It also features original articles contributed by members of the Correctional Service of Canada and other correctional researchers and practitioners.

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Foreword	Frank J. Porporino	
	Director General	
	Research and Statistics Branch	
	Correctional Service of Canada	
Research in Brief	 An Historical Overview of the Construction of Canadian Federal Prisons 	
	 A Snapshot of the Correctional Service of Canada's Institutions 	
	 Direct versus Indirect Supervision in Correctional Institutions 	
	 The Impact of Correctional Environments on Older Inmates 	1
	 Royal Institute of British Architects Makes Recommendations for 	
	Research on Prison Design	
	• A Daughalagical Perspective on the New Design Concepts for	
feature Articles	 A Psychological Perspective on the New Design Concepts for William Head Institution (British Columbia) by Joseph C. Johnston 	
	 Personal Space and Privacy: Implications for Correctional Institutions by Susan Lee Painter 	1
Management Focus	 Architecture, Operations and Change 	1
	by George Centen and Elizabeth Sampson	
	 The Design Continuum: An Operational Manager's Perspective by Arden Thurber and Marcel Chiasson 	3
egal Perspectives	 Reasonable Accommodation and the Rights of Persons with Disabilities by Lisa Hitch 	
nternational Overview	 Democracy in Spain: New Prison Construction Philosophy See the Activity of Catherine A New Institutional Design Consent 	
	 South Australia's Cottages: A New Institutional Design Concept Swadan's Local Institutions 	
	 Sweden's Local Institutions New Prisons Built as a Partial Response to an Increase in Crime in 	
	• New Prisons Built as a Partial Response to an increase in Crime in the Netherlands	

his issue of FORUM is devoted to a discussion of the link between correctional environments and behaviour. In his book *Discipline and Punish: The Birth of the Prison,* Michel Foucault observes that:

The transition from the public execution, with its spectacular rituals, its art mingled with the ceremony of pain, to the penalties of prisons buried in architectural masses and guarded by the secrecy of administrations, is not a transition to an undifferentiated, abstract, confused penality; it is the transition from one art of punishing to another, no less skilful one. (p. 257)

In Canada, we have come a considerable way in transforming imprisonment away from the "art of punishing." I would argue, though, that we must resist the temptation to take institutional and environmental design for granted. The quote carries a poignant message that bears repeating even in the context of Canadian corrections. We must remember that prison environments affect behaviour, that they have the ability to reward or punish, and to encourage either prosocial or antisocial attitudes. And indeed, we must always remain aware of and act on this knowledge in designing and managing our correctional institutions.

To appreciate a discussion of what is possible, one must first be provided with a picture of what has been. We have started this issue of FORUM with such a picture, found in the Research in Brief section, which traces the construction of federal prisons in Canada from the early 1800s to present day, with projections for the future. More important, the article discusses the lessons that were to be learned from each construction period in this history.

The feature articles of this issue of FORUM are particularly useful for those of us who are not completely familiar with the elements that are considered important in the design of correctional institutions and environments. The first article describes the new housing units to be built at William Head Institution and the empirical evidence supporting the new design. The second article discusses the concepts of space and privacy and how they affect us in our everyday living. For a crash course in the influence of environment on behaviour, I urge you to read this section of the magazine.

The Management Focus carries an important message for all correctional staff: architecture inevitably has an impact on operations, and operations ultimately defines the ability of a particular architectural plan to meet its design goals. It is therefore necessary that the dialogue between architecture and operations on the design of new correctional facilities be fluid and dynamic. We cannot afford to exclude one another from our activities. The stakes are high and the resources are low.

Ultimately, the message to be carried from this issue of FORUM is that the design of correctional institutions and environments affects the behaviour of staff and of inmates and therefore influences the success or failure of our efforts in corrections. Hence, it is crucial that we are aware of and understand the issues involved in design, and that we take an interest in the future direction of design.

I would urge you to give consideration to the points and discussions put forth in the pages to follow and, as always, we are anxious to hear your views.

Frank J. Porporino, Ph.D. Director General Research and Statistics Branch Correctional Service of Canada

esearch is often communicated only in academic publications in a specialized language, making it inaccessible to practitioners who must put research findings into action. In this section of FORUM, we hope to overcome the rift between the researcher and the practitioner by providing brief descriptions of findings from recently published studies.

As the theme of this issue of FORUM is institutional design and correctional environments, we thought it useful to begin the magazine with a brief overview of the history of federal prison construction, followed by a profile of the Correctional Service of Canada's institutions. We then delve into the issue of correctional environments by examining their impact on a particular offender group and by comparing the effectiveness of direct versus indirect supervision. More information about the research reported in this section can be obtained by contacting the Research and Statistics Branch or by consulting the references provided.

We welcome contributions from researchers in the field who wish to have their findings profiled in the Research in Brief section.

An Historical Overview of the Construction of Canadian Federal Prisons

It is often held that the design of correctional institutions reflects the nature of a given jurisdiction's outlook on rehabilitation.

In Canada, the design of federal correctional facilities has evolved substantially during recent history, from pre-1940 institutions which conjured up images of stacked cages to the institutions of the 1990s which attempt to simulate community living. We have moved from institutional design concepts that primarily promoted the use of dynamic security to those that promoted static security, and back again to dynamic security. This brief article outlines six distinct stages of prison construction in Canada, focusing on the characteristics of institutional design during each stage and the major tenets on which they were based.

Historical Precedents

The widespread use of long-term imprisonment as a form of punishment emerged first in the United States with the development of two types of penitentiary systems – the Pennsylvania system and the Auburn system – in the early nineteenth century. By this time, a number of European countries had already developed workhouses and houses of correction, but these were not "penitentiaries" as we now think of them. Under the Pennsylvania system, inmates were completely isolated from one another: in fact, they were even kept out of sight of other offenders with their cells arranged in such a way as to preclude eye contact; and they each worked alone. Under the Auburn system, inmates were allowed to eat and work together during the day but were housed in individual cells at night. Although inmates were in proximity to one another during the day, they were completely forbidden from both verbal and nonverbal communication. The Auburn model would become the system upon which most prisons in the United States and Canada would be modelled initially. In Europe, South America and Asia, the Pennsylvania model was the preferred approach.1

Before the 1940s

Correctional institutions constructed during this period evoked an environment of communal penitence. The offender was stripped of individual rights and incarcerated in a colony behind a solid wall. Group cells no longer existed, but each individual windowless cell was of minimal size. Tiers of cells overlooked a tall common space, suggesting images of stacked cages. Interestingly, the open grills of the cells permitted a crude form of socialization – inmates could communicate through the bars. Inmates in one American state prison who were moved to a modern facility complained about the closed cells and limited time for group contact.

Built to last hundreds of years, these institutions are landmarks in their communities, contributing to a sense of history and identity. While many buildings have since been added to accommodate services comparable to those found in modern institutions, the ranges remain essentially the same. As well, these older facilities are not very adaptable, making them both expensive and difficult to change. Their fate remains a challenge to correctional administrations.

The 1950s

The institutions of the 1950s emphasize privacy, with smaller ranges composed of larger cells. Each cell has a solid door and a view to the outside. The bed capacity of these institutions is comparable to that of older institutions at approximately 450 beds each. The design concepts encourage movement through outdoor areas. As in the older institutions, control is largely exercised through dynamic security and the manual locking of barriers. Whereas inmates had their meals in their cells in the older institutions, eating in the newer institutions was communal by range. The dining rooms, which continue to be used, double as lounges where inmates socialize.

The 1960s

This decade was one of major prison construction, adding approximately 4,000 beds to the capacity of the Correctional Service of Canada's facilities. These newer institutions each accommodate approximately 450 inmates and, at higher security levels, are designed to limit inmate contact with

C.T. Griffiths, J.F. Klein and S.M. Verdun-Jones, (Eds.), Criminal Justice in Canada: An Introductory Text. (Vancouver: Butterworth & Co. [Western Canada], 1981). staff. Static security measures, such as remote controls in "bubbles" and separate corridors for staff, became standard features.

The lower-security institutions of this era are characterized by a more open plan, akin to a campus. Buildings, however, are organized in a straight line, permitting a continuous covered link to confine all circulation. Bubbles are strategically located to control traffic. Housing units, though smaller and with a higher ratio of common areas per occupant, are fitted with hard finishes and a preponderance of hardware that is remote controlled. These designs, transplanted from California, represented the newest in prison philosophy in the 1960s. They stressed efficiency and were, to a large extent, driven by the detention equipment industry.

During this period, a number of building acquisitions were made, including vacated military, internment and work camps. Satellites to larger institutions were also constructed. These lower-security facilities featured such employment strategies as the provision of goods and services to neighbouring institutions. Such facilities also addressed the need to reduce the level of institutionalization prior to release.

The 1970s

The alienation brought on by the designs of the 1960s elicited change in an era of soul searching and experimentation. New approaches both to lessen confrontation and to enhance rehabilitation were pioneered. Institutions were designed to be smaller and less austere, to respond to specific behavioural dysfunctions. Although security was an important consideration, an attempt was made to create a more humane environment. Though correctional officers were still in bubbles, other staff members interacted with inmates on the floor. An unfortunate by-product of this practice was the opportunity for inmates to pit staff one against the other, creating rifts.

Mission Institution, a mediumsecurity facility, succeeded in reducing the use of hardware and today remains one of the Correctional Service of Canada's best efforts to promote a relaxed ambiance encouraging cooperation and self-control. However, at higher security levels, results were mixed at best.

During this period, the Correctional Service of Canada acquired more camps and established urban community centres for parolees and inmates on mandatory supervision.

The 1980s

This period was characterized by opposing views. On one hand, the Correctional Service of Canada embraced the concept of community and some means of instilling responsibility. On the other hand, several fatal incidents of violence against staff spurred the imposition of severe controls and preparation for armed intervention capability. Many existing institutions were upgraded with additional controls. A number of new institutions were designed to minimize the risk of violence and to facilitate a quick and effective response to any attempt to breach the good order of the institution.

Despite this climate of unprecedented fear, the Correctional Service of Canada achieved a few notable examples of gentler architecture. Bowden Institution owes its design concept to a 1970s movement rooted in social housing. This design allowed for access to apartments from the face of the building, rather than from an internal corridor, the idea being to prevent predatory behaviour. From the windows of the units, passers-by and residents have a greater chance of spotting suspicious activity. At Bowden, small clusters of cells overlook a semi-private common area. which enhances policing by staff and inmates. Inmates also have free access to their rooms by being able to unlock and lock their doors at will, a privilege overridden at night. Although a central control area is still provided, it is open and serves as an information station at all times. One significant reason for the success at Bowden is that the institution was completely redeveloped while it operated as a small,

Federal Prison Construction in Canada

Before the 1940s

- Kingston Penitentiary 1832
- Laval Penitentiary 1873, closed in 1989
- Dorchester Penitentiary 1880
- Saskatchewan Penitentiary 1911
- B.C. Penitentiary closed in 1976
- Stony Mountain Institution 1920s and 1930s
- Collins Bay Institution 1930s
- Prison for Women 1934

The 1950s

- · Federal Training Centre
- Leclerc Institution
- · Joyceville Institution

The 1960s

- Springhill Institution
- Correctional Development Centre (Quebec)
- Archambault Institution
- Cowansville Institution
- Millhaven Institution
- · Warkworth Institution
- Drumheller Institution
- Matsqui Institution

The 1970s

- · Regional Reception Centre (Quebec)
- · Regional Psychiatric Centre (Prairies)
- Edmonton Institution
- · Kent Institution
- Mission Institution

The 1980s

- · Atlantic Institution
- Drummond Institution
- Donnacona Institution
- · Port Cartier Institution
- · Special Handling Units
- · La Macaza Institution
- Bowden Institution

The 1990s (projected)

- · William Head Institution
- a new light-medium security institution
- a number of redevelopments and expansions of minimum-security institutions
- · institutions for female offenders
- · mental health facilities

low-security camp. The nucleus of staff who operated this camp in a relaxed and positive manner still retains this attitude even though the institution has tripled in size.

The Future

The future will see much more focus on construction of lower-security prison facilities. The Correctional Service of Canada is trying to better prepare offenders for reintegration into the community, in order ultimately to reduce the relative use of incarceration as a major intervention in corrections. Moving low-risk offenders more quickly into minimum-security facilities is the best means of achieving this objective. With the reduced control in the less regimented minimum-security institutions, offenders have a better opportunity to demonstrate their readiness for conditional release and to show this earlier in their sentences. The resulting increase of higher-security space allows the Correctional Service of Canada to retract those cases not meeting behavioural expectations.

Minimum-security institutions have generally been the most neglected facilities, lacking both program space and adequate housing. As a result, the ability to meet the stated objectives is being seriously questioned. Improvement of existing facilities is therefore critical.

What characteristics should the environment have to support minimum security? It is widely believed that the negative adaptive skills learned in an institutional environment must be unlearned and replaced by the skills and behaviour needed for community integration. Therefore we must "deprisonize" inmates. To do this, the highly regimented routines and the degree of care provided (both of which contribute to a comfortableness. indifference and lack of a sense of responsibility for one's life) must be changed. Instead, a more "normal" and self-motivating environment must be introduced. There is no question that this is a significant challenge to corrections, requiring that staff members themselves become less

"institutionalized." Perceived operating efficiencies will have to give way to flexibility and tolerance, putting at risk services that are sacred to offenders, such as prepared meals. Every opportunity will have to be given to advance the learning and application of even the most basic living skills.

In response to this, housing will take the form of an apartment or house with each unit accommodating five or six offenders who will share washrooms, kitchen, dining and sitting rooms. Where today the offender considers the cell as his/her "house," the personal domain will expand to encompass the whole unit. Each occupant will be expected to participate in the experience of interpersonal relations and shared responsibility and chores. Supervision and control, too, will take on a broader role ensuring equality. fairness and relative harmony, and that standards of housekeeping are met.

Though similar practices exist

elsewhere, most notably in the Scandinavian countries, one need not look far for equal models in Canadian corrections. Parolees or offenders under mandatory supervision who reside in community release centres are generally expected to assume responsibility for their day-to-day living. However, it is often observed that they are ill equipped to do so. It is therefore imperative that these deficits in life skills be addressed before release. The minimum-security facilities can advance treatment and programming with a modicum of structure and with the resources on hand. Complemented by an open environment, offenders have the choice either to walk away or to stay and become involved.

This article was prepared by Chris Posner, Project Planning Officer, Facility Research and Standards, Construction Policy and Services, Correctional Service of Canada.

A Snapshot of the Correctional Service of Canada's Institutions

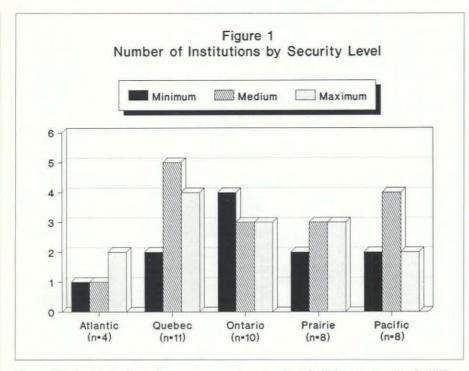
The Correctional Service of Canada recently compiled descriptive profiles of all its institutions.¹ These profiles, assembled by the Operational Planning and Resource Analysis Branch, provide extensive information on the inmate composition, facilities and programming capabilities of our institutions. The Research and Statistics Branch analysed the information in the "1990/1991 Institutional Profiles," providing a summary of the characteristics of our institutions.

There are 41 federal institutions (excluding halfway houses) under the jurisdiction of the Correctional Service of Canada.² Four are in the Atlantic region, 11 in Quebec, 10 in Ontario, and the Prairie and Pacific regions each have eight. Eleven institutions are minimum-security facilities while 16 are medium- and 14 are maximumsecurity facilities (see Figure 1).

Roughly two thirds of the institutions in most regions are in rural areas on the outskirts of cities or towns, and one third are in urban areas. The exceptions are the Prairie region (where 88% of the institutions are in rural areas) and the Atlantic region (where only one of its four institutions is in a rural area). In considering just medium-security institutions, however, one finds that almost half are situated close to urban centres.

The average institution is located

- ¹ The institutional profiles do not include Community Correctional Centres (CCCs) which are federal minimum-security institutions.
- ² For the purpose of this article, the Special Handling Unit (SHU) at Saskatchewan Penitentiary, the SHU at the Regional Reception Centre (Quebec) and the Regional Treatment Centre at Kingston Penitentiary are not counted as separate institutions.



about 27 kilometres from the nearest source of community services. Not surprisingly, in the Atlantic and Prairie regions, the average distance between institutions and local services is considerably higher. There is also some variation in the average distances between regional headquarters and the institutions. Most institutions are located within at least 160 kilometres of regional headquarters. In the Prairie region, however, the average distance is almost 500 kilometres, with one institution, Stony Mountain, located 900 kilometres from regional headquarters in Saskatoon, Saskatchewan.

Only 16% of our institutions were built less than 10 years ago, and most of these are maximum-security facilities. Approximately 45% of our institutions were built between 10 and 25 years ago, an additional 23% between 26 and 50 years ago, and 16% more than 50 years ago. The oldest buildings are used primarily as maximum-security facilities. Nineteen of our institutions stand alone, with the remainder of sites incorporating more than one institution. In many cases, medium- and maximumsecurity facilities share the same property.

The stated capacity of our institutions ranges from 78 to 501 inmates, with an average of 259. The average capacity of minimum-security facilities is 121 inmates, while medium- and maximum-security institutions have average capacities of 377 and 235 respectively.

In terms of the actual numbers of inmates housed in our institutions at any one time, the headcount sometimes exceeds the capacity of the institution. On 12 October 1990, for example, approximately 40% of our institutions housed more inmates than their stated capacities. However, the majority were only overcapacity by 8.5% with a range of about 1% to 21% overcapacity. To manage the overcrowding problem, 19 of our 41 institutions were using "double-bunking." In any one institution, the number of inmates who were double-bunked ranged from two to 160. While one institution had 35% of its population double-bunked, most institutions double-bunk less than 20% of their populations.

The problem of overcapacity is primarily in the medium-security institutions.³ In fact, on 12 October 1990, almost 70% of our mediumsecurity institutions were overcapacity. On that same date, none of our minimum-security institutions were overcapacity, while 41% of our maximum-security institutions had populations in excess of their stated capacities. The Ontario and Prairie regions appear to have the most serious problem, with 45% and 44% of institutions respectively reporting overcapacity.

