

THE IMPLICATIONS OF CYBERNETICS FOR CRIMINAL JUSTICE POLICY:
JUVENILE CONTAINMENT AS A CASE STUDY

by

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B.A. (Honours), Simon Fraser University, Burnaby, B.C. 1979

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS (CRIMINOLOGY)

in the Department

of

Criminology

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SIMON FRASER UNIVERSITY

March, 1982

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The Implications of Cybernetics for Criminal Justice Policy

Policy: Juvenile Containment as a Case Study

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ABSTRACT

This thesis examines the implications posed by cybernetic theory with regard to public policymaking. Specifically, it is hypothesized that the use of cybernetic principles will increase the degree of rationality inherent in any given policy process. Rationality is defined as solving a given problem in accordance with the overall priorities of the organization in question, while achieving an acceptable compromise between the functionally ideal solution to the problem, the resources of the system, the relevant political considerations and the importance of the problem area relative to the other problems faced by the system.

Separate literature reviews are provided of both the traditional approaches to policy analysis and the major tenets of cybernetic theory. Elements from both fields are combined in the construction of a "cybernetic" model of public policymaking. Certain elements of this model are designated as operational indicators of the term "cybernetic principles".

Following this, a descriptive analysis is presented of the processes by which changes were enacted to juvenile containment legislation in the provinces of British Columbia, Ontario and Alberta. The results of this analysis are matched with the elements of the cybernetic model in order to rank the provinces in terms of their use of cybernetic principles. A continuum is identified which places Ontario first, British Columbia second and Alberta last. A further analysis of the policy processes

with regard to an independent definition of rationality results in the same relative ranking. It is tentatively concluded that the hypothesis is confirmed. However, it is noted that several limitations exist with respect to the study, and that caution must be used in interpreting the results.

ACKNOWLEDGEMENTS

I would like to thank all of the people who played a role in the completion of this thesis. The greatest debt of gratitude is owed to my senior supervisor, Dr. Simon Verdun-Jones, whose patience, understanding and insight throughout the entire process contributed immeasurably to the final result. In addition, the other two members of my committee, Dr. John Ekstedt and Dr. Ray Corrado, offered unfailing support and assistance during all stages, and were especially helpful with respect to their own particular areas of expertise. Finally, I would also like to thank all of the staff and graduate students in the Department of Criminology for the understanding and forbearance which they so generously displayed during some of the more trying periods in the writing of this thesis.

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I. INTRODUCTION

Of all the problems currently facing modern criminal justice systems, one of the most pressing involves the management of large organizations. During the last three decades, the implementation of criminal justice programs has increasingly involved the creation and maintenance of large-scale bureaucracies. Numerous writers have argued that this situation is complicated by the fact that large bureaucracies are often successful in resisting external control to the extent that they are able to pursue courses of action which are antithetical to the wishes of those politically responsible for their administration (Ashby 1956; Beer, 1967; Dechert, 1966). For this reason, it would appear that devising some method of analyzing and controlling the bureaucratic decisionmaking process, especially as it relates to the formulation of policy,¹ is mandatory if effective political control over the criminal justice system is to be maintained.²

Insofar as this issue is concerned, the policy science literature is replete with a multitude of theories and models, both descriptive and prescriptive, aimed at analyzing and controlling the decisionmaking process employed by public officials. The major problem, however, centers around the degree to which the various academic approaches are accurate in a descriptive sense; and even more importantly, the degree to

which they can be utilized in a prescriptive sense. The lack of consensus which currently exists regarding these concerns leads to three major aims insofar as this analysis is concerned.

The first of these aims will be to conduct a review and analysis of the existing literature regarding decisionmaking in the public arena. Following this, an overview of the literature in the field of cybernetics will be presented, culminating in the construction of a cybernetic model of policymaking. Finally, a specific area of Canadian criminal justice policy will be examined with a view to assessing the degree to which elements of a cybernetic model were utilized during the policy formulation. Concurrent with the latter aim, the following hypothesis will be subjected to an exploratory assessment:

1. The degree to which cybernetic principles are embodied in a particular policymaking process will be positively correlated with the degree of rationality³ inherent in that process.

Having articulated the conceptual parameters to be applied to this thesis, it now remains to define the specific area of the criminal justice system which will be subjected to analysis. Because of the nature of the hypothesis articulated above, it is considered mandatory that the area selected must provide a broad comparative base insofar as policy formulation is concerned. In this regard, the enactment of legislation respecting the incarceration of juveniles in the provinces of British Columbia, Ontario and Alberta is deemed to provide a suitable comparative

base for several reasons. First, these three provinces all enacted fairly radical changes with regard to juvenile containment legislation during the period from 1970 to 1978. In addition, the enactment processes were distinctly different in many respects, a feature which will enhance the validity of the any comparisons which are made. Finally, the fact that responsibility for juvenile programs is divided between the federal and provincial governments will provide an increased opportunity to assess many of the elements of the cybernetic model which will be constructed later in this thesis.

NOTES

1. While the definition of the term policy will be explicated in greater detail later in this discussion, for present purposes it is sufficient to note that it is taken to signify those decisions which place constraints on the making of other decisions.
2. This question is especially relevant in the light of Reisman's assertion that longstanding bureaucratic rules exhibit a tendency to assume the authority normally reserved for formal legislation (Reisman, 1976:81-85).
3. The term rationality will be defined on pages 48 to 51 of this thesis.

II. THEORETICAL MODELS OF POLICY FORMULATION

One of the most striking features of the policy analysis literature is the lack of consensus which exists regarding the formulation and implementation of organizational policies. This disagreement extends to the most basic of issues, and even includes such general questions as the definition of the term policy, the general manner in which policies are set, and whether or not optimal policymaking strategies can be devised. When this discussion is extended to more specific problems, the disagreement becomes even more pronounced. As a result, it is hardly surprising that a great many different policymaking strategies, each attracting its own coterie of adherents, have been advanced in an attempt to provide bureaucratic policymakers with some form of guidance in this most crucial area of organizational management.

The aim of this chapter will be to provide an overview of the various approaches outlined in the academic literature with regard to the formulation of "public" policy.¹ However, because of the vast number of strategies which exist, many of which overlap to varying degrees, it is felt that some means of simplifying the discussion must be employed. Accordingly, this overview will concentrate on discussing three widely accepted theoretical models. These models are, in order of discussion, the rational, the incremental-change, and the mixed scanning

models. While this approach will result in losing some of the subtler distinctions which exist between the models surveyed, it is felt to be sufficient for the purposes of this thesis.²

In addition to the above limitation, two additional disclaimers need to be articulated regarding the scope of this analysis. First, an academic distinction is often made between descriptive and prescriptive models of policy analysis (Bower, 1968:105-108). However, because it is felt that virtually all of the academic models can be employed in either fashion, this distinction will be ignored in the ensuing analysis. Second, Bower (1968) distinguishes between "models of individual choice", in which a single decisionmaker formulates the policy, and "models of collective choice", in which the policy formulation is a group responsibility (Id:108-112). However, it will be contended later in this thesis that policymaking, as distinct from other types of decisionmaking, will always involve compromise among members of a group, and that any appearance of "single actor" policymaking will be illusory. As a result, this distinction will not be dealt with in this chapter.