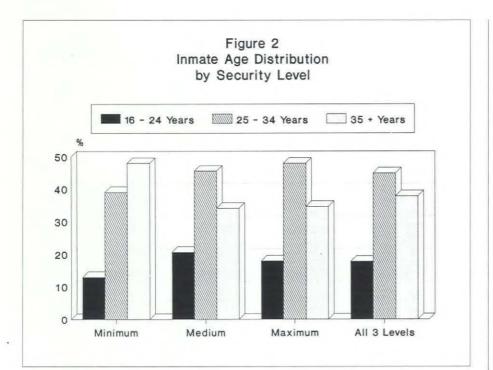
The Correctional Service of Canada offers a variety of educational, vocational, occupational and personal development programs in most of its institutions. The average number of programs offered is quite close across the three institutional security levels. Most programs focus on the personal development of offenders. The

	Minimum	Medium	Maximum
Number	11	16	14
Average Inmate Capacity	121	377	235
Institutions Using Double-bunking	1	13	5
Age of Facilities (%)			
Under 10 Years	0	13	29
10-50 Years	100	75	42
Over 50 Years	0	12	29
Location of Institutions (%)			
Urban	36	44	23
Rural	64	56	77
Average Distance from			
Community Services (km)	9	40	22

Characteristics of Our Institutions

³ Overcapacity figures were calculated by dividing the institutional headcount by the stated capacity of each facility. The information available does not describe the nature of the inmate population in these institutions.

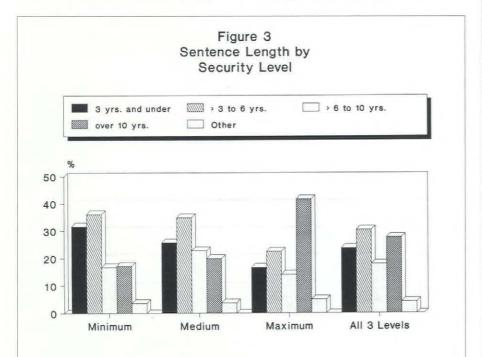
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Regional Psychiatric Centres in the Pacific and Prairie regions and the Regional Treatment Centre in Ontario provide the greatest number of personal development programs for inmates.

The institutional profile also contains information on the age of inmates and the length of sentences. Almost half the inmates in minimum-security institutions are 35 years of age or older. Inmates between the ages of 25 and 34 years comprise the largest group in both medium- and maximum-security institutions (see Figure 2).

As shown in Figure 3, approximately one third of inmates in minimum-security institutions are serving sentences of less than three



years. A similar proportion of inmates in minimum-security institutions also serve sentences of three to five years on average. Medium-security facilities house a large portion (35%) of inmates who are serving three to five years while, not surprisingly, a considerable proportion also are serving sentences between six and 10 years (23%) and more than 10 years (20%). Maximumsecurity institutions have the highest proportion (42%) of inmates serving sentences of more than 10 years.

"1990/91 Institutional Profiles." Report prepared by the Operational Planning and Resource Analysis Branch, Correctional Service of Canada, 12 October 1990.

Direct versus Indirect Supervision in Correctional Institutions

Correctional facilities that employ direct supervision methods experience more frequent, and less hostile, staffinmate interaction, according to a recent comparison of direct and indirect supervision institutions in the United States. In addition, direct supervision facilities were more likely to have correctional environments that were "softer" and more "normalized."

"Indirect" supervision is defined as the method of supervising inmates whereby correctional officers monitor inmate living areas from enclosed posts. "Direct" supervision places correctional officers right in the living unit where they are required to have continuous, direct personal interaction with inmates. For the past several years, these two methods of supervision have been the subject of debate within the corrections community. Some say that direct supervision results in lower stress, less violence and less vandalism in the institution as well as improved staff morale and greater job satisfaction.

Others, however, hold that indirect supervision facilities are safer for staff members, who are separated from inmates by a physical barrier.

Jay Farbstein & Associates, Inc., with Richard Wener, attempted to quantify the differences between direct and indirect supervision and to find empirical support for the purported benefits of each approach. Finding support for one supervision approach over another would have implications for the design of new and existing correctional facilities.

Design of Indirect Supervision Facilities

The most popular layout for indirect supervision facilities is that of a central, enclosed control-booth, from which officers overlook a dayroom surrounded by single cells (the modular or "pod"ular plan) or by multiple-occupancy cells or dorms. "Pods" usually consist of 48 to 60 beds divided into four or five subunits. Durable, vandal-resistant building systems, fixtures and finishes are commonly used, as are elaborate communication and locking systems.

Generally, the main role of the correctional officer in indirect supervision facilities is to operate the control systems and monitor inmate behaviour. Minor infractions are dealt with through limited intervention on the part of the officer; in the case of a major infraction, backup staff is called.

Design of Direct Supervision Facilities

The design of direct supervision institutions may be somewhat similar to that of indirect supervision facilities, but softer finishes, such as carpeting and upholstered furnishings, are often used. As well, rather than being separated from inmates by a barrier, staff members are stationed right inside living units with the inmates.

One of the primary duties of correctional officers in direct supervision facilities is to maintain personal contact with inmates. In fact, security depends upon the ability of highly trained staff to detect and defuse potential problems.

Direct supervision facilities tend to offer inmates more physical amenities, such as games tables, exercise equipment and access to controls for lights in their cells. Larger dayrooms are also more common. The larger living area helps normalize the environment and increases the likelihood that inmates will gravitate into smaller, more compatible groups.

Support for direct supervision is increasing and yet, outside of the federal prison system in the United States (the Federal Bureau of Prisons is a strong advocate of direct supervision), only a small minority of the 4,000 jails and prisons currently in existence in the United States are direct supervision facilities. Many more are being planned, however. In Canada, the Unit Management model of offender management, of which the Correctional Service of Canada is a strong proponent, is based on the principles of the direct supervision approach.

Hybrid Institutions

Some institutions are hybrids of direct and indirect supervision facilities. For example, some institutions have controlbooths but also station officers directly in the housing units; finishes and furnishings can range from soft and residential to hard and institutional. The distinguishing feature of direct supervision is the constant, interactive presence of the correctional officer in the living unit.

Study Methodology

The present study examined differences between direct and indirect supervision facilities in such key factors as their construction and operating costs, safety and security, environmentbehaviour issues (e.g., impact of soft furnishings and finishes on incidents of vandalism) and design issues (e.g., single versus multiple occupancy, types of finishings and furnishings). This information was gathered through a mail survey of correctional administrators and through case studies of direct and indirect supervision prisons and jails.

Mail Survey

A detailed survey was sent to administrators of a sample of direct and indirect supervision institutions, including both prisons and jails. The survey collected descriptive information about the institution, its design and operations, as well as such attitudinal information as satisfaction with the facility, problems and staff duties.

Institutions were selected to represent a variety of sizes, jurisdictions, security levels and regions. Minimumsecurity institutions were not included because the researchers felt there was little controversy over the use of direct supervision in these facilities. Of the 67 questionnaires sent out (47 to prisons and 20 to jails), 52 (78%) were returned (38 from prisons and 14 from jails).

Each responding facility was rated on a five-point scale of direct-toindirect supervision styles. This rating was necessary because some institutions employed aspects of both direct and indirect supervision styles. The rating was based on the descriptions of management styles, as presented in the questionnaire, and on the physical layout of the institutions. For the comparative analysis reported below, facilities at opposite ends of the scale which could be characterized as "pure" direct supervision were compared with those which were "pure" indirect supervision.

Results - Mail Survey

Administrators rated direct supervision institutions significantly higher on measures of safety and on the ability to survey the inmate setting, as well as for the appropriateness of direct supervision, soft and moveable furniture and for the number of cell amenities. Surprisingly, direct supervision administrators were also more apt to feel that barred doors, which go against the philosophy of a normalized environment, were acceptable.

Correctional administrators at direct supervision institutions also reported less violence than did administrators at indirect supervision institutions. The average number of violent incidents reported for a one-year period at direct supervision facilities was approximately 13; this compares to about 32 for the indirect supervision institutions.

Case Studies

In-depth on-site case studies were done at seven medium-security facilities (a combination of direct and indirect supervision jails and prisons). The study attempted to compare reasonably well-matched (in facility age, staffing, programs, etc.) samples of facilities. As well, attempts were made to control such other variables as staffing ratios, hardness or softness of the environment, the availability of resources and the type of inmate.

Some correctional institutions employ aspects of both direct and indirect supervision. In the case studies, institutions that had a preponderance of characteristics related to one supervision type or the other were selected. These were three jails – one indirect (where contact with inmates occurs intermittently during periodic officer tours of the living areas) and two "pure" direct supervision – and four prisons – two classic direct, one indirect and one hybrid direct supervision.

Data were gathered in the housing areas of the seven facilities by the use of: • a physical environment survey;

- behavioural tracking (where an observer watches, records and rates each episode of communication or interaction between staff and inmates or between staff members);
- staff and inmate questionnaires; and
- · interviews with staff and inmates.

Results – Case Studies Physical Environment Survey

No significant difference was recorded in size of cells, staffing patterns and comfort levels (e.g., temperature, sound levels) in the institutions surveyed. Indeed, staffing ratios appeared to be affected more by program choices at the institution than type of supervision.

As to cell structure, the institutions were predominantly designed for single cell occupancy, although the direct supervision prisons have a mixture of single- and double-occupancy cells. Direct supervision institutions tended to provide more services at the housing unit. Furthermore, dayrooms in the direct supervision institutions were all rated as having soft environments (e.g., wood or fabric furnishings, vinyl or carpeted floors, wallboard) while those in the indirect supervision and hybrid institutions were all rated as hard (institutional blue or green colours, fixed steel furnishings). Supervision style did not affect the hardness or softness of cells, though.

Average building, staffing and operating costs were approximately 40% lower for the average direct supervision prison than for the average indirect supervision prison. In the direct supervision prison, the construction cost per bed was \$41,600, the annual staffing cost per inmate was \$10,900 and the annual maintenance cost per inmate was \$4,200. The corresponding figures for the average indirect supervision prison were \$73,000, \$17,300 and \$6,700.

Behavioural Tracking

Data on staff-inmate interaction were gathered at only five of the seven case-study sites (two direct supervision prisons, two direct supervision jails and one indirect supervision jail); data were unavailable for the other two sites (one indirect and one hybrid direct supervision prison).

The level of interaction was fairly high at all sites, with no apparent differences between direct and indirect supervision institutions. About half the interactions at the direct supervision facilities were initiated by staff and half by inmates. At the indirect supervision facility, however, almost all interactions (91.3%) were initiated by staff.

Most staff-initiated interactions (41% to 74%) at the direct supervision institutions were with inmates. At the indirect supervision site, on the other hand, most staff-initiated interactions (72%) were with other staff members. Direct supervision officers appear to spend a greater proportion of their time interacting with inmates than do indirect supervision officers.

In all sites, the officer station was

the most common location of both sorts of interactions, between staff and inmates and between members of the staff. This finding makes the placement of the officer station a critical issue in the design of the institution.

There were no major differences in the rated quality of interactions in both types of institutions; most were rated a 3 (for businesslike exchanges), and most were brief, lasting less than one minute.

Whether in a direct or indirect supervision facility, a universal finding was that having a second correctional officer present meant that both officers spent more time in or near the officer station and more time interacting with each other than with the inmates.

Questionnaires

A total of 612 inmate questionnaires and 264 staff questionnaires were completed at the seven study sites. For this article, only findings from the prison questionnaires will be presented. Inmates in this sample were mostly males between 22 and 40 years old who had typically been in the institution for six months to two years. Staff respondents typically were males between 22 and 40 years old, with some college education and in the job for one to five years.

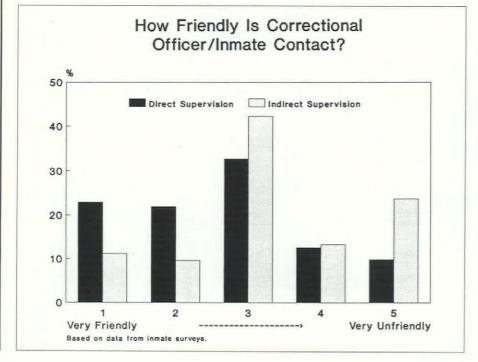
With the inmate surveys, a number of significant differences were noted between responses from direct supervision prisons and those from indirect supervision prisons. Significant differences on selected dimensions are reported in the table.

Inmates in direct supervision prisons reported more contact between officers and staff and said that the contact was more pleasant and less hostile (see figure). They also saw less chance of officer-inmate attacks and officer-inmate fights and felt that vandalism occurred less frequently. The response time of correctional officers to emergencies in direct supervision prisons was better, as well. Notably, however, inmates at direct supervision facilities also saw a greater chance of inmate-inmate attacks and sexual assaults.

Selected Factors Showing Significant Differences Between Direct and Indirect Supervision Institutions*

Factor	Direct Supervision	Indirect Supervision
Interaction	correctional officer (CO) counsels inmate more often	CO/inmate contacts less businesslike
	CO/inmate chat more often	
	CO/inmate contacts more pleasant	
	CO/inmate contacts less hostile	
Safety	feels less danger of CO/inmate attack	feels less danger of inmate/inmate attack
	COs have quicker response time to emergencies	feels less danger of sexual assault
	CO/inmate fight less often	
Vandalism	less frequent vandalism in room	
Satisfaction with Facility	more satisfied with room and dayroom	more satisfied with dining
	more satisfied with indoor and outdoor recreation	
Privacy	more privacy in conversation	
General Satisfaction with Design Factors	more satisfied with amount of sunlight	colours more pleasant
	better outside view	
	looks better than expected	
Stress	less somatic stress	

* Based on inmate surveys



Inmates in the direct supervision prisons reported significantly fewer somatic complaints. They also felt more satisfied generally with the appearance and cleanliness of their rooms and the dayroom. They were, however, significantly less satisfied with the availability of such amenities as recreation, telephones and televisions, a finding partially accounted for by the higher levels of overcrowding at the direct supervision prisons.

Surveys of staff members at direct supervision institutions elicited less positive results. They generally felt less safe than staff from indirect supervision facilities: they reported higher probabilities of sexual assault, reported feeling less safe in the living unit and believed it was more difficult for an inmate to contact an officer. On the other hand, staff members at direct supervision facilities reported being more satisfied with the design of the correctional officer station and gave a more positive rating to the surveillance capabilities in the living areas and residential control areas. They also reported significantly more inmateofficer communication.

Staff members from the indirect supervision prisons rated their institutions significantly higher on measures of privacy afforded in various areas (shower, toilet, talking with an inmate), the appropriateness of space allocations (in rooms, for meals, for telephones) and the availability of amenities. These findings may again be in part due to crowded conditions at the direct supervision prisons.

Conclusion

Overall, it appears that interaction between staff and inmates at direct supervision facilities was less hostile, more pleasant and more often initiated by inmates than in indirect supervision institutions. Furthermore, correctional officers in direct supervision institutions tended to spend more time interacting with inmates. Staff at indirect supervision facilities, on the other hand, spent more time interacting with other staff members.

In safety issues, the results are

mixed. Inmates at direct supervision facilities rated their institutions more positively on a number of safety measures. On the other hand, staff members at direct supervision facilities rated their institutions more negatively on many safety variables. In interpreting these findings, the researchers warn that the benefits of a direct supervision approach may be impeded if this approach is not supported by a commitment from management. Some situations were observed in which correctional officers who were in direct contact with inmates had not been given the kind of training, support and management commitment that accompany the direct supervision philosophy. In these cases, staff members were more likely to feel vulnerable and less safe, and were generally uncomfortable with that level of contact with inmates. Because staff is in such close and frequent contact with inmates, proper training for staff and classification of inmates are important prerequisites to making direct supervision work. Indeed, it was found that direct supervision facilities overall take more effort and commitment to plan, train for and manage.

Jay Farbstein & Associates, Inc. with Richard Wener. (1989). "A Comparison of 'Direct' and 'Indirect' Supervision Correctional Facilities – Final Report." National Institute of Corrections – Prison Division, United States Department of Justice.

The Impact of Correctional Environments on Older Inmates

Older inmates tend to function better in prison environments that have agesegregated housing units and smaller inmate populations. This finding, among others, was the result of a 1989 study investigating the impact of prison environments on older inmates.

The study followed up on an earlier research project conducted at the State Prison of Southern Michigan (S.P.S.M.) in Jackson, Michigan, The S.P.S.M. facility, with an inmate population of approximately 6,000, comprised two cell designs. One was the "spine design" in which cells were located in the centre of a corridor, and the inmates' view was toward the exterior walls of the cell blocks. The other was the "open design" in which cells were arranged along the exterior walls facing each other across an open space. Although the spine design offers a higher level of privacy, the open design offers greater opportunities for socialization (that is, inmates can see each other and communicate from their cells).

The earlier study examined noise levels and health care demands in the two different designs. Results showed, among other things, that the spine-type cell blocks were noisier over longer periods of time than the open cell blocks.

The next study involved relocating a group of older inmates from S.P.S.M. to a different facility, a former mental hospital. This served as a follow-up to examine the health care needs and demands as well as the influence that the environmental change had upon these older relocated inmates.

The new facility was located in Ionia, Michigan, and was established as part of a program to house elderly prisoners with special needs in one location more suitable to their unique needs. The design included double bunks in dorm rooms as well as a number of single rooms on each of the two floors. Inmates had control over the window and heating radiator located in each room, and each room had a solid door. A fenced yard for the exclusive use of the elderly inmates was located adjacent to the building in which they were housed. As one might expect, the correctional environment induced by this institutional design was different from that of the S.P.S.M. facility.

Forty-one men, with an average age of 62 years, participated in the study. Of these, 40% were serving sentences of one to two years, and an additional 46% were serving ten years or more. The short-term group of offenders had served, on average, almost one third of their sentences while the longer-term offenders had served only 14.6% of their sentences on average. Almost half the sample had been convicted of murder or homicide. Eighty-three percent had at least one chronic health care problem while almost half were reported to have three or more.

Structured interviews were conducted with the inmates, addressing three major areas: changes in general well-being, perceptions of environmental changes and open-ended questions which helped explain influences on inmate perceptions of change. The average time served at the Ionia facility at the time of the interview was two months.

With regard to changes in general well-being, an improvement in mood level was experienced by 69% of the men after the relocation; only 9% had experienced a decrease in mood level. A quarter of the men were involved in fewer confrontations and incidents. Thirty-six percent indicated that while they previously had no good friends during their time at S.P.S.M., they had established at least one good friendship since being moved to the new facility. The latter finding is particularly interesting when one considers that the inmates had spent an average of only two months at Ionia compared to two to three years at S.P.S.M.

In regard to inmates' perceptions of changes in environment, some improvement was found in general relationships with others, in privacy satisfaction and in satisfaction with the cells, rooms and wards, although this change was not found to be significant. Alternatively, attendance at religious activities significantly decreased, as did the number of visits from friends and family.

The open-ended questions uncovered what the inmates preferred at Ionia compared to similar situations experienced at S.P.S.M. What 63% of the inmates liked most about Ionia was the physical environment, that is, the cleanliness and physical arrangement (ward, room, windows, doors). Fourteen percent said they preferred staff at Ionia compared to the staff at S.P.S.M. A number of inmates (45%) stated that they liked being with men of similar age. Sixteen percent believed they were hassled less and felt they were in a safer place, while an additional 16% indicated they liked

Royal Institute of British Architects Makes Recommendations for Research on Prison Design

Following disturbances in the spring of 1989 at some British correctional institutions, including Strangeways Prison, an enquiry into Britain's prison system was commissioned. This enquiry was conducted by Lord Justice Woolf. As part of the study process, he requested a report from the Royal Institute of British Architects (RIBA) on prison architecture and on the process of design and construction for new and renovated correctional institutions.

The report of the RIBA, prepared in November 1990 by a panel of consultant architects experienced in prison design, addresses many issues related to institutional design, including research and communication; procurement and processes; briefing and consultation; design and development; resources and costs; staff training and motivation; and the phasing out of some existing correctional institutions. A host of recommendations respond to each of these issues. For this brief article, however, we have chosen to highlight only those recommendations that deal with research and communication in prison design. This section of the report deplores the lack of research, monitoring, feedback and communication on the operation, design and effectiveness of correctional institutions.

Recommendations

The RIBA has recommended that action be taken with respect to:

 the lack of fundamental research, monitoring of results and application of those results to the design of new prisons;

- the lack of effective communication between the Home Office and correctional workers through to external architects and consultants; and
- the limited base of knowledge on such important issues as:
 - How much does the success of correctional institutions depend on policy and management, and how much on design?
 - How should "success" be defined and measured?
 - How do different prison designs affect the behaviour (and misbehaviour) of inmates and correctional officers?
 - What is the underlying logic behind changes in design during the last decade?
 - Why is the ideal housing group size thought to be 50 inmates?
 - What is the sociology of imprisonment and of prisoner-family relationships, and what are the related implications for the location and design of correctional institutions?
 - What is the relationship between the design and management of prisons and recidivism?
 - What have the correctional accomplishments and failures of other jurisdictions (not just the United States) been?

The RIBA has further recommended that:

- there be increased feedback on the performance of prisons – feedback is still the exception rather than the rule and errors in design are therefore perpetuated;
- input and feedback from the users of new designs be solicited before and after these designs are used;
- architects working on different correctional institutions be encouraged to compare and exchange experiences;
- the long-term results of the guidelines in the Prison Design Briefing System of the Home Office, a first step in the improvement of design standards, be examined;
- the effects of the design of correctional institutions in the United Kingdom and in other jurisdictions be continuously observed and evaluated;
- a more extensive public debate over, and involvement in, the design and management of correctional institutions (i.e., seminars and conferences) be encouraged; and
- the United Kingdom be encouraged to participate more fully in information exchanges with other jurisdictions.

"Report on Prison Design by the Royal Institute of British Architects for Lord Justice Woolf." Report prepared by the Royal Institute of British Architects, November 1990. the quieter environment at Ionia.

When asked what they liked least, 55% cited loss of "trustee status" which can be described as gaining certain privileges for good behaviour and for having served a significant portion of their sentences without mishap. Twenty-one percent of the inmates stated they did not dislike anything at Ionia.

It was noted that the move to Ionia seemed to increase health care demands temporarily, but other measures of inmate welfare showed significant improvement. The findings supported the conclusion that the policy of age segregation along with improvements in the physical environment have a positive impact on inmate welfare. Based on these findings, a number of design suggestions for the better accommodation of older prisoners were offered, including:

- age-segregated housing units should be used for elderly inmates as these tend to provide an added measure of personal safety;
- one-storey living areas should be used to accommodate older inmates, as their various chronic health problems often result in physical limitations;
- space should be allocated in or near the housing unit for basic medical examinations and delivery of certain health care services;
- rooms should have doors to provide more privacy and security for older inmates; and
- such security measures as heavyduty prison hardware and building construction could be reduced in housing for older inmates who generally are not hostile or aggressive.

Ernest O. Moore, "Prison Environments and Their Impact on Older Citizens," *Journal of Offender Counseling, Services & Rehabilitation*, 13 (1989, 2): 175-191.

A Psychological Perspective on the New Design Concepts for William Head Institution (British Columbia)

by Joseph C. Johnston

Research and Statistics Branch, Correctional Service of Canada

n the spring of 1989, the Construction Policy and Services Division of the Correctional Service of Canada adopted a new set of design concepts for correctional facilities that would guide the rebuilding of the new housing units at William Head Institution in British Columbia.¹ The housing construction will begin during the summer of 1991 and will be completed in approximately one year. William Head will then stand as the first correctional institution of its type to be built in Canada. The new design concepts reflect prosocial values that are intended to be achieved through the "normalization" of the institutional environment and through the establishment of a more positive dynamic between offenders and correctional staff. This article reviews the considerable psychological and social science literature on the impact of environments, which shows consistent empirical support for the design concepts embodied in the construction of the new housing units at William Head Institution.

"Rebuilding" William Head Institution

A poorly designed physical environment can frustrate human relationships and well-being. Conversely, a more "human" design can set the stage for positive interaction and improve well-being.

William Head will represent the first major correctional facility to be designed using, as guiding principles, the core values of the Correctional Service of Canada's Mission Document. The underlying concept is that the new institution should reflect a **residential** environment and eschew the more traditional features of a jail.

A residential hierarchy is planned, which begins with the inmate's **room** (most private, individual space) contained within a five- or six-person **house** (semi-private, family space) which exists in a **neighbourhood** (semipublic, small group interaction) of houses along with a multifaceted, multi-use (i.e., programming, laundry, staff offices, recreation) centre for each neighbourhood. The most public level is that of the institutional **community**, made up of the sum of the neighbourhoods.² In all, 240 inmates will be accommodated, with five per house and eight houses per neighbourhood within the community. The purpose of this layout is to foster a sense of community and provide more opportunities for personal growth and development.

Perhaps the most important feature of the new William Head is the level of personal responsibility afforded the offenders.

In keeping with this residential model, uniquely coloured neighbourhoods with their own names or addresses will promote a sense of identity. Perhaps the most important feature of the new William Head, one that sets it apart from more traditionally designed institutions, is the level of personal responsibility afforded the offenders. Inmates in the new institution will take on more of the responsibilities (e.g., cooking, cleaning) associated with residential living.

Building Design

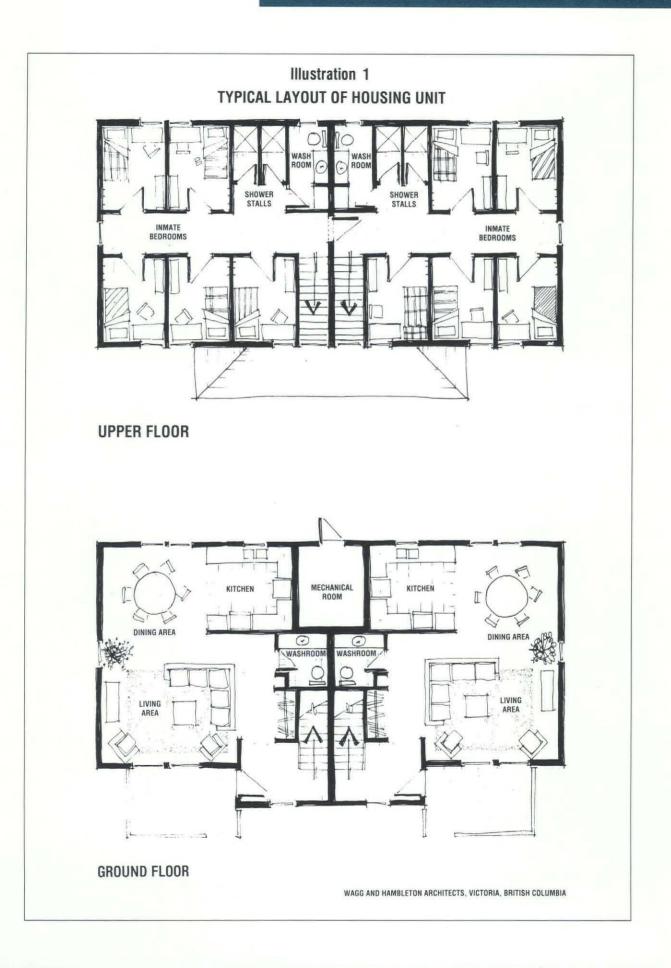
The design for inmate housing provides for two-storey duplex-type houses – each half of the duplex will house five inmates. The bedrooms will all be located on the second floor and are designed for private, single occupancy. Each room will contain a bed, a desk, a chair and a closet. Since these rooms will be the inmate's most private space, furniture arrangements and decoration will be left to the discretion of the individual. The rooms will not contain a washroom – one washroom will be shared by the five housemates, but it will be for single occupancy only.

The first floor of each house will include a common living/dining area, complete kitchen facilities, a washroom, a storage room and a deck outdoors. As mentioned previously, the inmates will be responsible for their own cooking and cleaning, in keeping with the residential living philosophy.

To maintain the residential character, there will be no bars on windows or doors and no dedicated guard post. In fact, the houses will have no containment capability. A connecting door will allow staff access from one half of the duplex to the other for bed checks and the like. For the most part, however, staff will not be present in the houses but will operate instead from the neighbourhood centre. The typical house design is shown in Illustration 1.

¹ The buildings at William Head will embody only part of the new design concept developed by the Construction Policy and Services Division. A substantial portion of William Head Institution was already in existence, and so only part of the design concept – that dealing with housing units – could be used to guide new construction.

² The existing layout of William Head precludes the structuring of the institution according to the "community" proposed in the original design concept.



The six neighbourhoods (made up of eight houses each) will have a shared central neighbourhood building. These single-storey, multipurpose structures will provide a large recreation area (with television and card and pool tables), laundry facilities, meeting rooms, unit management offices and programming space. As in the residences, there will be no bars or heavy security. Furthermore, residential-style materials, finishes and street furnishings will be used throughout.

A strong perimeter will be maintained while internally easing restrictions on inmate movement and activity.

Building Layout

Each neighbourhood will use a slightly different arrangement of its eight houses and centre, giving it a visually distinct, "village" character. Each neighbourhood will have an open, central courtyard, and open walkways will join the neighbourhoods. Illustration 2 depicts the layout for the neighbourhood centre.

The perimeter security fence that already surrounds one part of William Head will be left in place – the other sides are surrounded by water. In accordance with the new residential philosophy, a strong perimeter will be maintained while internally easing restrictions on inmate movement and activity.

Perceptual Factors Thermal Comfort

Inmates and correctional staff commonly complain of thermal discomfort – too hot, too cold, stuffy, drafty – in their facilities. Because the proposed design of William Head is less sealed up than other institutional designs, thermal discomfort should be alleviated. Also, the separate living facilities will probably have separate climate controls. If this is the case, it is suggested that inmates be allowed to control their own thermostat as in a normal, residential environment.

· Colour and Light

Colour schemes for the new William Head have not yet been chosen, although there are relevant data available. Wener and Clark,³ for example, report that inmates tend to prefer bright colours and murals, and Goldblatt⁴ noted positive effects when inmates were allowed to paint their own murals.

Different colour schemes will be used to distinguish neighbourhoods at William Head. From a psychological perspective, this is a positive step that should enhance the inmates' sense of identity or belonging to a certain neighbourhood.

Since there will be neither bars nor security screens over the windows, inmates will have plenty of natural light and an unobstructed view out-of-doors. Although no empirical research has been done on windows and natural lighting in a correctional environment. studies on settings such as schools and hospitals indicate that windowless environments are not perceived to be as pleasant as those with windows.5 In some cases (e.g., hospital rooms), lack of natural light has been correlated with increased stress and even depression.6 These findings would probably hold true in correctional settings, as

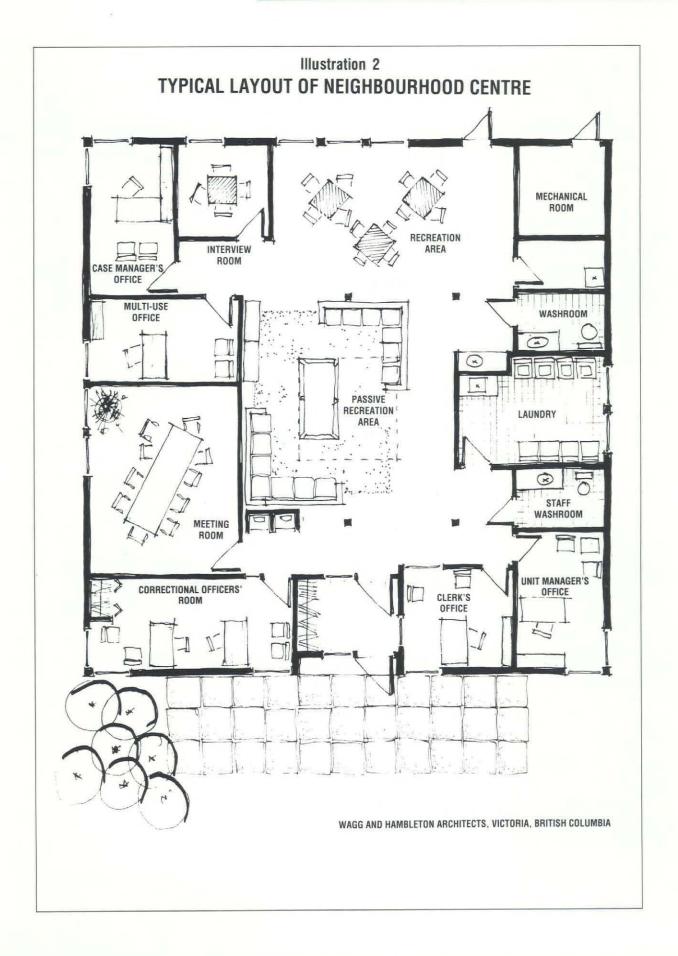
almost anyone who has ever seen a windowless cell might conclude. Indeed, as early as the 1920s, the Pennsylvaniastyle (windows in cells) prison design was gaining favour over the Auburnstyle designs (windows in outer corridors opposite cell doors) largely because of the pleasant and more humane atmosphere created by windows.⁷

· Noise, Texture and Fixtures

These seemingly disparate features will be considered jointly because, as shall be seen, the texture of surfaces within an institution and the nature of the hardware or fixtures used have a bearing on the extent and type of noise present. For this discussion, noise is simply defined as unwanted sound.

Richard Wener of the United States Bureau of Prisons has noted that noise is a persistent problem within correctional settings, especially the older, or more institutional-like designs. In general, it has been found that noise invades privacy, deters concentration, disturbs sleep and induces stress.8 Moore⁹ has even reported that the level of noise in an institution correlates with inmate health complaints. For anyone who has ever visited or worked in an older institution, these findings will not come as a surprise. The metal-on-metal din (gates opening and closing, lock bolts snapping and metal doors shutting) along with inmate-produced

- ³ R. Wener and N. Clark, "A User-Based Evaluation of the Chicago Metropolitan Correctional Center: Final Report." A report to the U.S. Department of Justice, Bureau of Prisons, 1977.
- ⁴ L. Goldblatt, "Prisoners and Their Environment: A Study of Two Prisons for Youthful Offenders." Unpublished dissertation: North Carolina State University, 1972.
- ⁵ C.S. Weinstein, "The Physical Environment of School: A Review of the Research," Review of Educational Research, 49 (1979): 577-610.
- ⁶ B.L. Collins, "Windows and People: Alternative Survey. Psychological Reactions to Environments with and without Windows," National Bureau of Standards Basic Science Series, 70 (Washington, D.C.: Institute for Applied Technology, 1975).
- ⁷ H.H. Hart, Plans and Illustrations of Prisons and Reformatories. (*Philadelphia: Wm. F. Fell Publishing Co., 1922*).
- ⁸ C.S. Weinstein, "Special Issue on Learning Environments: An Introduction," Journal of Man-Environment Relations, 1 (1982): 1-9.
- ⁹ E. Moore, "Environmental Variables Affecting Prisoner Health Care Demands," Research and Design, 1985. Proceedings of the American Institute of Architects, Los Angeles (1985).



5 D DOM NOW ROAD

noise (walking, talking, yelling, radios and televisions) is virtually incessant. Hard surfaces, such as tiled floors which are commonplace among correctional institutions, contribute to the problem in that they reflect rather than absorb noise.

Fortunately, the recent trend has been to "soften" correctional environments. There is greater use of sounddeadening materials like carpet and acoustic tiles. Metal-on-metal contacts have also been avoided or limited, and television and radio noise has been reduced by isolating or dispersing audio sources. The plans for the new William Head will incorporate these and other features to reduce the bothersome noise of correctional environments.

The use of softer material and furnishings may have a positive impact on other areas than just noise reduction. For example, a study by Chaiken, Derlega and Miller¹⁰ found that people discussed private matters more openly in "soft" settings (with rugs, wall decorations, cushioned chairs) than in "hard" ones (with bare floors and walls, hard chairs). This suggests that the non-institutional environment planned for William Head will enhance social relationships in line with the purpose of the proposed rebuilding.

The most salient characteristic of the rebuilt William Head may be its residential design which will help circumvent the noise so characteristic of correctional environments. The problems associated with clanging cell doors or the hubbub of 40 or 50 inmates in a living unit will simply disappear because there will be no cell doors to slam, and only five or six inmates will live in any one housing unit. Thus, the noise level at William Head will be much less noxious and stress-inducing, and likely closer to the level of a normal residential environment.

Social and Psychological Factors • Crowding

Crowding in correctional facilities has increasingly become a serious issue. Any modifications made to William Head will have to address this issue. Perhaps the most relevant impact of crowding on an institution is the impact on social relations and interaction. Empirical findings indicate that high-density situations generally result in negative social outcomes. For example, in crowded (high density) situations, there is more aggression and competition for resources, less cooperation and more social withdrawal. Other individuals in a crowded situation are perceived as less attractive or interesting, and the social milieu itself becomes unpleasant.¹¹

The high-density corridor housing in many traditional institutions does little to foster positive social relationships.

It has been demonstrated that social withdrawal in response to high density (or crowding) manifests itself in various ways. Adopting a defensive or guarded attitude¹² is one method of withdrawing, which by its nature decreases the quality of social interaction. Similarly, topics that dominate conversation in crowded settings are less personal or self-relevant, even among well-acquainted people.¹³

Although research that directly compares social relations in high- and low-density correctional institutions has yet to be done, a parallel may be found in a study by Reichner,14 comparing two types of university dormitories. Students in a corridordesign (high density) and in a suite-type dormitory (low density) were compared in their reactions to being ignored in a social conversation. Reichner found that the students who lived in the lowdensity suites were more adverse to being ignored, while those in the corridor-type high-density setting were less bothered. These findings indicate that the high-density corridor housing existing in many traditional institutions does little to foster positive social relationships, while the proposed designfor William Head's rebuilding should enhance positive interaction among and between offenders and staff.