The Rational Model

The man whose name is most often associated with the rational model of policymaking is Harold Lasswell. In The Decision Process (1956), Lasswell argues that good policy decisions result from a series of six steps, each of which follows logically from the preceding one. Commencing with the recognition that a problem exists, the rational policy maker investigates the problem, compiles a list of possible solutions, ranks these alternative solutions according to existing organizational priorities, assesses the possible risks and consequences of each alternative, and finally, selects the solution which provides the best possible compromise between the values and priorities of the organization and the risks involved in the solution.³

The operationalization of this model has often been held to embody the assumption that it is possible to conceive of all possible alternatives, along with all of their possible consequences. In addition, this process also appears to assume that pre-existing values and priorities will always be clearcut. In fact, since the possible consequences will all occur at some future point, it would be necessary to predict what the values and goals of the organization will be at that time. Lasswell does admit that this approach embodies difficulties. However, he argues that the operationalization of his model is not

necessarily intended to follow a rigidly defined temporal sequence. Nor, he argues, is it intended to preclude the use of limiting criteria such as economic feasibility to define the scope of the analysis carried out.

Lasswell further asserts that the question of values in public policymaking is not as problematic as many people assume. Values, he argues, are simply objects of human desire (Lasswell, 1943:217). While conceding that any statement of values must commence with highly abstract concepts, he argues that if suitable "rules of interpretation" are utilized, it is relatively simple to operationalize these abstract concepts into concrete preferences to fit specific situations (Id:212).⁴ He further notes that the only constraining factor to be placed on the operationalization of values in any specific situation is the identification of a "supreme value" to guide the operationalization process. As long as the concrete preferences which result from the operationalization of abstract values do not contravene this supreme value, the "rules of interpretation" can be tailored to suit the policymakers involved.⁵

Another view of the policy process which is similar to Lasswell's is postulated by Herbert A. Simon. While Simon's major concern is with corporate organizations, his thoughts regarding the policy process are also applicable to the public arena. In Administrative Behavior (1976), Simon argues that the major task of a rational policymaker is to match the desired ends to the appropriate means. Accordingly, a rational decision

is defined as the selection of "...that one of the strategies which is followed by the preferred set of consequences" (Id:67). Insofar as the actual policy formulation is concerned, Simon asserts that this complex process is reducible to a simple three-stage process in which the policymaker lists all of the alternate solutions, assesses their possible consequences, and evaluates these consequences in terms of a pre-existing set of values or priorities (Id:67-70).

Simon concedes that this type of rationality is impossible to achieve in practice. For this reason, he argues, most bureaucratic policymakers utilize a type of limited rationality referred to as satisficing.⁶ Under this model, the first step is the calculation of the minimum acceptable results which can be tolerated by the organization in question. Following this, all multi-dimensional values and goals are reduced to single-dimensional constraints. Finally, the range of alternate solutions is reduced by excluding all but the most obvious factors (Simon, 1976;80-89). As a result, the policymaker is left with a manageable number of choices which, while unlikely to result in an ideal solution, are almost certain to provide a satisfactory one. Simon argues that this process remains rational as long as the policymaker remains cognizant of its limitations.

Other writers have disagreed with this latter assertion, however, and while agreeing that rationality is impossible to achieve in its pure form, have sought to reformulate the concept so that it represents a useful compromise between the impossible

ideal posed by the rational-comprehensive approach and the minimum acceptability criteria incorporated into the satisficing model. An example of this approach is found in the work of Yehezkel Dror. In Public Policy Re-Examined (1968), Dror discusses three policymaking models which embody the concept of rationality to varying degrees. While Dror merely describes these models as a prelude to discussing the approach which he describes as the optimal model, they are nevertheless worth discussing briefly at this point.⁷ These models are labelled as the pure-rationality, the economically-rational and the sequential-decision models.

In Dror's analysis, pure-rationality is achieved when the following six-phase process is followed by a policymaker:

1. The establishment of a complete set of operational goals, with relative weights allocated to the relative degree to which each may be achieved.
2. The establishment of a complete inventory of other values and resources, with each being weighted according to their relative importance.
3. The compilation of a complete list of the alternate policies open to the policymaker.
4. The assessment of the costs and benefits of each alternative, including the extent to which each will achieve the various operational goals, consume resources, and realize or impair other values.
5. The calculation of the net expectation for each alternative by multiplying the probability of each benefit or cost by its utility; and
6. The comparison of the net expectations of the various alternatives and the selection of the alternative(s) with the highest net expectation(s) (Id:232).

As will be noted from the above six steps, Dror's conception of pure-rationality does not differ greatly from the model postulated by Lasswell. As such, it suffers from similar difficulties on an operational plane. Dror does note that this process would be impossible to achieve under real conditions; however, he asserts that the concept of pure-rationality is essential to the understanding of the policy process as a whole. In addition, he states that it provides a useful criterion for assessing the adequacy of more realistic models.

The economically-rational approach to policymaking is similar to the pure-rationality model except for the stipulation that the various phases of the latter model are to be carried out only to the extent that they are economically feasible. To be more specific, if the cost of operationalizing any particular phase exceeds the benefit to be derived from doing so, the development of the phase in question is to be curtailed or eliminated. While this approach appears sensible on a purely intellectual level, it nevertheless poses serious problems of an operational nature. For example, it will often prove impossible to determine what the costs and benefits of any particular phase will be without actually operationalizing it. Nevertheless, the introduction of the concept of economic feasibility into the equation does provide a logical criterion for limiting the decision process, and thus represents an improvement over the pure-rationality model.

The sequential-decision model is designed to be employed in situations where a high degree of uncertainty exists regarding the information required for carrying out the initial phases of the pure-rationality approach. In fact, in some instances, the only feasible way to obtain enough information to make a final decision is by testing several alternate solutions.⁸ Then, after more information is gained from the development of the initial stages of one or more policy alternatives, the decision process can be refined in a sequential fashion, with each subsequent decision being based upon the information gained from the results of the preceding one.

The major disadvantage posed by this approach is the cost factor. Clearly, testing several possible solutions to varying stages of development is more expensive than implementing one, albeit imperfect, decision. In addition, because the decision process will necessarily be extended over a lengthy period of time, the possibility of changes in the values and priorities of the policymakers will be much more likely than in other types of decision processes. Nevertheless, the model does offer advantages in terms of information accuracy, and in certain situations might well represent the most rational course of action. This is particularly true in the light of recent developments in the area of simulation modeling which might permit the policymaker to obtain the needed information without actually testing the various alternatives under real conditions.

In their article, "Public Policy and Normative Economic Theory" (1968), Richard Zeckhauser and Elmer Schaefer propose an approach to rational policymaking which differs radically from the models discussed previously in this section. Instead of laying out a series of steps which must be followed, they maintain that a rational policy decision simply involves solving a given problem in accordance with a given system of values (Id:28). In accordance with this definition, they further state that a rational model consists of three elements: a set of feasible alternatives, a set of preferences (i.e. values) and a systematic methodology for relating the preferences to the alternatives in an efficient manner. They assert that the way in which the third element is operationalized is unimportant as long as the system of preferences remains transitive.