Additional data indicate that prosocial behaviour occurs more frequently within moderate- to low-density situations. Latane and Darley¹⁵ conducted a classic series of experiments, generally referred to as "bystander-effects studies," wherein an experimental confederate acts as if he or she needed help of some kind – for example, by faking a heart attack or appearing to need help fixing a flat tire. Using the

- ¹⁰ A.L. Chaiken, V.J. Derlega and S.J. Miller, "Effects of Room Environment on Self-Disclosure in Counselling Analogue," Journal of Counselling Psychology, 23 (1976): 479-481.
- ¹¹ D. Ellis, H. Grasnick and B. Gilman, "Violence in Prisons: A Sociological Analysis," American Journal of Sociology, 80 (1974): 16-43. See also Y.M. Epstein, R.L. Woolfolk and P.M. Lehrer, "Physiological, Cognitive and Nonverbal Responses to Repeated Exposure to Crowding," Journal of Applied Social Psychology, 11 (1981): 1-13.
- ¹² G.W. Evans, "Crowding and Human Performance," Journal of Applied Social Psychology, 9 (1979): 27-46.
- ¹³ E. Sundstrom, "An Experimental Study of Crowding: Effects of Room Size, Intrusion and Goal Blocking on Nonverbal Behavior, Self-Disclosure, and Self-Reported Stress," Journal of Personality and Social Psychology, 32 (1975): 645-654.
- ¹⁴ R.F. Reichner, "Differential Responses to Being Ignored: The Effects of Architectural Design and Social Density on Interpersonal Behavior," Journal of Applied Social Psychology, 9 (1979): 13-26.
- ¹⁵ B. Latane and J.M. Darley, The Unresponsive Bystander: Why Doesn't He Help? (New York: Appleton-Century-Crofts, 1970).

"lost letter" technique (wherein "lost" letters are actually dropped by the researcher and addressed to his/her lab), Bickman and his colleagues16 found that "lost" letters were mailed more often when found in low-density dorms than in crowded ones. And Jorgensen and Dukes17 reported that people in a cafeteria followed posted instructions to return their trays to a pick-up point, and in general cleaned up after themselves more, when the cafeteria had few people in it, compared to when the cafeteria was crowded. A uniform finding from "bystander" studies is that people are much more likely to help others in low-density situations.

If prison violence is to be reduced, limitations on population density should be given serious attention in the design of any new institution.

Aggression and violence are another area of study that relates to crowding, one that is a constant concern in correctional institutions. Not surprisingly, the general finding from social and environmental psychology research is that conditions of high population density tend to bring about aggression and violent acts; this holds true for inmates, non-inmates and even children.18 While males tend to cope well enough with short-term exposure to crowded situations, the same cannot be said of longer-term exposure to high density. This notion is particularly salient in the context of corrections because long-term high-density living is precisely the situation in which many offenders are placed.

The researchers Cox, Paulus and McCain¹⁹ have, in fact, closely tracked fluctuations in population density and rates of violence in several prisons in the United States. Even when such nondensity factors as time of year and temperature are accounted for, significant correlations are found between increases in density and incidence of violent acts, such as assaults. These findings strongly suggest that if prison violence is to be reduced, limitations on population density should be given serious attention in the design of any new institution.

A further point, one which relates both to crowding and aggression, is a simple economic fact of high-density situations: there is stiffer competition for limited resources. In the correctional context, resources may include any number of things, such as washroom availability, library books, televisionlounge seating, recreational materials virtually anything an inmate might conceivably need to use. The pinch that crowding creates on the availability of resources has twofold consequences. One is the frustration or unpleasantness of being limited or denied a resource, and the other is the fact that competition and conflict over limited resources often lead to aggression and violence.

Coping with Crowding

Tying all the social effects of crowding together are the related notions of coping and control. High-density incarceration is stressful and generally negative, and can bring about a sense of helplessness among inmates.²⁰ Inmates spontaneously seek out or enact various coping behaviours, some of which may be more positive than others. Social withdrawal, for example, may be one way of coping with the stress of crowding – one that is completely at odds with the prosocial objectives of the Mission Document. Escape is another strategy typical of individuals subjected to high density. When the stress associated with high density becomes intense enough, an individual will simply leave. Obviously, escape as a coping strategy is unacceptable in a correctional situation.

Inmate surveillance and external control issues have been the foremost concerns in traditional institutional designs. New design concepts, such as those being implemented at William Head Institution, emphasize inmate responsibility and internal or social spheres of control. The new correctional environments will afford inmates a freer range of behaviours, including "escape," and greater perceived control. Unlike previous and more traditional designs, the new institutional concepts will stress the importance of social relations but also allow a degree of privacy unavailable in earlier designs. In line with the philosophy behind new institutional designs, the inmate will now be afforded commonplace controls and coping behaviours (e.g., "escaping" to the privacy of one's

- ¹⁶ L. Bickman, A. Teger, T. Gabriele, C. McLaughlin and E. Sunaday, "Dormitory Density and Helping Behavior," Environment and Behavior, 5 (1973): 465-490.
- ¹⁷ D.O. Jorgensen and F.O. Dukes, "Deindividuation as a Function of Density and Group Membership," Journal of Personality and Social Psychology, 34 (1976): 24-39.
- ¹⁸ C.M. Loo and D. Kennelly, "Social Density: Its Effects on Behaviors Perceptions of Preschoolers," Environmental Psychology and Nonverbal Behavior, 3 (1979): 131-146. See also P. Smith and K. Connolly, "Social and Aggressive Behavior in Preschool Children as a Function of Crowding," Social Science Information, 16 (1977): 601-620, and see D. Stokols, "A Typology of Crowding Experiences," in A. Baum and Y.M. Epstein (Eds.) Human Response to Crowding. (Hillsdale: Erlbaum, 1978).
- ¹⁹ V.C. Cox, P.B. Paulus and G. McCain, "Prison Crowding Research: The Relevance of Prison Housing Standards and a General Approach Regarding Crowding Phenomena," American Psychologist, 39 (1984): 1148-1160.
- ²⁰ J.W. Brehm, A Theory of Psychological Reactance. (New York: Academic Press, 1966). See also E. Zamble and F.J. Porporino, Coping, Behavior, and Adaptation in Prison Inmates. (New York: Springer-Verlag, 1988).

own space) that are typical of normal residential environments.

Privacy

Privacy, generally defined as the control of access to self, is typically lacking in older-style institutions. Seeking privacy serves an important psychological function and is something taken for granted by those who are not incarcerated. Much social scientific research has focused on privacy, and some of this is relevant to the new ideas in institutional design.

An important feature of the William Head design is the private bedroom for each inmate. Inmates will be allowed to decorate and arrange their rooms and furthermore, they will have keys to their rooms allowing control over access to their private space, as in a residential environment. Of course, correctional staff will have a master key, but this will not allow staff to lock inmates in their rooms.

The empirical basis for this type of inmate housing is straightforward, with the general finding that control and privacy are important to most inmates. For example, Smith²¹ studied groups of prisoners who were moved from a four-person-to-a-cell facility to a new facility where each had his or her own cell. A significant relationship was found between privacy and the amount of control inmates felt they had in their lives. The inmates at the old facility who most valued privacy felt that they had had the least control over their lives when there. At the newer, more private facility, the more the inmates valued privacy, the more control they felt they had.

The plans for the new William Head Institution focus on housing designed to encourage positive social interaction while respecting the need for privacy.

McCain, Cox and Paulus22 compared all the various types of inmate housing - single, double, multipleoccupant, open dormitory, segmented dormitory - using a number of measures of well-being, such as reported stress and acts of aggression. Their results showed a linear relationship between the level of privacy afforded (i.e., number of inmates housed together) and the number of positive effects: less negative effects were noted for the most private (single-bed) situations. This study, as well as a study by Wener and Olsen,23 also found increased health complaints among inmates in multiplehousing when compared to those in single-occupancy accommodation. Similarly, d'Atri24 found higher reported stress levels and higher recorded blood pressure among inmates housed collectively.

The effects of crowding and privacy do not appear to be attributable to the amount of space afforded each inmate. Interestingly, there appears to be no correlation between the amount of space (i.e., spatial density) given an inmate and increases in any measure of well-being. Moreover, inmates housed singly tend to fare the best in spite of the fact that they typically have the least space in square feet. From a design perspective, this finding is quite useful in that it suggests a need not for more and more room for inmates, but rather for small or moderate amounts of room with some degree of privacy.

While in many cases it may be experimentally difficult to tease apart the independent effects of crowding and privacy on well-being, the overall picture is clear: increased crowding and lack of privacy act, sometimes together and sometimes independently, to create an unpleasant, stressful and potentially dangerous environment. The recently proposed plans for the new William Head Institution, with their focus on housing designed to encourage positive social interaction while respecting the need for privacy, show considerable empirical precedent.

If the aim of the new institutional design is to create a "normalized" or residential environment, then it is likely that normal, or residential, territoriality will result.

Territoriality

Although territorial behaviour is frequently observed in correctional settings - for example, bikers or some ethnic or racial group habitually occupving a certain area of a cafeteria several problems arise in relating this to the new institutional designs. First, relatively little empirical research has been done in the field, and what has been done tends to focus on such general theoretical issues as territorial control or dominance, marking or personalization behaviours and so forth. Questions typically addressed are "Why do humans mark off territory and how do they do it?" or "What are the evolutionary antecedents of human territoriality?" Aside from research concerned with making neighbourhoods "defensible" against crime, little of this work has been guided by potentially practical applications.

We have already noted that

- ²¹ D.E. Smith, "Privacy and Corrections: A Reexamination," American Journal of Community Psychology, 19 (1982): 207-224.
- ²² G. McCain, V. Cox and P. Paulus, "The Effect of Prison Crowding on Inmate Behavior." A report prepared for the LEAA (1980).
- ²³ R. Wener and R. Olsen, "Innovative Correctional Environments: A User Assessment," Environment and Behavior, 12 (1980): 478-494.
- ²⁴ D.A. d'Atri, "Psychophysical Responses to Crowding," Environment and Behavior, 9 (1975): 237-252.

territorial behaviours are commonplace in correctional settings. In fact, territorial behaviour is universal and occurs on the street, in the neighbourhood and basically anywhere that groups of people are found.25 So if the aim of the new institutional design is to create a "normalized" or residential environment, then it is likely that normal, or residential, territoriality will result. Here, it is argued that it is probably inappropriate to ask such questions as "How can we increase/ decrease territoriality?" in the same manner that crowding was approached, but rather "How might we foster the positive or normal aspects of territoriality?" Despite the lack of data, it would be reasonable to suggest that the construction of a more normal environment such as the one envisioned for William Head Institution might achieve this end.

Concluding Remarks

Perhaps the best way to judge a human environment is by the well-being of the users of that environment. In the case of a correctional institution where an inmate must live 24 hours a day. often for several years or more, creating a humane environment becomes especially important. This, of course, is not to suggest that older institutional designs (or even the more recent podular designs) are necessarily inhumane, but rather, to note that they had different principles guiding how they were to be built and operated. For instance, surveillance and control were the foremost concerns in earlier designs, while today the prosocial values of the Mission Document provide the guiding principles for institutional design.

Given the data, all evidence seems to point to the conclusion that an institution possessing the features planned for William Head will provide inmates with a more normal environment where basic needs and human social relations are emphasized. It can also be concluded that this new design is in accordance with many empirically established requisites for human well-being.

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²⁵ J.J. Edney, "Human Territoriality," Psychological Bulletin, 81 (1974): 959-975.

Personal Space and Privacy: Implications for Correctional Institutions

by Susan Lee Painter, Ph.D., Associate Professor of Psychology, Carleton University

ncarceration involves not only the protection of society from inmates' antisocial behaviour but also punishment in the form of deprivation of personal liberty. The deprivation of personal control over events and space, even the limited space permitted in prison, and the creation of large proportions of communally used but non-owned space have readily observed consequences on behaviour. Those consequences, which can involve hostility, aggression, lack of co-operation and rejection of responsibility, can have measurable and serious consequences for correctional institutions. The following article discusses the perception and experience of personal space and privacy. This discussion, though not directly focused on corrections, is clearly applicable to relationships and behaviour that occur in correctional settings among and between both staff and inmates.

The consideration of design in the development of plans for correctional institutions is not a luxury. The design of a building or space can assist in controlling and guiding behaviour, make correctional staff more comfortable in performing their difficult tasks, reduce the amount of stress and tension experienced by inmates, and generally optimize the possibility that inmates can be rehabilitated and resocialized rather than just incarcerated. Inmates' behaviour, sometimes ascribed to their characters, may be equally a function of their physical environment. Human behaviour and the design of spaces are inextricably linked.

Human behaviour and the design of spaces are inextricably linked. We respond to aspects of our environment without even knowing it. In fact, our responses to the environment are so ingrained that it is difficult to tell that they are actually responses to something other than internally motivated behaviours. For example, we unconsciously drop our voices when we enter a formally appointed room; we automatically choose a seat near a window and just as automatically place our belongings around us to preserve an adequate "bubble" of personal space.

Personal Space

Personal space refers to the amount of physical space people need around themselves to feel comfortable and not subject to invasion by others. It also refers to the ways in which spaces are "personal," that is, identified with a person – the way a place or space (an office, room, cell, desk or house) is identified as one's own.

I. Personal Distance and Proxemics People have strong feelings about

controlling access to their persons. This is manifest in the amount of space people choose to have surrounding them when dealing with other people. The amount and nature of the space needed depends on the identity of the other person or people, the nature of the situation and the arrangement of the environment, as well as on other environmental factors.

The feelings about personal space that we have in North America are not always shared with people from other cultures. In India, for example, the amount of personal space accorded in a public situation is much less than the amount we take for granted in North America. These differences can sometimes be found in the ergonomic specifications that are developed and adhered to by designers and architects to ensure that the furniture, buildings and equipment they design "fit" human proportions. For example, the North American standard for the recommended width for two people facing each other across a dining table is 10% more than the Indian standard.

The observation of personal space conventions is part of the basic foundation of social interaction.

"Proxemics" describes the distancing aspect of personal space, that is, the way behaviour is organized around space and distance from other individuals. Personal distance affects animal as well as human behaviour. Animals will arrange themselves within the available space in ways that make them feel most comfortable, some species huddling and others avoiding contact. Whereas animals regulate the space between them in an instinctive way, the cues for people to seek contact with others or to maintain distance are usually situational – for example, friends stand or sit closer together than strangers.¹ The emotional characteristics of a situation can also dictate the kind of distance people prefer: people in a joyful or celebratory mood seek closer contact, as do people who are confronting an external source of danger, such as an earthquake, fire or other natural disaster, or the threat from a person in a hostage-taking situation.

Observations of animal behaviour show that every animal species has a "flight distance" and a "critical distance." The flight distance is how close the animal will let an individual of another species come before it flees. The critical distance is the space the animal will allow until it attacks. Animals clearly demarcate these critical distance zones by their behaviour.

In humans, the regulation of space and distance is a mixture of instinct and socialized behaviour. The observation of personal space conventions is part of the basic foundation of social interaction. When other people ignore these conventions, we feel threatened or offended. We may explain their behaviour as the result of mental illness or aggression. A person of the opposite gender who violates our personal space may be regarded as sexually aggressive. Even if we do not try to explain the deviant behaviour, it makes us uncomfortable and usually makes us modify our own behaviour. We may become aggressive ourselves in response to this violation of convention and personal boundaries.

There are four kinds of distance described by Edward T. Hall² which are normally used when people relate to others. These are general rules that are modified under particular circumstances, and the distances given are those that are observed in North American cultures. The actual distances used

- ¹ C. Mercer, Living in Cities. (Baltimore: Penguin, 1975).
- ² Edward T. Hall, The Hidden Dimension. (New York: Doubleday, 1966).
- ³ Forrest Wilson, A Graphic Survey of Perception and Behavior for the Design Professions. (New York: Van Nostrand Reinhold Company, 1984).

by people are likely to differ among cultures and subcultures, as suggested above. For a designer of any space, whether it be an institution or a more personal space such as a house or apartment, knowledge of the basic rules governing distance is important. It is even more important for designers charged with creating spaces that people will share, as with work or living spaces.

1. Intimate distance is a "bubble" around a person that ranges from actual contact to 18 inches. Wilson³ calls the close phase of this zone (from zero to six inches) the distance of lovemaking, wrestling, comforting and protecting: this distance is reserved for lovers, family, small children and very close friends.

The common exception is when people are forced into close quarters, for example, in an elevator or a bus. When this happens in North America, people tend to wrap an invisible cocoon around themselves. They may bring their arms and legs close to their bodies, wrap their arms around themselves, remain immobile or maintain strong muscle tone to defend against the touch of strangers. Another way people maintain their personal distance in close quarters is by avoiding giving "signals" of intimacy; for example, they might avert their eyes so that they do not come into direct eye contact with someone standing within the space normally reserved for intimate interaction.

2. Personal distance, from 1.5 feet to about four feet, is a zone within which people can touch each other but where contact is not necessary. This bubble of personal space generally surrounds people in their interactions with those known to them: it is a comfortable space within which people can discuss personal matters. A stranger or acquaintance who comes closer than this is perceived as invading personal space.

Hall noted that the interaction distance between two people in Latin America differs from that in North America. Latin Americans cannot talk comfortably with one another unless they are very close to the distance that evokes either sexual or hostile feelings in North Americans. When they move close, we withdraw: they think we are cold, distant and unfriendly, and we think they are intrusive. This has more implications for interaction in the United States, where a large proportion of the population is Hispanic, than it does in Canada. An interesting research question would be whether French-Canadians have a different social distance setting than English-speaking Canadians, or whether Native Americans' social buffer zones differ from those of non-Native Americans.

Again, this personal space is violated in a number of situations, for example, in a classroom or movie theatre where people you may not know are sitting right next to you. The perception of being invaded depends on the person's orientation in space: the amount of space required depends on where in the 360-degree space (or bubble) around you the other person or people are. The personal-space bubble is not evenly spread out all around but rather is larger in front of you. Thus it would be considered a rude invasion if a stranger walked up to within a foot or two of your face, but someone standing close to your side or to your back would not be a problem unless the person actually touched you. Even then, we have a tolerance for people jostling us if it is a momentary event.

3. Social distance includes a close zone of four to seven feet, within which impersonal interaction takes place. People who work together use close social distance as do people at a casual social gathering. At this distance, speech and facial expressions are clearly perceived, so communication can be efficient and accurate. When designers arrange seating in public places where communication is required or desirable, people are seated within this range so they can see and hear one another.

At the far phase of seven to 12 feet, more formal business and social discourse are conducted. The office arrangements of important or high status people are sometimes designed to keep visitors at this distance – chairs at the opposite sides of a standard desk keep people's heads about eight or nine feet apart.

At around 10 feet, the presence of another person does not require acknowledgement or conversation. So for example, in an office, a receptionist or secretary can attend to other work if a waiting visitor is seated at least 10 feet away.

An important part of the feeling of possession is the right to personalize a space, to adapt it to your own needs and desires.

4. Public distance includes a close zone that is between 12 and 25 feet and a far zone of more than 25 feet. Even the closer zone is in the range of "noninvolvement." You can pass people you know within this distance and acknowledge them, but not stop to exchange greetings. This is a more formal zone and voices must be raised somewhat in order to be heard. In the far zone, voices and actions have to be exaggerated in order to be perceived accurately. Public figures are usually surrounded by a distance of 30 feet or more from the crowd or audience.

A variety of modifications and exceptions to these "rules" or conventions have been noted through behavioural observation. People can tolerate a closer distance in open-air settings than in closed settings; extroverts seem to tolerate physical closeness better than introverts; and,

in general, people who have difficulty relating to others appear to have larger body buffer zones,4 or personal space bubbles. Researchers who have observed behaviour in correctional facilities found that almost all violent inmates had larger body buffer-zones, or personal space bubbles, than nonviolent inmates. Thus the violent inmates required more space around them when in contact with others, particularly for the personal space zone directly behind them.5 This rear zone appears to be elongated, trailing behind the inmate. The unusual shape of this buffer zone may be a function of the dangers inherent in living a violent lifestyle where physical threat is always a possibility.

There are also gender differences in the way personal space is handled. When intrusion is avoidable, people will intrude on the personal space of a female rather than that of a male.⁶ People will stand closer to a woman than to a man and will approach nearer to a woman before stopping.⁷ This may be a function of the perceived lower status of women in our culture, or it may be linked to people's perception that men are more likely to use violence or aggression to defend their space.

II. Personalized Space

Personal space also refers to a place or space that is identified as one's own – an office, room, desk or house. An important part of the feeling of possession is the right to personalize a space, to adapt it to your own needs and desires. This is something designers must keep in mind, but it is often sacrificed for uniformity, in order to control costs or people, or simply due to a lack of imagination. Employees persist in personalizing their work spaces, even when they work in an office or agency where there are

⁴ Mercer, Living in Cities.

J.S. Wormith, "Personal Space of Incarcerated Offenders," Journal of Clinical Psychology, 40 (1984): 815-827.

⁶ Mercer, Living in Cities.

⁷ A. Chapman, "Space and Place: Territorial Training for Traditional Gender Roles," Women and Environment, 7 (1985): 1.

directives against it – it seems to be a human imperative.

Inherent in this concept of personal space is status, that is, the ranking of people and groups through socially controlled means. It is usually easy to tell the socio-economic status of a family by the kind of home they live in, or whether they have a home at all. Other kinds of more socially determined status can be indicated by the style and appointments of clothing and personal spaces. In business and public agencies, for example, rank or status is reflected in the kind of office a person is assigned - its location, size, whether it is shared and the type of furniture it contains. Designers must allocate such things as floor space, window locations and furnishings in a manner that goes beyond the practical or functional ways to divide space, to include ways that have an impact on the emotionally sensitive issue of designating status.

Several issues inherent to the notion of personalized space help determine how people respond to physical settings. People have predictable reactions when their territory is invaded or threatened and when they are required to share space. These reactions and issues are discussed below.

Territoriality

Humans' sense of territoriality is just as strong as that of animals. It is just lightly masked by manners and social conventions. If you have ever taken a parking space from someone who thought it was "theirs," or had someone "steal" yours, you know that territoriality extends far beyond your own office, room or home. Infringement on, or invasion of, someone's territory can bring out highly aggressive feelings and sometimes violent behaviour. This is in part because our sense of self-worth is tied up in being able to control access to our persons. In our culture, people of higher rank or status are permitted to touch or come close to those of lower rank, but the privilege is not reciprocal. Invading or taking over one's space is equivalent to suggesting that he or she is of little consequence: it can be used as a

demonstration of power.

Personal Property and Possessions

People have clear reactions to others' infringement on what is theirs or what they think is theirs. Our reactions when we arrive home to discover that an intruder has broken in and touched or taken our possessions include outrage, fear and a clear sense of violation and disgust; we feel almost as if the intruder touched or invaded our bodies. The sense of territoriality about possessions even extends to places or things that are temporarily ours, such as a seat on an airplane or a place in a queue.

A place or object that is "no one's" is generally not well cared for or considered.

Group Property and Possessions Feelings nearly as strong as those mentioned above are engendered by group property and possessions. Neighbourhood committees, teams and schools all are the object of group territoriality. People are motivated to defend their common resources. Even when people have internal disputes, they will band together to fight a common enemy. In fact, psychologists have found that the best way to create cohesion in a group is to have a common enemy or a cause for which the group can work as a team. The classic "Robber's Cave" study in early social psychology research showed clearly that even in cases where people have hostile and negative feelings about others, bonds can be formed when there is a common cause.8 Young children at a summer camp were divided into two competitive teams for games and recreational events. When the competitive spirit got out of control and the children developed hostility to one

another, the camp directors "engineered" a breakdown of the camp's water system. All the children had to work together to repair the system, and this had the effect of mending the split between the two former rival groups. In a similar way, a threat to a residential area (a city proposal for a heavily travelled access road or plans to pave over a park or yard) can create a neighbourhood out of people who formerly cared little about one another. This process is assisted if the area has clear boundaries or a clear identity, for example, a name.

No-Man's-Land

Feelings of ownership are related to people's willingness to take care of a place or object. When people do not exercise territoriality, either as individuals or as a group, there is cause for concern: a place or object that is "no one's" is generally not well cared for or considered, precisely because it does not belong to anyone. This is sometimes why a place or object is vandalized. When people are working or living in an impersonal space, their behaviour becomes depersonalized and does not adhere as stringently to normal social controls. For a designer, one way to circumvent this is to involve the users in the planning of a space or facility. People involved in the planning seem to operate as if the space or place belongs to them and they will act more co-operatively and responsibly, for example, reporting that a drinking fountain is overflowing or an outside door will not close.

Sharing

Sharing property or space can be difficult, in part because we have such strong ingrained feelings of possession and territoriality. This is particularly true in our culture, which assumes that each person will have her or his own space, furniture, equipment and other items. We are not used to having to

⁸ M. Sherif and C. Sherif, Groups in Harmony and Tension. (New York: Harper, 1953).

allow others to use our things, or having to ask for or arrange to use things belonging to others.

One of the reasons it is difficult to share is that in early childhood, we develop a sense of self based partly on our possessions. When we realize that something can belong to "me," we begin to get a better idea of who this abstract "me" is. Identification with one's possessions is strong and does not fade after childhood. Even in adulthood, we frequently see ourselves reflected in our things, and these reflections give messages about ourselves to others. This is why the visible manifestations of status can be so important to us. In a prison or correctional institution, the number and types of possessions inmates can bring from home are limited. In leaving possessions behind, they lose part of their identity. The loss of identity, which can be exacerbated by the required uniformity of accommodation and behaviour, can undermine an inmate's self concept and create antisocial or erratic behaviour. The loss of outward signs of identity and status may also necessitate the establishment of status within the inmate population through other means, such as physical aggression, participation in the drug subculture or refusal to co-operate with correctional staff.

Designers can help reduce the friction caused by territoriality by clearly defining boundaries and rights.

Boundaries

Designers can help reduce the friction caused by territoriality by clearly defining boundaries and rights whenever possible. When hallways, rooms or decks are shared, a clear demarcation of the boundary and an indication of what is public or shared space and what is private space can help people get along better. Perhaps even more important, a clear indication of the transition between public and private spaces makes both indoor and outdoor space safer for users.⁹ For example, in apartment building hallways, the placement of plants or decorations outside individual doorways extends the private spaces out into the hall. The suggestion of ownership and surveillance makes it less likely that criminal or antisocial behaviour will take place there.¹⁰

Places can be designed to support or discourage the formation of friendships by having common spaces.

Privacy

Privacy can be defined largely in terms of the need to be alone when we live or share spaces with other people. We need privacy precisely because we live and work constantly in the company of others. In many cases, the only place a person can be assured of privacy is in the bathroom or the car. The issue of privacy becomes even more crucial, however, in correctional settings, which generally offer fewer spaces for privacy. Even the inmate washroom facilities in correctional institutions generally do not afford privacy.

I. Living Together

Group living is the norm in our culture: people live in couples, for example, in families and in such residential settings as dormitories and correctional institutions. Group living supports human endeavour, but it also causes stress. Most sources of stress are beyond the realm of the designer, but some aspects of living together can be improved by good design.

There are a variety of issues involved in living with others. These concern the development of

- 9 O. Newman, Defensible Space. (New York: Collier, 1973).
- ¹⁰ C. M. Deasy, Designing Places for People. (New York: Whitney Library of Design, Watson-Guptill Publications, 1985).

relationships and safety, as well as territoriality and personal space as discussed above.

One of the most clearly established precepts of social psychology is that people generally make friends and establish relationships with those who are in physical proximity. Places can be designed to support or discourage the formation of friendships by having common spaces, hallways and entryways available for use by all residents or users of the space. The idea is to promote traffic flow in particular directions by having focal points in places where people will meet and interact with each other.

One of the most important functions of living space is the provision of personal safety and security, that is, protection from intruders. Safety also includes security outside the living place, or safe passage to and from the dwelling.

There is a link between personal safety and friendship formation: places designed to encourage the formation of relationships among residents will automatically be safer places. This is because people look out for one another if they are friends. In addition, friendship formation tends to encourage people to take a "we" attitude about the space and to take responsibility for communally held space and for the things that go on there.

Creating workplaces that are more satisfying from the human point of view will result in improved productivity.

II. Working Together

Lack of privacy or control over personal space or over events occurring in the workplace affect an individual's sense of well-being, much in the same

way that invasion of their personal space is perceived as a threat or annoyance. Some researchers have looked at the relationship between job stress and the workplace among white collar workers. A common finding is that the productivity of these workers has declined during the time that office automation and information processing capabilities increased. When these new facilities are introduced into an office, they may require more communal use of space; they also can raise the level of frustration and feelings of loss of control, with the result that the levels of frustration and stress can rise while the level of productivity falls.

Some designers have suggested that creating workplaces that are more satisfying from the human point of view will result in improved productivity-by making people happier at work, you can make them better workers. It has been estimated that, over the life span of a typical office building, 90% of the costs are for employee salaries and benefits, and 10% are for the design, construction and operation of the structure itself.11 The "sick building syndrome" is only now being recognized as the result of serious flaws in the way large office buildings are designed, constructed, heated and ventilated.

In 1987, over 170 million salary dollars in Canada were lost because of absenteeism.¹² Orientation and training for a new professional or technical staff member can cost an organization between \$8,750 and \$17,500 per year.¹³ If employees leave their jobs because their lack of control over the work space leaves them frustrated and unproductive, it may be wiser to invest in the design of the structure to satisfy employee needs.

It is possible to design work space so that it allows for more personalization of space, if not privacy. Deasy¹⁴ has made a few recommendations for designers and management:

- identify each person's workplace with a name tag, even stations where there is rotation of staff;
- provide lockable storage space for personal belongings;
- arrange work stations so that the

worker faces oncoming traffic and is not placed where traffic is concentrated (unless it is an information or reception area);

- provide individual control over light and temperature;
- provide window views, even if they are over a distance from the work station;
- provide flexible furnishings that are height-adjustable as well as adjustable in relation to each other;
- allow for personalization through pictures, plants or awards; and
- provide for facilities that are easy to clean and maintain, especially for rotation work stations where work space is shared.

Conclusion

The sense of personal space and privacy is an integral element in human behaviour and interaction. When spaces are designed without keeping these imperatives in mind, those using the space - the residents, staff, clients or inmates - are forced to operate in ways that make them uncomfortable. They may not understand or even perceive the reasons for their unease, but it is clear that their discomfort will manifest itself in strained interactions and relationships. It may even increase general levels of tension and aggressive behaviour. Within correctional facilities, a wide variety of people must perform a great range of tasks and operate within complex role-relationships. If correctional settings can include design features that can make these tasks and relationships easier, both inmates and staff will benefit.

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- ¹² R. Sparks, personal communication (1991).
 - ¹³ Sparks, personal communication.
 - 14 Deasy, Designing Places for People.

¹¹ Deasy, Designing Places for People.

Architecture, Operations and Change

by George Centen, B.Arch. and Elizabeth Sampson, B.Arch. Construction Policy and Services, Correctional Service of Canada

hether as a result of a new social awareness, social change, technological advances or economic realities, prisons, as a distinct building type, will decline in importance and potentially cease to exist in the near future. In many ways this ultimate development in the relatively short history of incarceration will bring prison architecture full circle.

Correctional architecture and operations have assumed a variety of roles and relationships since the inception of incarceration. Throughout this history, architecture has introduced, facilitated and at times forced operational change. However, an appropriate and timely operational response is critical if actual correctional change is to be successfully adopted and maintained. While architecture can play a lead role in introducing and facilitating change, it cannot achieve or maintain it. This is the role of operations.

This article examines the changing role and relationship of correctional architecture to operational change. It traces this evolving role from the point of development of the prison as a distinct building type, through the introduction of reformative programs, to initial moves toward softening of the correctional environment. Finally, the article discusses the current transitionary phase, which sees architecture assuming a more prominent role in guiding operational responses.

The Development of the Closed Institution

Until the latter part of the eighteenth century, imprisonment was not a recognized criminal sanction. As such, within criminal justice, the role of built structures was limited to providing temporary detention and containment. Offenders were held temporarily, until the punishment prescribed by the courts was fulfilled. This singular function of providing indiscriminate, collective containment could be easily met by any secure structure, making it unnecessary to develop a distinct building form. Conversely, the "operations" of the day - the spectacle of corporal punishment - was of utmost importance.

Around 1780, penal practices

were revolutionized. Recognizing that corporal punishment was becoming as heinous as the crime itself, the state distanced itself from this sanction by introducing incarceration. The act of retribution was thereby redirected from state to institution and from body to soul. A complex system of incarceration was developed to respond to these revised intentions, with the penal institution emerging as the means by which this new system could be applied.

Institutionalization was simultaneously occurring in the areas of mental and physical illnesses (hospitals), education (schools) and the structuring of the workplace (the factory). The driving force behind this widespread institutionalization was a need for the production of useful and compliant individuals, an economic necessity for the new industrialized age.

The specific objectives of the penal institution moved beyond the singular purpose of containment to ensuring security, preventing moral contamination and providing a healthy environment. All three objectives could be satisfied, almost exclusively, by the physical structure: security through the provision of clear sight lines for continuous surveillance, the prevention of contamination and transference of criminal tendencies through physical separation, and the protection of health through the incorporation of newly developed mechanical systems such as plumbing and ventilation.

Consistent with these objectives, the basic institutional model comprised individual cells arranged in such a way as to allow continual supervision of all areas. The panopticon prison, a circular arrangement of cells around a central observation tower, first proposed by Jeremy Bentham in 1787, represented the idealized institutional form. Radial or rectangular cell blocks and the more recent telephone pole plan are all variations on the same theme. When correctional programs were expanded to include work, this design concept was adapted to the institutional workshop. Pentonville Prison, constructed in 1840, carried the concepts of supervision and separation to its limit with the inclusion of a chapel in which each inmate was physically isolated in a separate stall.

By the middle of the nineteenth century, the prison as an institutional building type had been perfected. However, the desired results had not yet been fully achieved. It was recognized that secure, individualized confinement, while beneficial to the good order of the institution, did little to improve the individual. Therefore, additional intervention was required. As a result, the notion of the prison as a place of reformation, be it through introspection, religion, work or education, was gradually introduced. The prison as a recognized building type remained stable and relevant to the original cause over the next hundred years. Progress toward the objectives of reform was addressed primarily through operational change. Correctional architecture contributed little to these developments beyond the construction of additional buildings for programming activities. The development of the institution had reached the point where the emphasis was on the operations rather than on the facility.

Normalization of the Institutional Environment

The move toward diluting and

potentially eliminating prisons as a distinct building form began in the 1960s, with the shift toward less institutionalized environments. Similar objectives were being pursued, to varying degrees, for such other institutions as schools, hospitals, the workplace and group housing. While each of these building types had unique operational reasons for change, the common impetus was recognition of the shortcomings of institutional settings.

By their very nature, institutions in general, and correctional institutions in particular, were ill equipped to prepare individuals successfully for life in the community. Inherent in the objectives of isolation and conformity to institutional norms was the loss of personal identity and dignity, the elimination of personal responsibility in the name of institutional efficiency, the inability to address individual needs and the establishment of an "us/them" dichotomy composed of those "in charge" and those "under charge." Staff, as well as inmates, were victims of this institutionalization.

As these shortcomings related to the institutional setting itself, a fundamental shift in the nature of that environment was required. Initial attempts to create a more normal correctional environment were aimed at diluting its institutional image. A move toward campus-style plans made up of smaller, residential-scale buildings presented a much different image from the monolithic, austere settings of previous decades. The use of residential materials, finishes and forms reinforced these initial changes. A corresponding operational shift from a static means of control to a dynamic model of institutional management, based on positive interaction between offenders and staff. was introduced. Architecture encouraged this dynamic model through the adoption of such innovations as open control stations, the elimination of barriers, the placing together of staff and inmate areas, and the inclusion of spaces specifically designed to encourage interaction.

While new architectural forms

present an image and context very different from that evident in the penal institution of the preceding era, incomplete, inconsistent and sometimes contradictory messages prevail.

- Although campus-style settings became the norm, movement often was, and continues to be, inappropriately structured through the excessive use of fences, barriers and other enclosures.
- The introduction of residential forms and materials, to provide a less institutional setting, is often diluted by the continuing requirement to provide full containment capabilities at the cell, range, housing unit and perimeter levels. This limits the degree to which the inmate can be afforded increased responsibility for personal behaviour. Similarly, it potentially diminishes the reliance on dynamic security. Where static controls continue to exist, there is less incentive to encourage increased responsibility, accountability and positive interaction as the primary means of institutional management.
- Attempts to introduce more normal elements into higher security level facilities are often thwarted by the need to retain the capability for armed intervention. This continuing requirement is a pervasive example of the attempt to overlay a previous operational mode onto a new physical setting. The architecture responds brutally to the potential or actual requirement for arms by setting up an elaborate physical network aimed at effective use and protection of these arms. Inherent in this requirement is the need to separate armed staff from inmates, to incorporate tunnels or galleries for safe transport and use of weapons, to reduce the distance between buildings and to design inmate areas so that they are fully visible from armed posts and galleries. In addition to limiting the architectural response, any requirement for an armed intervention capability dramatically affects both operations and the underlying perceptions of staff and inmates, often reinforcing the "us/them" dichotomy.
- · While closed control posts were eliminated in favour of open stations, the requirement for full observation capabilities from these locations continued to dictate and limit the form that the housing units would take. The requirement for direct surveillance from these stations to all areas of the unit effectively eliminated the need for interaction between staff and inmates. All unit activities could be seen and directed from one location. A by-product of this requirement for full observation was a restriction on the possibility of creating an appropriate degree of privacy between inmate rooms and more public common areas. This in turn affected the potential to create an environment that would both respect personal dignity and enhance self-esteem and identity.
- Providing or retaining centralized, remote-control posts contradicts the decentralized, interactive approach encouraged by open unit controls. Similarly, replacing manually operated locks by remote-control electronic systems, while potentially freeing staff for increased interaction, actually eliminates an opportunity for such interaction.
- While offices have been located within inmate housing units to support interaction, inmates and staff are typically there at different times of the day. This reduces, and is perhaps even counter-productive to, effective positive interaction. Even when staff and inmates are simultaneously present, proximity does not guarantee interaction.
- Where a variety of social and group settings are provided, their use is often compromised or restricted by staffing patterns and allocations that are determined according to post standards from an earlier operational mode.