Despite the structural simplicity which characterizes their model, Zeckhauser and Schaefer concede that the determination of preferences presents a problem of considerable magnitude. As a result, a detailed description of this area is presented in the article. First, the overriding consideration to be employed in the identification of preferences is the welfare of the individuals affected by the policy in question. They propose that this be measured by means of the "Pareto criterion" which is defined as follows:

State A is declared better than State B if someone is better off in State A and no one is worse off. (Id:43)

In other words, a policy is considered a good one if it improves the situation of some individuals without worsening it for any

others. They further argue that a rational policymaker should attempt to achieve the "Pareto optimum" which is defined as improving the situation for as many individuals as is possible without worsening it for anyone (Id:46).

This process is not without weaknesses. Indeed, the authors identify two of them in the article itself. First, it will often be impossible to avoid worsening conditions for some members of a society when attempting to improve them for the majority. Second, it may not always be possible to rank all feasible alternative policies using the Pareto criterion due to the fact that some individuals will be better off under one policy while others will fare better under another. Further, it can be argued that the terms "improving" and "worsening" are extremely subjective, a factor which would create numerous operational difficulties insofar as implementing the model is concerned.

Another theorist who rejects the step-by-step approach to rational policymaking goes even further and also completely rejects any notion of a prescriptive model of policymaking. In his article, "The Study of Policy Formation: An Introduction" (1968), Raymond Bauer argues that the term "policy" simply refers to the making of parameter-setting decisions in accordance with some defined system of values. Insofar as this value system is concerned, Bauer asserts that the manner in which it is arrived at is irrelevant as long as the values are made explicit in the policy decision (Bauer, 1968:2). Bauer also criticizes Zeckhauser and Schaefer's notion of an optimal

policy. He states that inequities will always result when the social welfare criterion is employed, and that the best that can hoped for is the achievement of a good policy in which the benefits outweigh these inequities.

Bauer begins his analysis of the actual policy process by asserting that policy decisions can only result in one of the following two ways:

1. The responsibility for establishing the policy can be delegated to an individual or group which then exercises relative autonomy insofar as devising the policy is concerned; or
2. The establishment of the policy can result from a process of direct negotiation between all of the principals involved (Id:14).

He further notes that these two processes are not mutually exclusive since negotiations can also occur among the members of a delegated group. In any case, he argues that delegation simply represents deferred negotiation in that the delegated individual or group must eventually present the policy to the principals for approval, at which point some conflict is inevitable.⁹

Thus, in Bauer's analysis, the real crux of any policy formulation is the bargaining process, with the crucial elements being the relevant actors involved in this process. Bauer asserts that it is impossible to predict the form that this bargaining process will take and confines himself to noting that the values utilized will reflect the compromise which is minimally acceptable to all of the relevant actors. This

compromise will depend on whether the process is a closed or an open system. A closed system is defined as a situation in which none of the relevant actors are encumbered by responsibilities which might conflict with the policy under discussion. An open system is one in which some of the actors have such responsibilities.¹⁰

The Incremental-Change Model

In the previous section, the rational approach to policymaking was discussed. While it was generally conceded that this approach is impossible to achieve in its pure form, all of the theorists reviewed accepted the notion that rationality constituted a useful ideal by which to assess the policy process followed in any given bureaucratic organization. This section will review the work of a theorist who rejects this notion of rationality. In "The Science of Muddling Through" (1959), Charles E. Lindblom argues that rationality is both impossible and undesirable.¹¹ In advancing this argument, he cites many of the same reasons regarding the impossibility of identifying all of the possible policy options and their consequences that were embodied in the various limited-rationality models discussed in the previous section.

In addition to these objections, Lindblom also takes issue with the whole notion of attempting to operationalize values during the actual policymaking process.¹² First, he argues that

it is impossible to identify and rank all of the values which may play a part in the decision at hand (Lindblom, 1959:81). Further, he contends that even if such a task were possible, it would not be sufficient to merely rank any values which are identified; and asserts that that it would also be necessary to know how to trade off the varying levels of different values which might be present in a given policy equation. This problem is exacerbated by the probability that the various values may not be contextually transitive, i.e. have the same relative rank, throughout all aspects of the policymaking process. Finally, he argues that the introduction of values which are distinct from the goals may place constraints on the policymakers which will interfere with their ability to reach a consensus on any given policy. (This point will become clearer later in this section.)

In keeping with these objections, Lindblom advocates an approach to policymaking which he labels as the model of "successive limited comparisons" (Id:156). This model is characterized by the following steps:

1. The goal or goals to be achieved are decided upon by the policymaker(s);
2. A list is compiled of a limited number of policy alternatives, each of which differs only incrementally from the present policy;
3. Each of these alternatives is evaluated in terms of past experience, with little consideration being given to possible consequences which are not immediately foreseeable;

4. The alternative which can be agreed upon by all parties as most closely approximating the desired goal is chosen and implemented; and
5. The implemented policy is evaluated in terms of its ability to continue to meet the approval of all the parties involved. If it is unacceptable for any reason (such as an unforeseen conflict of values), the entire process is simply repeated until an acceptable policy is identified. For this reason, this approach is also referred to as the "disjointed-incremental" model (Lindblom, 1963:84).

Several important points of clarification need to be raised regarding the above five steps. First, the intrusion of values into the process is extremely limited, with any values which are considered being closely related to both the goal and the policy alternatives under evaluation. Second, the evaluation of the alternatives completely excludes any consideration of theoretical concepts which are not directly related to the problem at hand. Finally, no attempt is made to enter into an exhaustive analysis of the problem area because it is a simple matter to repeat the process if the initial solution proves unsatisfactory.¹³

Lindblom argues that this approach offers numerous advantages over the various rational models which exist. First, because the goal(s) and policy alternatives are both closely related to the existing situation, there is no need to engage in the complex means-ends analysis that is necessary with the rational models. As well, any means-ends analysis that might prove necessary is simplified by the limited number of values which are considered at any given time. Should the resulting policy inadvertently contravene an important unconsidered value,

the process is simply repeated until a solution is identified which does not conflict with any important values. More importantly, the values are rarely made explicit unless they are contravened, a factor which allows different individuals to agree on a given policy even though they would not agree with the values being utilized by other members of the policymaking group.

In addition to the advantages which Lindblom cites in terms of the actual formulation process, he also suggests that his model offers two distinct advantages insofar as the outcome of any given policy is concerned. The most important of these stems from the fact that only incremental changes are considered as possible solutions to the problem at hand. Because of this, there is little likelihood that the new policy will exert a radical effect on other parts of the organization. Thus, any changes which might be required to the organizational structure should be minor. In addition, because the change process is both successive and limited in nature, a better opportunity is afforded for the evaluation of the policies as they are implemented. This factor helps reduce the risk of a policy exerting unforeseen consequences of a disastrous nature on the organization in question.¹⁴

The Mixed Scanning Model

In The Active Society (1968), Amitai Etzioni argues that, while Lindblom's incremental approach to policy analysis represents a substantial improvement over most of the rational models, it nevertheless suffers from two major weaknesses. First, although he concedes that the incremental approach may well represent the reality of policymaking in a modern pluralist society, he suggests that it is basically a partisan type of process which affords the more powerful groups in a society the ability to override the needs and interests of the society as a whole (Id:254). In addition, he further argues that the approach is shortsighted to the extent that it will inhibit the development of important social innovations.

In order to overcome these two problems, Etzioni proposes a mixed scanning approach to policymaking which he asserts combines the best features of the rational and incremental models. The essential feature of this model involves a distinction between "contextuating" (i.e. fundamental) and "bit" (i.e. item) decisions. The former are those decisions which set the overall context for the latter, and as such, constitute policy decisions (Id:286).

The actual process by which contextual decisions are made is relatively simple. The policymaker begins by scanning the problem area to obtain a broad overview of both the available information and most of the feasible alternative solutions.

Then, based on the information which is available, he selects several of the more promising alternatives for more detailed investigation. This process is repeated until an acceptable solution is identified. As the analysis becomes more detailed, the policymaker becomes more incremental in his approach to the problem. However, the policymaker also occasionally reverts to a higher level of scanning to ensure that he is not missing important new information.

Insofar as the implementation of the resulting policy is concerned, Etzioni argues that it is desirable that some attempt be made to do so in a fragmented fashion, with the more risky and expensive aspects of the policy being reserved for the latter stages of the implementation process. As well, he asserts that it is essential that the policymaker continually monitor the situation by means of both incremental and high level scanning, and that he be willing to modify the policy if new information appears.

Another theorist who rejects Lindblom's incremental approach to policymaking is Yehezkel Dror. In his article, "Muddling Through -- Science or Inertia?" (1964), Dror argues that the incremental model will only be valid in situations where a present policy exists which is satisfactory in most respects. It will not work in cases where the problem which precipitates the search for a policy is totally new or represents a high degree of discontinuity from the previous situation. It will also be inappropriate if the available

resources undergo a radical change (Id:154-155). He further asserts that Lindblom's definition of a good policy as one which the relevant actors can agree on is unsuitable. He suggests that a high likelihood exists that the need for compromise, when combined with insufficient information, may result in an agreed upon policy which is disastrously inadequate (Id:168).

In keeping with these criticisms, Dror suggests that four basic assumptions ought to underlie any notion of optimum policymaking. First, the policymaker must accept the desirability of increasing the rationality of the process as much as is feasible under any given set of circumstances. At the very least, he argues, this rational component ought to include a complete explication of goals, an extensive search for alternate solutions, a thorough elaboration of expectations, explicit criteria for limiting the decision process and explicit criteria for the formulation of the decision. Second, it must be recognized that extra-rational components such as intuition are both unavoidable and desirable in any policy process. Third, it is important to realize that both the rational and extra-rational components of the decision process can be improved by conscious analysis and the extensive use of feedback loops.¹⁵ Finally, Dror notes that the actual policymaking process in most modern organizations has a tendency to follow the incrementalist model described by Lindblom unless specific stipulations to the contrary are provided (Id:170).

It is this latter assumption which led Dror to devise his own policymaking model. In Public Policy Re-Examined (1968), he presents the Optimal model which he states is designed to constitute "...a) a framework for analyzing public policymaking; b) a basis on which secondary criteria for ascertaining the quality of actual policymaking...can be developed; c) the main standard for appraising actual policymaking; and d) a normative goal for improving policymaking." (Id:162). This approach consists of three major stages and 18 phases. The first stage is the mega-policymaking stage and is defined as policymaking about policymaking. It consists of the following seven phases:

1. Processing values;
2. Processing reality;
3. Processing problems;
4. Surveying, processing and developing resources;
5. Designing, evaluating, and redesigning the policymaking system;
6. Allocating problems, values and resources; and
7. Determining policymaking strategy.

The next stage is the actual policymaking stage which also consists of seven phases:

1. Suballocating resources;
2. Establishing operational goals, with some order of priority for them;
3. Establishing a set of other significant values, with some order of priority for them;

4. Preparing a set of major alternate policies, including some good ones;
5. Preparing reliable predictions of the significant benefits and costs of the various alternatives;
6. Comparing the predicted benefits and costs of the various alternatives and identifying the best ones; and
7. Evaluating the benefits and costs of the best alternatives and deciding whether they are good or not.

The final stage in Dror's model is labelled the post-policymaking stage and consists of three phases:

1. Motivating the executing of the policy;
2. Executing the policy; and
3. Evaluating the policymaking after executing the policy.

Dror concludes his outline of the optimal model by noting that an extensive communication and feedback network must operate during all stages of the process. Because this network is even more important during the implementation stage, he states that it actually constitutes a separate and final phase.

Dror asserts that the optimal model offers two distinct advantages when compared to other approaches to policymaking. The most important of these is that it is accurate in a descriptive sense while also being directed towards improving the current situation through innovation and broad conceptual analysis. To be more specific, he argues that it avoids both the impossible ideal embodied in most rational models and the blind acceptance of the status quo incorporated into the incremental approach. As well, he states that it is flexible enough in

structure to accommodate the different amounts of time and other resources that may be available for the investigation of different problems.

In closing this section, it would seem appropriate to note that the discussion of the two mixed scanning models has been limited to a brief outline of their various facets. The major reason behind this brevity lies in the fact that they are considered the most realistic of the theoretical models discussed in this chapter. As a result, several elements of these models will be discussed in Chapter IV where they will be modified in accordance with the basic assumptions underlying the field of cybernetics and included in a "cybernetic model" of public policymaking. For this reason, it would appear redundant to analyze them in any detail at this point.

NOTES

1. It must be emphasized that the analysis in this thesis will be specifically concerned with public policymaking. While similarities obviously exist between policymaking in the public and private sectors, it is felt that the public arena places constraints on policymakers which do not exist in private organizations.
2. It must be noted that other theorists have categorized public policymaking models along different dimensions. One of the more important variations in this regard is that postulated by Peter Aucoin in "Public-Policy Theory and Analysis" (1979). Aucoin identifies four broad "theories" of policymaking which he labels as the "incrementalist", the "public choice", the Marxist "theory of the state" and the "environmentalist" approaches. While this taxonomy offers some conceptual advantages, it has been rejected in this analysis because the foci of the various categories cut across several different levels of analysis.