These examples illustrate that, while architectural modifications have created a new non-institutional image for the correctional facility, contradictions remain. These conflicts between image and practice are rooted in the temptation, during a period of transition, to continue with the previous mode of operation or to provide a physical capability that exceeds the new operational need (i.e., build higher/operate lower).

Before these contradictions can be resolved, the development and application of thorough and consistent operational requirements is essential. These must be aimed at encouraging responsibility, facilitating interaction and reinforcing both individual identity and self-esteem. Rather than removing basic responsibilities, as is typical in institutional settings, operators must encourage and extend an inmate's responsibility for personal behaviour and the well-being of others. Interactions between staff and offenders must, to the extent possible, occur as a natural by-product of daily living experiences rather than within a more structured approach. To be truly effective, all participants in a correctional setting must be treated with dignity and respect. Operations must be flexible enough to address the diversity of individual needs through the provision of a variety of social and learning opportunities. These serve to reinforce personal identity, while reducing the potential for either isolation or anonymity typical of institutional environments. While architecture can and must contribute to, and in some instances even structure or force, such basic operational change, it can neither attain nor sustain these objectives: this is the role of operations.

Architectural structuring of this new operational order is being explored by the Correctional Service of Canada in select design projects. Innovations being studied for application include: the provision of kitchens to allow inmate responsibility for meal preparation; the elimination of the containment capability of inmate rooms and housing units; the creation of small, autonomous housing units (five to eight individuals); the elimination of continual, direct surveillance capabilities within housing units; the introduction of greater occupant control of his or her immediate environment; and the establishment and promotion of intermediary group settings. Additionally,

the design of common use areas will promote the involvement of, and use by, the local community.

While architecture can create a setting within which these basic human values and goals can be addressed, it is up to operations to ensure their achievement. The inability to arrive at an appropriate and consistent operational response will result in the failure of the physical solution (the architecture) and hinder the progression toward an integrated model of corrections.

Future Directions – Community Integration

Changing the design of closed institutions to more closely parallel a community environment occurs as a transitionary phase. This phase is aimed at facilitating the successful reintegration of offenders into the community by eliminating the negative effects generally associated with institutional settings. This new approach to corrections also has the potential to sensitize inmates. staff and the public to correctional facilities as a normal, contributing component of the community. Once the normalized environment becomes the accepted correctional standard, architecture and operations can move toward the broader goals of full integration into, and acceptance by, the community. This is the challenge facing correctional architects and operators in the future.

Again, parallels can be drawn to initiatives being pursued in other settings - hospitals moving toward specialized and extended home care, education being increasingly delivered by correspondence and home schooling, the extended use of the home as the principal work location, more accessible facilities for independent living by people with physical disabilities, and independent housing for elderly people. A raised level of social awareness and a general appreciation of the interrelationship between these functions and the welfare of the community provide an opportunity to pursue these initiatives. At the same time, the economic capability of the state to continue delivering the present level of services is uncertain, providing the final catalyst

for change.

The current emphasis in corrections on reducing the role of incarceration as a primary correctional strategy diminishes the need for a specific correctional building type. This change is being fuelled by a recognition of the shortcomings of incarceration and an appreciation of the benefits of community involvement to the eventual return of the offender to society. As well, reduced budgets, increased operating and construction costs, and such recent technological advances as improved monitoring capabilities, provide momentum and opportunity for the creation of a radically new approach to corrections.

One potential model would see corrections removed from the day-today realm of an individual's existence: corrections would mean treatment and training (not 24-hour housing) to deal with those aspects of the individual that contribute to his or her criminality. This selective form of intervention would eliminate the need for centralized accommodations for offenders. While programming could take place in a centralized location, the offender would spend the remainder of the day as a contributing member of his or her regular environment.

A community-based resource centre would form the primary physical representation of this model. Ideally, the facility would be part of a larger community-resource complex, not only assisting offenders in their varying stages of rehabilitation but also meeting other social welfare needs. In most cases, existing structures could provide accommodation. The less emphasis there is on a distinct physical setting for the provision of these services, the greater the chance of successful community integration and acceptance.

This type of change will not come without its challenges: the loftier the goal, the greater the risks and the more difficult its realization. There will be significant pressure to dilute the image and the reality. Inevitably, there will be demands to create identifiable environments that separate the correctional setting from the community; to replicate community facilities and services in the name of efficiency and local acceptance; to continue with earlier and more familiar physical and operational modes; to consolidate facilities to enhance efficiency and reduce costs; and to address initial problems through reliance on existing institutional capabilities.

Total integration of all offenders into the community will never be fully achieved. In fact, success will require the selective preservation of the closed institution to accommodate those offenders who would disrupt or receive no immediate benefit from the new order.

Conclusion

In leading change, architecture often becomes the lightning rod for criticism of a new philosophical direction. Throughout the history of corrections, it has always been easier to criticize the architecture than to question the validity of the operational response. When a correctional facility is designed and constructed to respond to a new philosophy, the structural form may demonstrate that current operational modes are no longer appropriate. The ability to discuss and criticize architecture rationally allows buildings to serve as a means of experimentation and to help develop new ideas. As successful community integration will largely depend on continuing correctional practices, the usual role of architecture to respond to initial criticisms must now be assumed by operations. This will require that correctional operators present a strong, consistent and holistic approach to meeting the challenges without relying on physical solutions. Therefore, current developments toward a more normalized correctional architecture should be viewed as a transitionary phase, preparing and challenging operators to develop new modes aimed at realizing the more fundamental goal of community integration.

Correctional philosophy and reality will continue to reflect changes being made in other public domains, demonstrating a natural connection to society. Whereas incarceration was born out of an effort by the state to distance itself from the punishment of the day (corporal punishment), the reduced importance of the correctional facility in the future will result from the realization that corrections should be a contributing and integral component of the community.

The Design Continuum: An Operational Manager's Perspective

by Arden Thurber, Warden and Marcel Chiasson, Deputy Warden, Westmorland Institution

n an ideal planning scenario, the operational manager would define local issues, program requirements and related functions. The designer would then create the accommodation that would best facilitate the day-to-day operational performance of those functions. In the Correctional Service of Canada or any large organization, the operational manager not only manages a local agenda but also must integrate a much broader organizational, and even governmental, mandate. The operational manager's membership in this larger community complicates the design-operating continuum for it is not only local requirements that drive the design process in an expanded organization, as applied to the local environment.

We suggest, not as designers but as operators, that there exists a design continuum that inevitably influences all stakeholders in the design process. This continuum has four elements:

- · philosophy,
- · program modality,
- operational requirements (functions) and

• accommodation design (form). We posit that the ideal continuum of design would follow this path. It should be noted, however, that change to any of the four elements has an impact on both design and operations, that change in any one element requires that all others be revisited to ensure that congruence is maintained. Thus, design in the real world is a cyclical and interactive, as opposed to a linear, process.

Philosophy

In the Correctional Service of Canada, the major philosophical foundations are set. The Mission and its core values seem durable and are not expected to change for at least a decade (and we hope longer). At first glance, a decade seems a comfortable planning parameter. But we know that the gap between the design of an institution and the actual completion of construction can be from four to six years, or even longer. This means that a change in fundamental philosophy in the final phases of the design-construction continuum could have an extensive impact on the operation.

Senior managers in corrections must be able to anticipate major shifts in organizational philosophy to avoid designing facilities to achieve goals that are no longer relevant. Given the cost and lifespan of such facilities, we have to live with our errors for a long time.

The capacity to anticipate philosophical shifts depends upon integrated communication. The information generated from environmental scanning exercises must be shared widely with operating and designing staff. Because operating staff frequently face issues that place the review of such information low on the "to do" list, the help of planning and design staff is needed. A great service could be provided through the synthesis of information and presentation of possible consequences or scenarios. These aids stimulate the operational staff's thinking and creativity.

Such a "pull through" strategy can market new concepts more effectively than a "push through" strategy based simply on disseminating a great volume of information. Those intrigued by an issue can return to the source documents to see if they accept the conclusions reached. When these potential shifts are seen early on, designers can begin to anticipate the operational changes that will inevitably follow.

Program Modality

The organizational philosophy of the Correctional Service of Canada can be expressed in myriad ways. Since the Mission Statement was adopted, several task forces have recommended changes to corporate objectives, programming, offender management and, most important, to staff/inmate relationships. Program modality seems to be the most volatile element in the Correctional Service of Canada.

While the Mission Statement is solid, our search to express it is intense, energetic and fluid. This is demonstrated by a few examples of major initiatives in program modality: the implementation of the Unit Management organizational model; the movement of accountability for case preparation to wardens: the creation of a Special Operating Agency to facilitate occupational development programs; and the introduction of major changes to resource management and accountability. All of these initiatives have had, and will have, an impact on operational requirements.

Operational Requirements – Function(s)

Our experience tells us that the program modalities chosen by the Correctional Service of Canada come with a menu of operational requirements or expectations. In many cases, the changes in operational requirements affect the design of space. As the adage states, "form follows function." For example, many institutions have just completed, or are still completing, the necessary changes (in form) to their facilities to complement the operational requirements (functions) of the Unit Management program. Due to the constraints of our capital budgeting process and types of facilities, modification of forms frequently lags quite far behind modification of functions.

The Unit Management model, as an example, asked us to create consistent teams of staff who would work with the same groups of inmates. It asked that security and case management functions be combined in one correctional role. It asked that we interact in a more frequent, consistent, goal-based manner. It asked that units become autonomous, fully delegated operations responsible for all facets of the correctional mandate vis-à-vis inmates, staff and even facilities.

We believe this particular modality is effective. However, some operations have lived, and are continuing to live, in facilities that do not easily lend themselves to the related operational requirements. This can be frustrating for operational managers and their staff. The costs in energy of creating a "best fit" are high.

While operational managers are open to, indeed often seek, new program modalities, they are at the same time concerned with how these new programs will relate to their facility design. As an organization committed to research and the sharing of knowledge, it is unlikely that we can expect Unit Management, or any other program modality, to stay in place forever. Incremental improvements, or the recognition of changes required to respond to a changed environment, will lead toward the creation of a new model (perhaps a de-institutionalized correctional facility). Inevitably, new functions will require new accommodation design or forms.

Accommodation Design – Form The accommodation design (form) follows operational requirements (function). In the real world of

continual change, the determination of appropriate design is an interactive process. The designers can offer alternative ways of performing functions, through differing space alignments, which can challenge the thinking and traditions of operators. Operators must confront designers with the real world constraints - staff size, budgets, nature of inmate population, community perceptions - that they deal with on a daily basis. If the purpose of such an exchange of ideas is to solve problems collaboratively, rather than to win a particular point, an optimal solution will be found.

Discussion

Within the framework presented above, we can discuss a few key questions on the relationship between design and operations.

How can design have an impact on operations?

We believe that design has a negative or positive impact on operations relative to its "fit" with the program modality being used and the operational requirements met or not met by the design. The negative impact can be dramatic, for example, design factors or assumptions that demand more supervisory staff than can be made available under conditions of economic restraint. Similarly, the positive impacts can be significant, such as the creation of spaces that make it natural for staff and inmates to interact around the activity of that area.

How should design affect operations?

Design is often placed in a reactive stance in terms of modifications to one or several program modalities, e.g., Unit Management. Design can significantly affect operations if it is allowed the opportunity to anticipate the program modality and the related operational requirements. To the extent that this is possible, design will facilitate operations by creating work space that is consistent with the functions expected. Equally, design can create environments that contribute to increased satisfaction and productivity for both staff and inmates. If we can tell the designers that an institution's primary focus is learning (education, cognitive skills, etc.), they can create an environment that supports learning (quiet living areas, adequate light and space for study, easy access to resource areas, etc.).

Are operations prepared for the impact?

Preparation for the impact of a design shift can be made only if operations have had the opportunity to detail the operational requirements that will arise from the philosophy and program modality now in place or anticipated by the organization. Our experience has been that front-line staff has not had sufficient time to identify these issues properly, nor to develop commitment to them.

If we design a facility that makes it difficult to conduct counts (the apartment-suite housing concept, for example), it is the correctional officer, not the manager or designer, who pays the price for the decision. It is therefore imperative that as much input as possible is received from front-line staff.

Let us assume that the corporate philosophy and functional models have been developed and decided upon, we would hope with input from front-line staff. Now the input of staff is required to determine how various design alternatives can work for or against the achievement of those goals. If, again for purposes of example, the counting process is a continual source of irritation to staff and between staff and inmates, it is not contributing to goal achievement. Either the design or the counting procedure or both need to be changed. The people who will perform the task are the ones who can best advise the designers.

Unfortunately, it often seems that our planning process does not take into account the time needed for adequate front-line input. Too often, for reasons of time or expediency, we use proxies. Simply having once worked the ranges or in the file room does not qualify a manager to assess the adequacy of the design for the performance of those tasks today – too much has changed. Inmates are different. Procedures are different. Even legislation is different.

Our planning process often fails to recognize that front-line people cannot respond to proposals as quickly as staff who work at some other levels. Their primary attention must be focused on day-to-day operational tasks. As well, many front-line people work shifts. Thus, where a two-week turnaround may be realistic for managers, probably six weeks are necessary for front-line staff.

Equally, consultation with frontline staff must be based on clearly defined issues or questions, for example: how can counts be done in this apartment design concept? How can the idea of inmates preparing some of their own food be made operational? Managers may be accustomed to making linkages quickly between concepts and assumptions that are part of their daily currency. Those items are not the daily currency of front-line staff. It is not a question of ability or intelligence but, rather, a question of familiarity. If we are considering the idea (program modality) of having inmates do some of their own food preparation because we believe that this will reduce institutionalization and better prepare them to reintegrate into the community (philosophy), then we need to put both the idea and its underlying assumptions on the table. We must allow staff to understand and challenge both of these easily. Once staff members understand and accept, they will be in a position to provide the detailed commentary (functions) necessary for a useful consultation process.

Failure to allow adequate time for consultation with front-line staff leads to suboptimal operational and design decisions. Those decisions, in turn, lead to working situations that act against goal achievement and add to the tensions and stresses inherent in the work.

Are the new institutional designs

meeting the needs of operations? We are familiar with the new design for William Head Institution. On balance, it is a case whereby a new program modality (de-institutionalization) is being facilitated by the design of accommodation space. As operational managers, we feel the direction implied by the new designs is congruent with our Mission Statement. It facilitates a de-institutionalized, normalized program modality. It remains to be seen to what extent the final designs will meet the operational requirements implied by this new direction.

On a more general level, new designs must address two primary concerns - flexible space and overaccommodation. The volatility of our program modalities, referred to earlier, is an environmental factor that must be kept in the forefront. Since "soft" changes (program modalities, functions) can and do occur much more frequently and quickly than "hard" changes (design), we need to build spaces that can be easily reused for different purposes. All building systems should be designed to handle change - the conversion of a boardroom to two offices should not require the reworking of the air circulation system. The concept of expandable and retractable spaces, as seen in modern community facilities, can be applied in our facilities. Within the constraints of security concerns, space adaptability and flexibility should be a high priority.

Again, due to the time gap between original planning and construction and the life span of our facilities, we need to overaccommodate to some degree when we build. As programs and activities expand to meet inmate needs, space is required. Whether the program delivery is by staff, contracted resources or volunteers, there must be space to prepare and deliver the service. The current level of programming is not a reliable guide for future requirements. The relative cost of including such flex space in new construction, compared to the cost of additions at a later date, should argue for a percentage allowance for future growth.

Can or should design move operations?

It is not the design that moves operations but rather the choice of program modalities to achieve organizational goals. The role of designers in expanding operators' vision of alternative ways to make a program work, however, can influence operations. New structures alone cannot be expected to change staff attitudes. But if the organization is committed to a new way of doing business, the staff conversion process will probably be facilitated by a good design. The chances of this occurring are greatly enhanced if the principles of consultation discussed above are respected.

 How, and in what direction, can design and operations move together in the future?

We have a bias toward the normalization and de-institutionalization of environments that can still provide the controls necessary to protect the public. We believe that involving operations

Reasonable Accommodation and the Rights of Persons with Disabilities

by Lisa Hitch, Legal Counsel Legal Services, Correctional Service of Canada

Persons with disabilities are a significant minority in Canada today. Recent figures show that more than two million Canadians qualify as either mentally or physically disabled. Although discrimination against disabled persons has been discouraged since biblical times,¹ only recently has protection from such discrimination been guaranteed in law. These legal protections are espoused by the Mission Document of the Correctional Service of Canada, which sets out in several of the Strategic Objectives² its commitment to employment equity for staff and to meeting the needs of individual offenders. This article will discuss the concept, recently enunciated by the Supreme Court of Canada, that a prohibition of discrimination is not simply an obligation not to discriminate (a negative obligation) but is also an obligation to take reasonable, positive steps to create equality (a positive obligation).

staff and design staff in problem identification, program modality creation and subsequent steps would help to synchronize the two entities. Operations and design will be forces in this process to the extent that they have been involved in the second and third element of our design continuum: program modality and operational requirements. In our model, the physical act of designing is the last step.

abilities of individuals belonging to a particular group – assumptions that may not reflect the real abilities of specific individuals and so could amount to discrimination.

Human Rights Codes

The protections given to disabled persons in employment and the provision of goods and services vary considerably from jurisdiction to jurisdiction. These protections are still very new in Canada. New Brunswick, in 1976, was the first province to prohibit discrimination specifically because of "physical disability." All other Canadian jurisdictions followed this example. By 1981, the International Year of Disabled Persons, only Newfoundland and Ontario had yet to

Historically, many jurisdictions have avoided legislating protection against discrimination on the grounds of disability. Even the recent United Nations Convention on the Rights of the Child, adopted last year, did not include physical or mental disability as prohibited grounds of discrimination in its equality provision until the last draft.3 This reluctance does not seem to be due to a lack of evidence of the need for protection against such discrimination.4 Rather, it is usually expressed as being due to concerns about the difficulties of distinguishing between two situations. One is where a mental or physical disability may actually prevent an individual from satisfactorily performing a job and thus be justifiable as a "Bona Fide Occupational Requirement." The other situation is where decisions are made on the basis of stereotyped assumptions about the

- ¹ Book of Leviticus, 19:14: "Thou shalt not curse the deaf, nor put a stumblingblock before the blind," as cited in M.D. Lepofsky and J.E. Bickenbach, "Equality Rights and the Physically Handicapped" in Bayefsky and Eberts (Eds.), Equality Rights and the Canadian Charter of Rights and Freedoms. (Toronto: Carswell, 1985).
- ² Core Value 1: "We respect the dignity of individuals, the rights of all members of society, and the potential for human growth and development"; Strategic Objective 2.1: "To ensure that the needs of individual offenders are identified at admission, and that special attention is given to addressing mental disorders."; Strategic Objective 2.3: "To provide programs to assist offenders in meeting their individual needs, in order to enhance their potential for reintegration as law-abiding citizens."; Strategic Objective 2.4: "To ensure that offenders are productively occupied and have access to a variety of work and educational opportunities to meet their needs for growth and personal development." Strategic Objective 3.13: "To actively support policies of bilingualism and employment equity."
- ³ See generally: L.M. Hitch, "Non-Discrimination and the Rights of the Child: Article 2," New York Law School Journal of Human Rights, 47 (7, 1989): 62.
- ⁴ The Chief Commissioner of the Canadian Human Rights Commission in testifying before one of the Joint Parliamentary Committees studying the proposed Charter, as cited in Lepofsky and Bickenbach, supra, note 1, at p. 336, stated that 21% of all complaints filed with the Commission concerned this ground. The unemployment rate was cited at between 70% and 80%.

pass such legislation, which they have since done.

With regard to mental disabilities, in 1978, Quebec was the first province to add to its *Charter* the term "handicapped persons" which included persons suffering from either "a physical or mental deficiency." Again, the other Canadian jurisdictions followed suit, and Alberta now remains the sole jurisdiction which does not prohibit discrimination on this basis.

Many of these Human Rights Codes provide definitions for the terms "physical disability" and "mental disability." Despite some differences, physical disability usually includes any physical disability, infirmity, malformation or disfigurement caused by bodily injury, birth defect or illness including epilepsy, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or any physical reliance on a guide dog, wheelchair or other remedial device.5 Mental disability usually includes mental retardation, organic brain syndrome, emotional or mental illness and specific learning disabilities.6

It must be recognized that mental and physical disability as a ground for discrimination is distinct from other grounds in two regards. First, the terms encompass a large range of disabilities with many varying degrees of disability within each. Second, because of this range of disability, there is also a range of necessary adjustments to the work force and to the workplace, many of which may be quite minor.

Charter

In 1982, the *Canadian Charter of Rights and Freedoms* entrenched the equality rights of disabled persons in our Constitution. No other country has given disabled persons constitutional protection in this manner. Section 15 of the *Charter*, which came into force on 17 April 1985, states:

15. Every individual is equal

before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

Discrimination

Disabled persons, as any other group, interact with the Correctional Service of Canada in many ways – as employees, visitors, volunteers and inmates. Discrimination against individuals on the basis of physical or mental disability is prohibited by law. Discrimination has been defined by the Supreme Court of Canada, as cited in *Law Society of B.C. v. Andrews*,⁷ as:

... a distinction, whether intentional or not, but based on grounds of personal characteristics of the individual or group which has the effect of imposing burdens, obligations and disadvantages on such individual or group not imposed upon others, or which withholds or limits access to opportunities, benefits and advantages available to other members of society.

This definition includes not only intentional, overt discrimination but also unintentional discrimination or so-called "systemic" or "adverse effect" discrimination. Thus, discrimination may be found by a court to exist even where there is no intention to discriminate on the face of a statute or policy – for example, where the law in question purports to treat all persons in exactly the same manner. In these circumstances, the Supreme Court of Canada has said that it will also examine the effect of any law or policy to determine if there is a differential impact on groups of people, caused because the purported equal treatment did not take into account that the people it affects did not all start at the same point or level and so that the equal treatment exacerbated the already existing inequalities.

Reasonable Accommodation

The courts have clarified that the protection against discrimination does not only include a liability for both intentional discrimination and unintentional discriminatory effects, but also "a duty on the part of those to whom the legislation applies to institute reasonable positive measures to meet the special needs of those who, by reason of disability, religious affiliation, or other protected characteristic, cannot be adequately served by accommodations or arrangements suitable for the majority."8 Failure to "reasonably accommodate" such special needs will also amount to discrimination.

The concept of reasonable accommodation is a necessary extension of the concept of protection against discrimination. Any prohibition of discrimination, in order to be effective, must attempt not only to eradicate all deliberate discrimination but also to address any institutionalized barriers to equality – sometimes something as simple as not being able physically to use a building because of the absence of a wheelchair ramp or the lack of adequate and accessible washroom facilities.

The workplace and many services will remain closed to minorities if these barriers are not addressed by requiring reasonable proactive steps to accommodate different needs. The first case to recognize this concept was *Ontario Human Rights Commission and*

- ⁵ See, particularly, the Canadian Human Rights Act, s. 20, and the Saskatchewan Human Rights Act, s. 2(n).
- ⁶ See, for example, the definition contained in the Regulations under the United States Rehabilitation Act of 1973, as amended in 1978 [92 Stat. 2982 (1978) codified as 29 U.S.C., S. 794(a)].
- 7 [1989] 1 S.C.R. 143.
- ⁸ Dale Gibson, The Law of the Charter: Equality Rights. (Toronto: Carswell, 1990): 133.

O'Malley v. Simpsons-Sears Ltd.9 In this case, Mrs. O'Malley was a member of the Seventh Day Adventist faith which prohibits adherents from working on Friday evenings and Saturdays. Her employer, Simpsons-Sears Ltd., argued that it was not intentionally discriminating by requiring her to work on Friday evenings and Saturdays as a term of full-time employment but that the obligation was a result of customer demand and was a term of employment for all employees. The Supreme Court of Canada held that, even though the concerns of the employer were genuine, Simpsons-Sears had discriminated against Mrs. O'Malley by not making reasonable adjustments to normal work schedules in order to accommodate her special needs.

Similarly, in the case of Re Saskatchewan Human Rights Commission et al. and Canadian Odeon Theatres Ltd., 10 the Court of Appeal of Saskatchewan found that, even where the company's argument was based on obeying fire regulations, it was discriminatory for the cinema management to insist that wheelchair patrons sit in the first row of regular seats if they did not wish to leave their wheelchairs. The Court held that the protections against discrimination would be "illusory" if the owners of public facilities did not have an additional positive duty to "make them accessible to persons who possess protected characteristics."

The recent case of *Alberta Human Rights Commission v. Central Alberta Dairy Pool et al.*¹¹ continues in this direction. In that case, the Supreme Court of Canada concluded that, where a policy creates an adverse effect on individuals (in this case a Seventh Day Adventist who could not work on Easter Monday), "the onus was on the respondent employer to show that it made efforts to accommodate the religious beliefs of the complainant up to the point of undue hardship."

There is no case law at present extending the duty to "reasonably accommodate" to section 15 of the *Charter*. However, it seems possible that the courts may also find such a duty under the *Charter*. In *Law Society* of *B.C. v. Andrews*,¹² it was stated that "[i]n general, it may be said that the principles which have been applied under the Human Rights Acts are equally applicable in considering questions of discrimination under s[ection] 15(1)."

Undue Hardship

The standard of reasonable accommodation is linked to a test of "undue hardship." In other words, the employer is only liable to take such reasonable steps to accommodate the special needs of an individual as will not amount to undue hardship for that employer. In Central Alberta Dairy Pool,13 the Supreme Court of Canada did not find it necessary to provide an exhaustive definition of undue hardship. It did, however, indicate that it would include such factors as "financial cost, disruption of a collective agreement, problems of morale of other employees, interchangeability of workforce and facilities." In the private sector, this test of undue hardship may involve many variables, such as in the case of an employer who has only one employee and may not be able to accommodate without significant inconvenience or even an inability to accommodate his or her own special needs.

In the case of the government, however, undue hardship may well be a difficult test to meet as it is unlikely that the courts will be sympathetic. In addition, it may be difficult to show that a given financial cost is undue or that the work force or facilities cannot be adapted, particularly where the inconvenience of other employees is minimal because of the large numbers of staff. (Where there are large numbers of staff, the inconvenience to each

¹¹ Supreme Court of Canada, unreported, 13 September 1990.

¹⁴ For an interesting look at the new United States legislation and its history, see: E.P. Kelly and R.J. Aalberts, "Americans With Disabilities Act: Undue Hardship for Private Sector Employers?", Labor Law Journal, 41 (1990): 675.

individual who has to make the accommodation is smaller. For example, covering a Saturday shift to make up for a Seventh Day Adventist would cause less inconvenience to employees in a company with large numbers of staff, where the shift could be rotated among employees, than in a company with only a few staff members.) These issues remain to be determined by the courts on a case-by-case basis.

Affirmative Action and Employment

The main concern of disabled persons is access to employment and services. With regard to employees, the Correctional Service of Canada is committed to the Employment Equity program of Treasury Board to hire more visible minorities and more persons with disabilities, as further supported by Strategic Objective 3.13 of its Mission Document. This program includes numerical targets and operational measures to improve the employment situation of disabled persons. Although the necessary standard of reasonable accommodation is not yet clear, some positive measures must be taken in order to ensure the full participation of disabled individuals who can successfully perform a job with some reasonable accommodation, such as with the many new technological aids now available.

In the United States, case law under the *Civil Rights Act* of 1964 quickly eroded the concept of "undue hardship" and reduced it to a point where only minimal costs were required. This has recently been changed by legislation with the new *Americans with Disabilities Act* which imposes a duty to accommodate unless the costs "would fundamentally alter the essential nature or threaten the existence of the respondent's enterprise."¹⁴ The

⁹ [1985] 2 S.C.R. 536.

¹⁰ (1985) 18 D.L.R. (4th) 93.

¹² Supra footnote 7.

¹³ Supra footnote 11.

Ontario Human Rights Commission has indicated that its guidelines will likely adopt the higher standard reflected in the recent American legislation but this issue has yet to be settled.¹⁵

Similarly, with regard to physical access to buildings, the *Obstacles* report of the Special Committee on the Disabled and the Handicapped, produced in February 1981, contained 130 recommendations on a variety of concerns, including such structural adaptations to existing federal buildings as wheelchair ramps and braille elevator signs, to allow access for persons with disabilities.

The Correctional Service of Canada is also affected by the issue of access to programs by disabled persons, both as inmates within the institutions and as visitors. Reasonable accommodation within programs is even more important due to the Correctional Service of Canada's objective of safe reintegration of offenders.

Conclusion

As the *Toward Equality* response notes, the Federal Government has made a commitment to "policies designed to effect the full participation of disabled persons in Canadian society and the economy."¹⁶ Achieving this full participation to the extent of each individual's own merits and abilities will take more than merely ensuring that overt discrimination no longer exists. Reasonable positive steps must be taken to ensure that disabled individuals have the same full access to employment, programs and services as all other Canadians.

The following summaries and extracts from opinions, reports and other documents are provided for the information and convenience of the reader. However, as the extracts are incomplete, the reader should refer to the actual opinion or document or consult with Legal Services at National Headquarters concerning the specific interpretation or applicability of any opinion or decision cited. If you have questions about these or any other related matters, please contact Mark H. Zazulak, General Counsel, Department of Justice, Legal Services, Correctional Service of Canada, National Headquarters, 4A-340 Laurier Avenue West, Ottawa, Ontario K1A 0P9.

RECENT DECISIONS

In *Wong*, the Supreme Court of Canada held that unauthorized video surveillance by police of suspected illegal gambling in a hotel room was an unreasonable search and seizure under section 8 of the *Charter* and was not justified under section 1 of the *Charter*. The Court further stated that the consideration of whether an individual has a "reasonable expectation of privacy" will depend on the particular factual context of the video surveillance.

In Treasury Board v. Public Service Alliance of Canada, the Federal Court of Appeal held that the contracting out of certain functions previously performed by indeterminate employees violated the Workforce Adjustment Policy. The Court agreed with the finding of the Public Service Staff Relations Board that the employer has an obligation under the Policy to the bargaining agent not to contract out jobs that had been and could be performed by indeterminate employees.

¹⁵ See generally: D. Baker "Anticipating the Next Generation of Equality Issues in Employment for Disabled People in Canada," in R.I. Cholewinski (Ed.), Human Rights in Canada: Into the 1990s and Beyond. (Ottawa: Human Rights Research and Education Centre, University of Ottawa, 1990): 41.

¹⁶ Canada. Toward Equality, the Response to the Report of the Parliamentary Committee on Equality Rights, (1986) 35.

n this issue of FORUM, we provide an overview of the institutional designs being developed in four countries: Spain, Australia, Sweden and the Netherlands. The new institutional designs in these international jurisdictions differ and may reflect the different pressing concerns to which they must respond in the management of their correctional populations. In Spain, efforts are under way to develop new, more humane correctional facilities. In Australia, success with the use of cottage-type facilities for low-security offenders has led to a plan for the building of new cottages elsewhere in the region. Sweden's objective of closely linking the prison service with the probation and parole service, and of enabling inmates to make ties with the various agencies that may help them upon release, led to an initiative for the construction of local institutions. In the Netherlands, an increasing prison population and political pressure against "double-bunking" have led to the construction of several new, modern facilities.

Democracy in Spain: New Prison Construction Philosophy

The emergence of democracy in Spain at the end of the 1970s brought forth more commitment to fundamental human rights. The transition to a democratic government in Spain in 1979 saw the introduction of the *General Penitentiary Law*, which stipulates that sentences should be administered with regard for basic human rights and with an emphasis on education and reintegration.

In accordance with the *General Penitentiary Law*'s considerations for humanization, security, dignity and durability in correctional institutions, a new correctional facility was built in Catalonia – the province with the most serious overcrowding problem in Spain. The Quatre Camins Penitentiary Centre opened in July 1989.

The architectural specifications and operational guidelines for Quatre Camins were based on three essential elements required to encourage positive change and the personal development of inmates: dignified accommodation, education and reintegration, and adequate security. To this end, emphasis is placed on adequate communication between inmates and their families; implementation of diverse types of treatment; multiple and varied facilities for all types of activities; modern health care facilities; reliable installations for security; and residential areas that

create a climate of comfort while maintaining security.

The architectural plan of Quatre Camins is divided into five separate areas according to their proposed functions: inmates' area - residential modules, health care centre, education area, treatment centre; personnel area administration and management, control centre; general service and exterior development - kitchen, laundry, maintenance; exterior security - guard structure; and external public communications, supplies. Although physically distinct, these areas are interconnected by passageways. The vast passageways of the Centre are located on two floors, with the first floor being used exclusively by staff.

The Centre's design resembles a city. The neighbourhood, the primary element of the city, comprises four modules which accommodate the inmates. The modules form a nucleus in the centre, attached to which are the different areas mentioned above. The whole facility is closed off by an outer wall.

The four residential modules, each containing 126 cells, are organized around a vast, glass inner-square, with two modules on each side of the main circulation passageway. Each module's main floor opens onto a large elongated courtyard set up with patios to create an environment conducive to communication. The courtyard allows access to all the inmate activity areas. Cells are located on the two upper floors of the modules and are disposed of in a linear fashion, along either wall of a wide passageway, thus allowing for supervision from a single control area. Each cell contains a washbasin, toilet, wardrobe and table. For security purposes, windows have grids.

The focal point of Quatre Camins is the immense, glass, central square. Located at the junction of the four modules, it is the location from which the passageways radiate to allow communication with the other areas of the Centre.

The architectural point of reference of the Centre is the interior vigilance structure. Located at the heart of the inner square, this high construction, separated from the main floor passageways, offers an overall view of Quatre Camins. An interesting feature of the vigilance structure, designed as a special support installation, is its prominent octagonal metal railing ring. An observation tower tops this metal structure and enables correctional officers to carry out occasional surveillance assignments.

Quatre Camins's security is reinforced by several perimetric subsystems: physical protection components, interior perimeter detection, exterior perimeter detection, closedcircuit television and security lighting. These subsystems replace surveillance and control normally accomplished by correctional officers from towers on the peripheral wall. Direct surveillance is done by motorized units.

The Quatre Camins Penitentiary Centre is seen as a real step forward in the design of progressive, efficient and humane correctional institutions in Spain.

South Australia's Cottages: A New Institutional Design Concept

As part of South Australia's efforts to minimize the institutional character of its correctional facilities, a new accommodation design concept known as "the cottages" was developed. First constructed in 1984, the cottages form a section of the Northfield Prison Complex which also includes the Women's Rehabilitation Centre. The facility is composed of 10 cottages (living units), which can accommodate a maximum of 40 male, minimumsecurity offenders who are approaching sentence completion.

Each cottage is a self-contained residence with four individual bedrooms. Each pair of bedrooms is provided with a bathroom (toilet, sink and shower) to be shared by the offenders. The other areas of the cottage – kitchen, dining room and living room – are for the common use of all residents. The inmates are provided with the necessary food supplies and facilities for the preparation of their breakfast and dinner. (They have lunch at their workplace.) The residents are also responsible for cleaning up after meals and for laundering some of their clothes.

In a further effort to encourage inmates to become more responsible and better prepared for their reintegration into the community, Northfield provides easy access to particular leave programs and offers various activities such as education, family visits, films, television, sports, arts and crafts, chaplaincy and library services.

The successful operation of the

cottages at Northfield has inspired South Australia's Correctional Services to build other facilities based on this concept. The first site chosen for new cottages is at Port Augusta Jail. The cottages will be built outside and nearby the high/medium-security institution. Cadell Training Centre, an unwalled institution for minimumsecurity offenders, will be the site of other new cottages. Redevelopment of the Cadell institution will create a series of sectors resembling a small town and creating a sense of community.

Sweden's Local Institutions

In 1973, the Swedish Parliament and Government decided to institute certain correctional reforms. An Act on Correctional Treatment in Institutions was passed to guide the establishment of closer links between the prison system and the probation and parole service, and closer ties with the various agencies (such as the employment office, the educational system and the social welfare system) that can assist inmates after release. A political decision was made to organize the institutional system in such a way that inmates, before their release, can be housed in institutions in their home district - in local institutions.

At the local institution, inmates were to be enabled before release to arrange their social situation, to establish contact with their private supervisor, probation officer and the social welfare authorities, and to prepare to support themselves upon release. Leaves from the institution and the opportunity to work at a job or study outside the institution on a work or study permit are considered important means to this end.

At the time of the reform decision, about 50 facilities in Sweden corresponded to the requirements laid down for local institutions. However, many of these were old and rather dilapidated. In early 1980, the Swedish Parliament agreed to a plan for the construction of 30 new institutions, to take place over more than a decade.

The local correctional institutions are designed to accommodate male and female offenders sentenced to one year or less and those serving longer sentences who are approaching their completion date. The institutions are located close to the inmate's community and in areas where work or education can take place in the community.

Readjustment of offenders into the community is the main goal of the institutions. To support this goal, workshops, administration and health services, as well as living areas, have been designed to resemble a community environment. Physical and leisure activity areas are available, although these facilities are somewhat limited, partly because of funding restraints and partly to encourage inmates to use community recreational facilities as much as possible and participate in mixed-company sports and leisure activities.

Institutional living areas are organized into eight sections, each section comprising five rooms, a shower, a sauna and a laundry room. Individual rooms have their own toilets. Meals are taken in the institution's dining room which is shared by both staff and inmates. Two rooms, separated from the male offenders' accommodation, are reserved for female offenders. Although they are provided with separate accommodation, female inmates use the same work and activities areas as the men.

New Prisons Built as a Partial Response to an Increase in Crime in the Netherlands

The Netherlands have embarked on a major prison construction program, with the 1990s marking the end of this 10-year initiative. The program was designed to accommodate an increasing number of offenders, due in part to an increase in drug-abuse related offences.