3. Various other writers have referred to this approach as the rational-comprehensive model (Lindblom, 1968:156), the instrumentally-rational model (Etzioni, 1968:254), and the functionally-rational model (Mannheim, 1940:53).
4. Lasswell labels this process as the "clarification of values" and states that it is important not to confuse it with the metaphysical "derivation of values" often engaged in by philosophers. This latter process, he argues, is usually meaningless (Id:213).
5. As a matter of interest, Laswellll argues that the sumpreme value in any democratic society must be the "dignity of the individual" (Ibid).
6. This term was actually introduced in a much earlier work in which Simon collaborated with another author in writing a text on organizational behavior (March & Simon, 1958:140-141).
7. Because Dror's optimal model is very similar to the process that Etzioni (1968) labels as mixed scanning, it will be dealt with later in this chapter.
8. While Dror suggests that the best approach would be to test several promising solutions simultaneously, it is conceivable that cases may arise where it would make greater economic sense to test them sequentially.
9. While some regulatory boards and commissions have a great deal of statutory autonomy in this regard, Parliament must ultimately face the electorate, an event which is analagous to presenting its policies to its principals.
10. It should be noted that these definitions of open and closed systems are not in accordance with those commonly used in either operations research or cybernetics.
11. It should be noted that Lindblom later expanded on this theory in A Strategy of Decision (1963), which he co-authored with David Braybrooke.
12. This does not imply that Lindblom considers values unimportant. He merely argues that, except for their implicit embodiment in the goal, any consideration of values should be held over until the chosen policy is evaluated.
13. In some respects, this latter point renders Lindblom's approach similar to the satisficing and sequential-decision models discussed in the previous section.

14. In the preceding section, the various rational models were critiqued as they were presented. However, because the next section discusses two models which arose in direct refutation of Lindblom's work, any discussion of the weaknesses of the incremental approach to policymaking will be deferred until these models are presented.
15. This concept will be discussed in greater detail in the next chapter. At present, it is sufficient to note that the term is being used to denote a process whereby the later phases of a project are influenced by information gained from the earlier phases.

III. THE CYBERNETIC APPROACH TO ORGANIZATIONAL CONTROL

The field of cybernetics owes its beginnings to the work of Norbert Wiener who first laid out its philosophical foundations in his classic treatise, The Human Use of Human Beings, published in 1950.¹ The term itself is derived from the Greek word kubernetes which literally translates as "steersman" (Wiener, 1967:23). Perhaps the simplest operational definition of the concept is to describe it as the analysis and control of complex systems based on methods of communication (Id:25). Cybernetics is, however, much more than that. In fact, it can be classified as both a philosophy and a futuristic conception of the world to come. This latter assertion is exemplified by the following passage contained in the opening pages of The Human Use of Human Beings:

It is the thesis of this book that society can only be understood through a study of the messages and communications facilities which belong to it; and that in the future development of these messages and communication facilities, messages between man and machines, between machines and man, and between machine and machine, are destined to play an ever increasing part (Ibid).

The above passage has frequently been quoted, even more frequently misquoted, and is usually misunderstood. While a detailed analysis of the various competing perspectives which have been imputed to it is beyond the scope of this thesis, three basic assumptions can be identified as underlying the

cybernetic approach to the analysis and control of systems behavior.

The first of these assumptions is the belief in the fundamental unity of all knowledge. This does not imply that it is possible to conceive of all possible knowledge; but rather that all knowledge is inter-related and that all systems are components of larger systems. More importantly, this assumption has led several other theorists to the further premise that the same principles of control apply to all systems, whether they are animate or inanimate, natural or man-made, social or economic, physical or biological (George, 1979:45; Beer, 1967:235; Kerschner, 1969:1216).

The second major assumption is the acceptance of the probabilistic nature of reality. This concept in its simplest form merely refers to the inherent uncertainty which exists regarding all empirical knowledge (George, 1979:39). The major implication that this assumption poses for the control of complex systems is that it necessitates assessing the likelihood of any particular fact being true. Wiener argues that this issue can be solved by first posing the question in terms of a large number of universes similar to the one in question. Once this is done, it is a simple matter to calculate the statistical probability of a given event occurring in the specific universe being considered (Wiener, 1967:19).

The final assumption which underlies the cybernetic approach to organizational control involves the homeostatic characteristics which all systems, whether mechanical, biological or social, exhibit. Wiener defines homeostasis as the tendency of all systems to resist decay and maintain equilibrium (Id:130). A better description is that provided by Beer who argues that it is the self-regulatory process by which an organism or system² maintains its critical variables within limits consistent with its survival (Beer, 1967:22-23).

While some writers have argued that this characteristic would render a system virtually immune to external control, such is not necessarily the case. For example, Ervin Laszlo, in The Systems View of the World (1972), argues that most systems are remarkably flexible with regard to their critical variables, and that if one of them is forcibly changed, the system will attempt to alter other less critical variables so that a new equilibrium can be reached which counterbalances the effect of the altered critical variable. Of course, limits exist as to the extent that a critical variable can be changed before the process will break down and the system will begin to decay (Id:40-42).

In addition to the philosophical assumptions postulated above, the cybernetic approach to organizational control also includes three elements which are crucial to any notion of organizational control. These are a system, a method of collecting and processing information and a communications network. While these elements are inextricably interwoven to a

large degree, they are considered so important to the further development of this thesis that they will be dealt with as separate entities in this chapter.

The System

The first hurdle which must be overcome insofar as the cybernetic approach to organizational control is concerned is the establishment of a suitable definition for the term "system". Clearly, the whole concept of control is premised upon the existence of a controller as well as something to be controlled. Equally clearly, the act of communicating requires both active and passive actors for the process to be complete. In keeping with the philosophical assumptions discussed previously, it is felt that a system can be minimally defined as two or more inter-related parts, each of which interacts with the other(s) to form a discernable and describable pattern. It must be noted that it is not necessary for each of the constituent parts to be an indivisible entity. Indeed, it is likely that in most systems the parts will also constitute systems themselves. For example, while the atoms which make up a molecule are clearly a system, so are the various divisions of a large corporate organization.

Having defined the parameters to be placed around the concept, it is now necessary to discuss several characteristics of systems which are relevant to any further discussion of

systems behavior. While the cybernetic literature reveals that systems can be classified in a multitude of different ways on both structural and behavioral planes, it is felt that the purposes of this thesis can adequately be served by limiting the discussion to a consideration of two structural dimensions, degree of openness and complexity, and the single behavioral dimension of predictability. Further, while the use of interfaces, homeostasis and entropy are usually considered separately in the cybernetic literature, they are related to the structural dimensions of a system to such a degree that they will be included in this section.

Perhaps the most important distinction to be made with regard to systems analysis is between open and closed systems. A closed system is defined as a self-contained set of parts which interact with each other but not with their surrounding environment. This type of system is most common in the physical and engineering sciences and need not concern us further except to point out that one of the major shortcomings of much social science research is the tendency of many researchers to treat social organizations as closed systems (Fast & Rosenzweig, 1972:20-26).

An open system, on the other hand, is one in which the constituent parts interact with the external environment as well as with each other. This definition necessitates a discussion of several additional characteristics. The most crucial of these involves the points of contact between the system and its

surrounding environment. Known as interfaces, these points play an extremely important role in determining the flow of information in any system. Since they will be considered in greater detail when communications networks are discussed, at this point, it is sufficient to note that identifying and ranking the importance of these interfaces is essential to any notion of cybernetic control of a system or organization.