The increase in crime and the rejection by Dutch politicians of proposed "double-bunking" compelled correctional authorities to put forth a five-element program to alleviate the problem of overpopulation in its correctional facilities. The program was as follows:

- reopen some correctional institutions to regain capacity;
- reclaim offices used for professional and administrative purposes and convert them into cells;
- · create emergency capacities;
- modify and enlarge already existing correctional institutions; and
- build new correctional institutions. This article focuses on the construction of four new correctional institutions, built according to specific regulations established in 1986.

The four correctional institutions studied are similar in that the institutional buildings have an inward-looking design, the maximum capacity is 252 cells and the buildings are assembled around inner courtyards for sports and exercise which ensures automatic peripheral security.

The residential unit concept is at the heart of these new facilities. The institutions are divided into two primary sections, each comprising 120 cells. The two primary sections are divided into two subsections: one subsection contains two residential units (for a total of 48 cells) and the other contains three (for a total of 72 cells). The individual cells are located on two or three tiers, each tier containing a maximum of 24 cells. Each institution includes a special unit to accommodate up to 12 high-security inmates. To enable maximum freedom of movement within the institutions, cells are located on the sides of the buildings, overlooking the courtyards.

Leewaden Prison

Located on a large site, this three-storey institution for long-term male offenders was constructed in a rectangular shape. The elongated form of the site and the institution allowed for the construction of three separate inner courtyards instead of two, thus providing inmates with two exercise courtyards and one sports courtyard.

The two primary living units are oriented toward the two inner exercise courtyards. Individual cells are furnished with a bed, a chair, a corner table, a desk, shelves and a semi-closed bathroom. For security reasons, cell windows are still equipped with steel bars.

Bright and modern colours were chosen for the interior and exterior of the institution, and long skylights illuminate the passageways in the residential areas.

Rotterdam Remand Centre

This correctional institution for male offenders was built along a busy canal. The Centre has been nicknamed the "Golden Sphinx" for its impressive gold-tinted external glass walls.

The block-shaped Remand Centre comprises four storeys and has two inner courtyards. One vast internal passageway allows for movement within the institution. As with Leewaden Prison, the colour scheme of the institution's interior is bright and modern. The Centre's height and glass walls allow staff and inmates to enjoy the view of the outside world over the peripheral walls.

Hoogeveen Prison/Remand Centre

The entrance to Hoogeveen Prison is architecturally impressive. The facade is designed in the form of a flag fluttering in the wind, complemented by the entrance hall floor painted in the blue, white and red colours of the Dutch national flag.

This correctional complex, which accommodates male offenders serving either a medium- or long-term sentence, bears some resemblance to both Leewaden Prison and Rotterdam Remand Centre as it is rectangular and two to four storeys high. The periphery wall is built of concrete segments which together create a colourful artistic pattern and retain a sense of modernism. Since Hoogeveen Prison does not completely conform to the inward-looking building concept, a double wall was built onto the periphery to close gaps between buildings and to enhance security.

Sittard Prison

The architectural concept of Sittard Prison is the atrium. The residential areas of this institution are assembled in the shape of a cross and surrounded by a rectangular arrangement of buildings that house the other facilities. The four inner courtyards created by the cross-like design are used for sports and leisure. The buildings do not completely surround the courtyards, however, so a double wall was constructed in some places, as with Hoogeveen Prison, to complete the periphery.

Like the other institutions, the cells are oriented toward the inner courtyards. The cells are arranged in two rows facing one another but, unlike the three other facilities, each row contains 12 rather than 24 cells.

Future Construction Work

Crime rates are still rising in the Netherlands, and correctional authorities estimate that in the years to come their correctional capacity will have to be increased by at least 1,000 cells. Correctional institutions will have to be constructed along more recent design specifications. These new specifications will establish capacity at 204 cells per institution. The concept of residential units will be retained, and the number of static supervisory positions will be limited where possible.

Research Across the Correctional Service of Canada

he usefulness of any research initiative depends in part upon the type of audience that initiative receives. Put simply, research is not much use if the people who can use the information it provides never see it. As the research program of the Correctional Service of Canada continues to grow, especially with the ever-increasing research commitment of each region, it becomes essential that a mechanism be established to provide updates on what is being done by whom and where. The purpose of this section of FORUM is to provide short profiles of select research projects undertaken across the Correctional Service of Canada, from the Research and Statistics Branch at national headquarters to each region of the country. It is hoped that this will help bridge the geographic obstacles that hinder the sharing of knowledge.

NATIONAL HEADQUARTERS – RESEARCH AND STATISTICS BRANCH

Study of Staff Commitment and Aspirations

This project aims to clarify what motivates correctional staff to perform at high levels, and to explore the factors that contribute to commitment to the Correctional Service of Canada. The project is designed to assist in the development of training programs and better methods for staff recruitment and selection. Contact: David Robinson,

Research and Statistics Branch, (613) 996-5222.

Research on Cognitive Skills Training Programming

The Cognitive Skills Training Program has been delivered to more than 200 offenders nationally. The research component investigates the effects of the program on reintegration of offenders into the community and examines the differential impact of the program on different types of offenders. The program's impact on a number of cognitive targets is also examined.

Contact: David Robinson and Marcy Grossman, Research and Statistics Branch, (613) 995-9986; Elizabeth Fabiano, Offender Programs Branch, (613) 996-7730.

Research on High-Risk Violent Offenders

Although research knowledge of high-risk violent offenders is accumulating, it has not yet resulted in the development of any major innovations for controlling the recidivism of this group of offenders. The development of a demonstration project would rely on findings from past research on violent offenders and on extensive input from other researchers experienced in this area. Contact: Frank J. Porporino, Research and Statistics Branch, (613) 995-0933.

Sex Offender Census

A census of all sex offenders currently in our institutions or under supervision in the community is being conducted. The census will provide detailed information about offence types. Also, a subsample of offenders will be examined in more detail with respect to a variety of factors that are viewed as relevant to ongoing risk assessment of sex offenders.

Contact: Larry Motiuk, Research and Statistics Branch, (613) 995-4694.

Research on Substance-Abuse Assessment and Programming

The Computerized Lifestyle Assessment-Screening Instrument was developed as a comprehensive substance-abuse screening instrument. It provides descriptive information on offender substance-abuse patterns, lifestyles, social functioning and criminal history indicators. This information will be used to develop typologies of substanceabusing offenders for the purpose of developing programming that best matches treatment modality with offender characteristics. Contact: David Robinson, Research and Statistics Branch, (613) 996-5222.

Family Violence Research Initiative

Current family violence initiatives include: (i) a literature review on the prevention and treatment of abusive behaviour; (ii) the identification of risk markers for family violence; and (iii) the development, implementation and analysis of two comprehensive demonstration projects offering multifaceted community programming to released offenders in two large urban areas. This work is being complemented by the development of new initiatives aimed at examining offenders' understandings of family and family dynamics, investigating the influence of supportive and non-supportive family relationships on risk of recidivism and assessing offenders' skill levels in areas considered key to proper family functioning.

Contact: Tanya Nouwens, Research and Statistics Branch, (613) 995-3340.

Study of "Walkaways" from Minimum-Security Institutions

This study will try to determine the relative importance of internal institutional factors (e.g., inmate privileges) versus external factors (e.g., family situations) in contributing to an offender's decision to walk away. Contact: Larry Motiuk, Research and Statistics Branch, (613) 995-4694.

Study of Day Parole

This research will seek more information about the factors that determine the granting of day parole and the characteristics of offenders selected for this type of release. The extent to which granting of day parole affects further case-

management decisions and discretionary release (e.g., full parole) will also be investigated.

Contact: Larry Motiuk, Research and Statistics Branch, (613) 995-4694.

Research on Staff/Inmate Interaction

This project will examine how interaction between inmates and institutional staff and the quality of staff/ inmate relationships affect institutional and community adjustment.

Contact: Frank J. Porporino, Research and Statistics Branch, (613) 995-0933.

PACIFIC REGION

A Neuropsychological Taxonomy of Offenders

This study will see the development of a neuropsychological taxonomy of offenders which may provide further scientific support for programming and treatment.

Contact: Roger Marceau, Regional Psychiatric Centre (Pacific), (604) 853-7464.

Detection of Malingered Mental Illness Within a Forensic Population

This project will study the validity of an instrument to detect malingering of mental illness within a forensic population.

Contact: Arthur Lindblad, Regional Psychiatric Centre (Pacific), (604) 853-7464.

Functioning of Mentally Ill Offenders in Federal Corrections

This study compares two groups of offenders – a group of mentally ill offenders and a matched control group – on several variables from classification and program participation to institutional transfers and health care use.

Contact: Carson Smiley, Regional Psychiatric Centre (Pacific), (604) 853-7464.

Subtest Short Form of the Wechsler Adult Intelligence Scale – Revised in a Sample of 100 Incarcerated Males

This project tested the use of a short form of the Wechsler Adult Intelligence Scale within a forensic population.

Contacts: Kim Oey and Myron Schimpf, Regional Psychiatric Centre (Pacific), (604) 853-7464.

Evaluation of Case Management Projects

This evaluation of Case Management Projects, including case management assessment, intensive case preparation and intensive parole supervision, will provide project descriptions, project objectives, compliance standards, cost effectiveness and assessment methodology. Contact: John Konrad, Regional Headquarters (Pacific), (604) 854-2521.

Evaluation Framework for Matsqui Reception Assessment Centre

This project will develop a data base to assist in forecasting offender program needs and to provide offender profiles.

Contact: John Konrad, Regional Headquarters (Pacific), (604) 854-2521.

Evaluation of the Mountain Institution Sex-Offender Program

This study evaluated existing sexoffender programs to determine whether the criteria for treatment were being met. Two self-help programs (Intervention and Phoenix) and an institutional program (Sex Offender Awareness Programs)

were the focus of the evaluation. Contact: John Konrad, Regional Headquarters (Pacific), (604) 854-2521.

Evaluation of Community Sex-Offender Programs

The project will include a literature review of sex-offender programs, a description of all community projects in the Pacific region and an analysis of all program participants since inception.

Contact: John Konrad, Regional Headquarters (Pacific), (604) 854-2521.

Evaluation of the Accelerated Release Project at Mission Institution

The evaluation was based on a special day-parole initiative from Mission Institution that focused on the release of native offenders to halfway houses in northern British Columbia. Contact: John Konrad, Regional Headquarters (Pacific), (604) 854-2521.

PRAIRIE REGION

The Prairie region continues to undertake a comprehensive program of research initiatives. Ten studies that were proposed in the 1990-91 Research Plan have been completed and 12 are in progress. Capitalizing on these activities, 15 research-based addresses have been given to professional meetings, 10 papers have been published in professional journals, 12 articles have been accepted for publication and seven manuscripts have been submitted to journals. Additionally, numerous workshops and seminars describing the practical implications of this research have been offered to staff of the Correctional Service of Canada and to community audiences. Information on these activities is available from Arthur Gordon, Chief of Psychology/Research at the Regional Psychiatric Centre (Prairies), (306) 975-5400.

The Perceptions of Correctional Officers Toward Sex Offenders

Using a modified version of the perceptions scale employed by Kropp et al., which examined staff perceptions of mentally ill offenders, this study examined correctional officers' perceptions of sex offenders who victimized children and those who victimized women, compared with other offenders. Data collection at two institutions (Drumheller Institution in the Prairie region and Springhill Institution in the Atlantic region) has been completed with the preliminary analyses currently under way.

Contact: John Weekes, Drumheller Institution, (403) 823-5101.

Psychological and Attitudinal Factors in Community Reintegration

In this study, a series of questionnaires will be completed by offenders before release, and at several intervals after their release, to assist in the delineation of those psychological factors which may be relevant to an offender's degree of success in integrating into the community. This research will also assist in identifying the role of psychological distress and expectations of community living in offenders' release experiences.

Contacts: Randy Atkinson, Winnipeg Parole Office, (204) 983-4306; Hugo Foss, Rockwood Institution, (204) 453-5541.

ONTARIO REGION

The Antecedents to Crime Inventory: Preliminary Findings

This is a research scale that uses a relapse-prevention approach to identify antecedents or proximal cues of criminality. The nine subscales are empirically related to criminality, and some validity data are available.

Contact: Ralph Serin, Joyceville Institution, (613) 542-4554.

Outcome Data on Sex Offenders Assessed and Treated at the Regional Treatment Centre

This research project obtained followup data on sex offenders assessed and treated at an 18-week sex-offender program which provides cognitivebehavioural therapy and group training in victim awareness, sex education, social skills and street skills.

Contact: Arunima Khanna, Regional Treatment Centre (Ontario), (613) 545-8460.

Psychopathy and Sexual Offenders

The importance, for treatment and prediction purposes, of psychopathy in different types of sexual offenders is investigated.

Contact: Ralph Serin, Joyceville Institution, (613) 542-4554.

Training Sex Offenders in Empathy and Victim Awareness

An evaluation of a sex-offender program was conducted with the hypothesis that empathy enhancement and victim awareness would reduce the victimization of others. A behavioural empathy test was developed to assess a range of verbal and non-verbal empathic behaviours. Contacts: Sharon M. Williams and Arunima Khanna, Regional Treatment Centre (Ontario), (613) 545-8460.

Sex-Role Ideology and Deviant Arousal in Sex Offenders

This study compares the beliefs of sex offenders with those of normative community groups about appropriate male-female behaviours. Male-female views of parenting, work, personal relationships, motherhood, abortion and sexuality will be examined. Contacts: Arunima Khanna, Regional Treatment Centre (Ontario), (613) 545-8460.

Cognitive Processing Deficits in Violent Offenders

A generic cognitive-behavioural anger-control program is to be augmented with the specialized assessment of cognitive processing skills in violent offenders. As part of a research program, these deficits will then be targetted for individual treatment.

Contact: Ralph Serin, Joyceville Institution, (613) 542-4554.

Psychopathy and Violent Recidivism

A large data base (n=260) will be used prospectively to predict violent recidivism with the Psychopathy Checklist. Predictive efficiency and decision errors will be investigated. Contact: Ralph Serin, Joyceville Institution, (613) 542-4554.

Development and Evaluation of an Instrument to Measure Anger in Prison Populations

This study proposes to assess anger in male and female offenders by correlating situation-specific vignettes with scores on psychometric instruments measuring their emotions, cognitions and behaviour. Contacts: Karen C. Smith and Frederick J. Tobin, Regional Treatment Centre (Ontario), (613) 545-8460.

Pre-Post Group Measures of Changes in Victim Awareness in Incarcerated Sex Offenders

The purpose of the study is to evaluate post-treatment changes in measures of victim awareness (including degree of compassion, responsibility and relative anger toward victims) of incarcerated sex offenders. Contacts: David Farnsworth and Karen C. Smith, Regional Treatment Centre

(Ontario), (613) 545-8460.

Pre- and Post-Treatment Comparisons for a Generic Cognitive-Behavioural Anger-Management Program

Pre- and post-treatment results on a psychological test battery are compared for approximately 60 offenders. The limitations of psychological testing to demonstrate treatment gains are discussed.

Contact: Ralph Serin, Joyceville Institution, (613) 542-4554.

Analysis of Sex-Offender Treatment Relapses and Survivors

This project is studying factors that influence relapse and successful maintenance of treatment gains in sex offenders. The goal is to identify personal and environmental variables that relate to outcome following treatment and to study the process of coping with post-release situations.

Contacts: Arunima Khanna, Regional Treatment Centre (Ontario), (613) 545-8460.

QUEBEC REGION

A number of research projects have been initiated in the Quebec region, either conducted by regional staff or co-ordinated by the Regional Research Committee. One recently completed study examines:

Self-Concept Among

Multirecidivists ("Le concept de soi chez les multirécidivistes")

This project compared the selfconcept of hardened career criminals with that of offenders who showed a serious commitment to changing the pattern of their criminal careers. Contact: Claire Jutras, Librarian, Federal Training Centre, (514) 661-7786.

Other ongoing and recently completed projects include:

- Patterns of Substance Abuse in an Incarcerated Population and the Link between Substance Abuse and Criminality ("Les habitudes de consommation de la population carcérale et les liens de celle-ci avec la criminalité")
- Exploratory Study of Schizophrenics Who Commit Homicide
- Administration of the I.Q. Test A Test of Verbal Skills ("L'administration du test individuel d'intelligence – épreuve individuelle d'habileté verbale")
- Study of Inmates Who Commit Disciplinary Infractions During Their Incarceration
- The Treatment of Sexual Abusers ("Le traitement des abuseurs sexuels")
- Study of the Development and Validation of a Substance Abuse Screening Instrument

For information on the above projects or on research activities in the Quebec region in general, please contact Ms. Manon Houle, Regional Headquarters (Quebec), (514) 967-3388.

ATLANTIC REGION

Research on Sex Offenders' Scores on the MMPI

This project compares the scores of sex offenders and non-sex offenders on the Minnesota Multiphasic Personality Inventory (MMPI) Clinical Scale, Subscale and Special Scales.

Contact: Marg McWilliams (on Education Leave), Dorchester Penitentiary, (506) 379-2471.

The Perceptions Correctional Officers Have of Sex Offenders

This project, initiated in the Prairie region as noted above, focuses on correctional officers' attitudes and perceptions of different types of sex offenders.

Contact: Daniel Beaudette, Springhill Institution, (902) 597-3755.

Needs Analysis of Black Offenders

This research is currently being conducted by the Nova Scotia District Parole Office. Contact: Oscar Miller, Nova Scotia District Parole Office, (902) 426-3408.

Personality Factors of Sex Offenders

This study compares three groups – one community control group, one prison sex-offender group and one non-sex-offender group – on the variables of alienation, dissociation and locus of control.

Contact: Kevin Graham, Westmorland Institution, (506) 379-2471. ■

Coming Up in Forum on Corrections Research ...

The theme of the next issue of FORUM will be early indicators of future delinquency.

For future issues, the editors of FORUM are soliciting articles on the following topics:

- staff in corrections;
- violence and suicide in correctional institutions;
- long-term offenders;
- effective correctional programming; and
- the role of punishment in corrections.

We welcome your suggestions regarding specific research in these and other topical areas that could be profiled in future issues of FORUM.

If you wish to submit a full article or a research brief to FORUM, please write to us at:

Research and Statistics Branch Correctional Service of Canada 4B - 340 Laurier Avenue West Ottawa, Ontario K1A 0P9

Call for Papers

American Correctional Association Summer Congress, Corrections Research Exchange

The Research Council of the American Correctional Association (ACA) and the Association for Correctional Research and Information Management will be co-sponsoring a corrections research exchange at the upcoming 121st ACA Summer Congress to be held in August in Minneapolis, Minnesota.

Papers will be presented in poster-session format to encourage interaction between researchers and correctional practitioners and managers. Interested presenters, who have conducted quantitatively oriented research, should submit abstracts (maximum of two pages) before June 30, 1991.

Further information on the format of the poster presentations will be forwarded if your paper is approved. Preferred topics will include research on the effectiveness of correctional programming; assessment, prediction and classification; special needs offenders; and black offenders.

Send papers to:

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