A second important characteristic which will operate differently in open systems than in closed ones is the process of homeostasis by which all systems strive to reach an equilibrium around their critical variables. In a closed system, the system remains relatively stable once an initial equilibrium is reached. In an open system, however, external factors are constantly being introduced through the interfaces. These new factors either create new critical variables or alter existing ones. As a result, the existing equilibrium is upset and the system commences to search for a new equilibrium which can co-exist with the new critical variables. Thus the process of homeostasis in open systems can be described as a constant search for the means to account for an ever changing set of critical variables. This characteristic is instrumental in precipitating changes to the goals and values of a given system.

Two concepts which are closely related to the process of homeostasis are stability and sensitivity. Stability is a measure of the degree to which a system can withstand the introduction of external factors before its equilibrium is

disturbed. Sensitivity is a measure of how quickly a system responds to externally introduced variables. These concepts are negatively correlated in most systems, i.e. as a system becomes more stable it comes less sensitive to changes in its environment and vice versa. Since both characteristics are considered desirable, a careful assessment of the relative benefits of each must be carried out before any steps are taken to emphasize one at the expense of the other in any given system (Dechert, 1966:25-26).

A final systems characteristic which will be affected by the degree of openness is entropy. Wiener (1967) defines entropy as a measure of probability which centers around the tendency of all systems to deteriorate over time and to move from "...a state of organization and differentiation in which distinctions and forms exist, to a state of chaos and sameness" (Wiener, 1967:20). He further states that chaos and uniformity are more probable in all systems than order and discrete structure. Part of the reason for this process may lie in the tendency of the relevant actors of a system to expend ever increasing amounts of energy on activities which are not related to the system's goals. In a closed system, entropy always increases over time until the system degenerates into a non-system. In an open system, however, the constant changes brought about by the interaction with the external environment serve to slow this process, and in some cases, will even reverse it over the short term (referred to as negative entropy). Ultimately, however, all

systems, both open and closed, must go through a life cycle and die (Fast & Rosenzweig, 1972:21).

The second structural dimension on which systems may be categorized is complexity. Beer (1967) defines complexity as a measure of the number of inter-related parts which comprise a system, combined with the average number of interactions entered into by each part with the other parts (Id:13). While Beer constructs a three-fold taxonomy of discrete categories, it is felt that any attempt to pigeonhole systems on this basis would be arbitrary at best, and misleading if carried to extremes. A better approach, it is argued, would be to treat the concept as a continuum ranging from simple to very complex. In fact, any attempt to classify systems on the basis of complexity serves little purpose in itself unless its effect on communications patterns and information theory is also considered. In this vein, it is almost axiomatic to note that complex systems will be subject to more communications problems than will simple ones. It follows from this that the control process in complex systems will also be more protracted than in simple ones.

On a behavioral plane, systems can be categorized on the basis of predictability. This term is defined as the degree to which any interaction between a system's constituent parts can be predicted in advance. Beer dichotomizes this concept into the categories of deterministic and probabalistic. This distinction, however, is even more arbitrary than his complexity taxonomy. First, the acceptance of the assumption regarding the

probabalistic nature of the world rules out any possibility of a truly deterministic system. Even more importantly, Beer's dichotomy does not give enough consideration to the many different degrees of predictability that are possible. This is especially true in light of the fact that one of the most crucial elements of decisionmaking involves being able to predict the manner in which the parts of a given system will interact under a given set of circumstances. Since it will never be possible to predict this for certain in a probabalistic world, one of the major tasks of the decisionmaker will be to establish an acceptable margin for error. He then must assess the accuracy of his predictions against this preset standard, and evaluate the consequences of error.

The Collection of Information

It must be noted at the outset that this discussion will be limited to a consideration of some of the broader elements of information theory and that an arbitrary distinction will be made between information and communication. In this vein, considerable disagreement exists as to the precise meaning of the term information. For example, Karl Deutsch describes it as a "state description" of a given situation at a given point in time (Deutsch, 1966:82). Charles Dechert, on the other hand, argues that information is "...that which can or does influence the deportment of another" (Dechert, 1966:16). Still another

view is held by Norbert Wiener who suggests that "(i)nformation is the name for the content of what is exchanged with the outer world as we adjust to it, and make our adjustment felt upon it" (Wiener, 1967:26).

Thus, three major cybernetic theorists place their emphasis on entirely different aspects of information. For Deutsch, the important element is the actual description of the perceived reality; for Dechert, the emphasis is on the process of influence which results from this description; and for Wiener, the crucial element is the mutual readjustment that occurs when the information is transmitted. Despite these differences, however, it nevertheless is possible to identify several characteristics which apply to the concept regardless of the definition being utilized. The most important of these is the distinction between quality and quantity. The quality of a given piece of information is the degree of correspondence which exists between the image which is portrayed and the reality that it represents. Quantity is a measure of the amount of information which is collected and processed in a given period. Deutsch (1966:83-84) argues that while the two concepts are usually treated as separate entities, in reality they are inter-related to the extent that a piece of information has to be of sufficient quality to be recognized as information before it can be measured.

Two factors which affect the quality of information are noise and redundancy. Noise is simply unwanted information which

may be mixed in with desired information at the time that it is collected.³ This can result from such factors as poor collection techniques, incorrect interpretation of collected data, or willful deception by an individual involved in the collection process.

Redundancy is defined as superfluous detail in the information that is collected and transmitted (Rosie, 1966:154). It can be either desirable or undesirable depending on the circumstances. Its potential desirability results from a higher probability that the necessary information will reach its intended receptor. This is particularly so in high noise situations. It is undesirable, however, when it unduly taxes the communications network without achieving a corresponding increase in the probability of reception; or when it serves to confuse the nature of the information being transmitted. In the latter case, it would constitute a form of noise in itself.

Another important characteristic of information systems is sensitivity. This concept is composed of two distinct elements. The first is the ability of the information receptors to recognize changes in the environment. The second is the ability to distinguish information from noise once the initial perception of changes has occurred. As with many other aspects of information systems, this characteristic presents a mixed bag of advantages and disadvantages. For example, the desirability of sensitivity is obvious in cases where the ability of the system is high with regard to both elements. It is still useful

in situations where the first element is low but the second is high. However, when the system is characterized by a high sensitivity to changes combined with a low ability to distinguish between information and noise, the disadvantages are many and obvious.

The previous discussion has dealt with information collection systems without considering the obvious fact that much information will not be relevant at the time that it is collected; or if relevant, that it will have to be combined with other information to be truly useful. Thus, the final aspect of information collection which will be discussed at this point is the processing and storage of data for future use. While many different systems exist in this regard, nearly all of them are variations of the one proposed by Karl Deutsch in The Nerves of Government (1966). According to Deutsch, any good information system should embody the following characteristics:

1. Provide for the coding of information in a manner that is amenable to selective recall;
2. Provide a storage system for information not immediately usable;
3. Provide for the selective dissociation and recall of individual items of information;
4. Provide for the recombination of several individual items into patterns which had not been present when they were collected;
5. Provide for new abstractions from the recombined patterns which ignore the original items in the recombination; and
6. Provide for the transmission of all new items back into storage if they are not immediately useable. (Id:85)

Communications Networks

Integral to the notion of collecting information is the notion of communication. After all, information that cannot be transmitted to the relevant actors in a system is useless. Communications networks can be classified as either open loop or closed loop (Dechert, 1966:15-16). These categories are not to be confused with the previous distinction between open and closed systems. While a closed system will always employ a closed loop communications network, an open system may utilize either an open or a closed loop network.*

A closed loop communications network is a network in which the channels of communication do not extend beyond the boundaries of the system. The information receptors may be located on the boundaries, however, and thus a closed loop network can still gather information from the surrounding environment. An open loop network, on the other hand, has some of its receptors located outside the boundaries of the system, with the resulting lines of communication being routed through other systems. While an open loop network risks the possibility that its communication channels may be externally disrupted, it is clearly superior in terms of the amount and kind of information that it can gather. For this reason, most social systems employ an open loop network (Id:16).

The effectiveness of communications networks can be assessed in terms of efficiency, complementarity and critical capacity. Efficiency is a measure of the amount of loss and/or distortion which occurs during the transmission of information. Complementarity is the relative efficiency of the different parts of the same network (Deutsch, 1966:82-3). Both of these characteristics will vary according to the amount of information being carried by the network at any given time and with the amount of interference being generated within the network. Obviously, the ideal network would be one characterized by minimal loss and distortion over all parts of the network under all load situations. The achievement of ideals is unusual, however, and the tendency is for communications networks to lose efficiency and complementarity as the load is increased. The maximum load that a given network can handle before this loss reaches a predetermined maximum acceptable level is referred to as its critical capacity.

In addition to their interaction with each other, these three characteristics will also be affected by what Deutsch refers to as the "switchboard" problem (Id:94). Simply stated, this problem involves the need to establish priorities for the transmission of messages when the network is overloaded, and to identify preferred routings when more than one channel exists for a given message. This problem is largely an administrative one, although to some extent the priorities employed will reflect the value preferences of the system as a whole. Deutsch

further notes that a good communications network should be capable of "learning" with regard to the most efficacious manner of managing the flow of information.⁵

The final concept to be dealt with in this section represents the most crucial element of communications networks and, indeed, is integral to the whole notion of a cybernetic approach to the control of complex systems. In fact, it can be argued that many of the weaknesses associated with the policymaking models discussed in the previous chapter stemmed from the fact that provisions for feedback loops were either poorly articulated or non-existent. Feedback can broadly be defined as the development of the latter phases of a project on the basis of information derived from earlier phases. This definition, however, needs further articulation before it can be used in an operational sense. It should first be pointed out that the type of feedback normally employed in cybernetic systems can more specifically be labelled as negative feedback. Negative feedback occurs when a system compares the status quo with the desired goal and takes action designed to allow it to more closely approximate the goal (Deutsch, 1966:88; Fast & Rosenzweig, 1972:22-23).⁶ This type of feedback is used by all systems which attempt to maintain homeostasis. For example, a governor which is set to keep an electric motor running at a constant speed and the process by which the human body regulates its temperature both utilize negative feedback.

Negative feedback can be either goal seeking or goal changing. In the case of the governor cited in the above example, the goal is to maintain the motor at a given speed. If this cannot be accomplished, the governor will continue to attempt to do so until such time as it either breaks down or is reset to another speed. Similarly, if the preset speed is inappropriate for the task at hand, it will maintain it regardless. Clearly, these two courses of action will result in less than ideal situations. For this reason, it is highly desirable for self-regulating systems to provide for changing the goal once the feedback from earlier stages indicates that it is either unachievable or inappropriate for the problem at hand. Used in this manner, feedback can be viewed as playing a goal changing role.⁷

The actual manner in which feedback influences a system's decisionmaking process necessitates a discussion of the concepts of "lag", "gain" and "lead" (Deutsch, 1966:90). Lag is the reaction time necessary for a system to act on information that its course of action is incompatible with achieving a given objective. Gain is the degree of corrective action necessary to remedy the situation. From an operational perspective, a shorter reaction time will usually reduce the need for radical changes of direction, which will in turn result in a smoother running system. Unfortunately, it often will prove difficult to gauge the degree to which a given course of action will diverge from the goal without analyzing the problem over a lengthy period of

time. Therefore, imposing an artificially short lag time, i.e. forcing a reaction before a thorough analysis has been conducted, may well result in future corrections being necessary, a factor which will also detract from the smooth operation of the system.

Two types of remedial action can be utilized to resolve this dilemma. The most logical of these is for a system to attempt to develop analytical techniques which will permit it to conduct the necessary analysis in the shortest possible time. In addition, a system can also attempt to anticipate the amount and direction of any possible divergence and compensate for it when settling on an original course of action. This latter approach is referred to as "lead". The major problem with this approach lies in the inaccuracy inherent in attempting to anticipate error. If the estimate of the error proves incorrect, the system may end up in a worse position than if no attempt had been made to account for potential error.

The whole concept of feedback can be summarized in one word; that word is learning. Once a system initiates a project, any information which is received and processed is technically considered as feedback. The crucial factor in determining how effectively a given system will implement a project lies in the degree to which the system is able to analyze this feedback and compare it with its original course of action. The ability of a system to conduct this analysis, and to modify its original plans in accordance with the results, is known as learning.

Several factors will affect the ability of a system to learn from feedback. The first factor which will operate in this regard is the effectiveness of the information gathering and communications networks employed by the system. In addition, the technical ability of the system to analyze the information once it is collected and transmitted to the relevant actors will also play a crucial role. The bottom line, however, will be the willingness of the relevant actors to deviate from their original plans. No matter how effective a given system is with regard to the first two factors, if its controlling actors are not amenable to change, the feedback process will be virtually useless.

NOTES

1. This work has undergone several editions, with the latest being published in 1967. Unless otherwise noted, all further references to this work are to this latter edition. It also should be mentioned that Wiener published an earlier work, Cybernetics in 1948. However, it mainly dealt with the technical aspects of information theory and mathematical modeling. As a result, it is Wiener's later book that is considered the definitive work in the field.
2. It should be noted that the terms system, organism, and organization will be used interchangeably in this analysis.
3. It should be noted that interference will also create noise. However, this concept will be dealt with when communications networks are discussed.
4. It should be noted that Dechert actually referred to control loops in his discussion; however, he clearly was equating control with the communication process. It also should be noted that the definitions of open and closed loops used in this discussion will not correspond exactly to those postulated by Dechert.

5. It is important to distinguish this type of learning from the learning which occurs with regard to the problem(s) under analysis.
6. Positive feedback is the use of information from all phases to provide the constant impetus to revise the goal upwards.
7. This conception of negative feedback must not be confused with positive feedback. While positive feedback does result in a goal shift, this shift is always in an upward direction.

IV. A CYBERNETIC MODEL OF PUBLIC POLICYMAKING

In Chapter II, several of the more widely accepted theoretical models of policymaking were compared and analyzed. While some of these models were considered more acceptable than others, it was generally concluded that all were unsatisfactory in one or more respects. In general, the major limitations inherent in these models devolved from two major weaknesses. First, the emphasis placed on the investigation and analysis of the problem area was either so inadequate that it ignored all but the most obvious factors or else so detailed as to constitute an operational impossibility. In addition, the previous models almost completely ignored the communications problems associated with complex organizations and appeared to assume that effective communications networks were a given in the public arena. Despite this, however, several of these models contained useful elements with respect to effective policy formulation and implementation. It is the aim of this chapter to synthesize these various elements and combine them with several of the basic cybernetic principles outlined in Chapter III to produce a policymaking model which attempts to avoid both of the above weaknesses.

Before embarking on this task, it is necessary to point out that the term "cybernetic approach" does not imply a policymaking strategy that is totally new or involves concepts

which have not been utilized in the past. In fact, almost all of the previous policymaking models implicitly included some cybernetic principles within their structure and, in a broad sense, could also be described as cybernetic models.¹ However, whereas the previous models often relegated any consideration of cybernetic principles to a secondary role, it is the intention of this chapter to enshrine these principles as the explicit basis upon which the rest of the model is developed. First, however, it is necessary to turn to a task which has been consciously ignored until now, namely the explication of the term "policy" as it is to be used during the remainder of this thesis.

Policymaking Defined

Earlier in this thesis, policy was defined as "...any decision which places constraints on the making of other decisions". Although this description constitutes the most basic definition that can be applied to the concept, it is far too general for the purposes of this analysis. While policymaking certainly can be classified as a type of decisionmaking, it is also much more than that. Before proceeding to discuss the parameters which will be used to define policy and policymaking in this analysis, it would first appear useful to review the manner in which other writers have approached this problem.

Among the theorists reviewed in the previous chapter, almost all exhibited the disturbing tendency to use the terms "policymaking" and "decisionmaking" interchangeably. Perhaps the most obvious example of this is the scope accorded to the term "policy" by Charles Lindblom. In his analysis, policy is defined simply as the outcome of any political decisionmaking process (Lindblom, 1968:3-4). He makes no attempt to differentiate between levels of policymaking and, presumably, the most routine cabinet decisions are to be considered in the same light as legislation which exerts radical changes on the status quo. More importantly, he does not clarify whether or not certain types of bureaucratic decisions can ever be construed as policy.

Another definition which is only slightly less vague than Lindblom's is postulated by Yehezkel Dror, who argues that the measure of public policymaking lies in "...how it affects real situations, which range from behavior involved in secondary decisionmaking and policy execution to society as a whole" (Dror, 1968:34). Thus, Dror, like Lindblom, does not explicitly distinguish between different levels of decisionmaking except to note that policy will exert a constraining effect on the making of secondary decisions. He does not, however, define exactly which decisions are to be considered as secondary decisions.

Amitai Etzioni and Herbert Simon advance definitions of policymaking which are slightly more detailed than those postulated by Lindblom and Dror. In Simon's analysis, policy is "...any general rule that has been laid down in an organization

to limit the discretion of subordinates" (Simon, 1978:59). In addition, he also argues that long-followed practices can achieve a policy status similar to that of formal rules (Ibid). Etzioni, on the other hand, ignores informal practices and limits his conception of policy to those formally promulgated decisions which establish the context within which lesser decisions are to be made (Etzioni, 1968:252).

Two theorists who place more detailed parameters around the concept are Raymond Bauer and Theodore Lowi. In "The Study of Policymaking: An Introduction" (1968), Bauer argues that policymaking is a "...course-setting involving decisions of the widest ramifications and longest time perspective in the life of an organization" (Id:2). In a similar vein, Lowi argues that "...policy is deliberate coercion--statements attempting to set forth the purpose, the means, the subjects and, the objects of coercion" (Lowi, 1970:315). He further states that "(p)olicymaking ...is a way of introducing the structural elements..." into the decisionmaking processes of any bureaucratic organization (Ibid).

It is these latter two definitions which will exert the greatest influence on the parameters to be placed around the use of the concept in this analysis. First, policy will be construed as a decision which establishes the overall direction which a given organization will take regarding a given issue. This will usually be accomplished by defining the goals, priorities and values which relate to the issue. Second, a policy must

delineate a general strategy for dealing with the issue in question. Further, a policy must introduce structural elements which will serve to focus the making of administrative and/or operational decisions about the issue. As long as these three criteria are satisfied, policy can result from either political or bureaucratic decisionmaking. In addition, because it will almost certainly prove impossible to set an "overall direction" for an entire organization without becoming involved in discussion and compromise with other individuals, it is argued that policymaking will always be a group process.

The Elements of the Model

The major aim of this section will be to combine the fields of policymaking and cybernetics in a manner which will facilitate the construction of a cybernetic model of policymaking. However, before commencing to discuss the actual elements of the model, it is necessary to articulate two major assumptions which underlie its construction. First and foremost, the model presented in this section is predicated upon the assumption that rationality is both a desirable and an achievable feature of public policymaking. In this regard, the first task is the articulation of an acceptable operational definition of rationality. Unfortunately, the theorists reviewed in Chapter II declined to place exact parameters around the concept and limited themselves to describing how it could be

achieved. While their definitions were usually implicit in their models, it is felt that the hypothesis being tested in this thesis requires the postulation of a definition which offers greater independence from the actual elements of the model. Accordingly, rational policymaking will be defined as the solving of a given problem in accordance with the overall priorities of the organization in question, while achieving an acceptable compromise between the following issues:

1. The functionally² ideal solution to the problem;
2. The resources of the system in question;
3. The relevant political considerations; and
4. The relative importance of the problem area vis a vis other problems faced by the system.³

The second major assumption underlying the model is the acceptance of the behaviorist approach to the analysis of policy formulation in complex organizations. This approach ignores the structure of the organization being examined and, instead, concentrates on comparing the output to the input. In this type of analysis, the resulting policy (the output) is assessed in terms of how well it solves the initial problem (the input), with the intermediate steps being ignored for the most part (Dechert, 1966:13-14). The underlying hypothesis is that many organizations are simply too complex to be understood from a structural-functionalist perspective and that if the appropriate elements are included in the policy equation, the

self-regulating aspects of the organization will operate to achieve an acceptable result."

For this reason, the step-by-step approach to policymaking will be rejected in this model. Instead, an emphasis will be placed on the identification of those characteristics that it is felt will contribute to rationality in the formulation of public policy. It must be emphasized that the order in which these characteristics appear will be determined by the nature of the problem and the particular system involved in solving it. As well, the operationalization of any particular characteristic will likely affect the operationalization of others, thus necessitating a continual refinement of the various characteristics throughout the entire process.

The following characteristics are considered the most crucial aspects of the cybernetic approach to rational policymaking:

1. A thorough definition of the problem area;
2. The identification of the boundaries of the "system" directly involved in the problem;
3. The identification and ranking of the points of interface between the system and its environment;
4. An assessment of the extent to which the "informal" system differs from the formal one;
5. A delineation of the overall priorities of the system or organization;

6. The establishment of a precise goal or goals, along with a delineation of the degree to which the goal(s) can be modified should it become necessary;
7. The compilation of a list of feasible alternate solutions, along with the likely consequences of each;
8. The selection of one of the identified alternatives based on an assessment of the following three factors:
 - a. the degree to which it represents the best opportunity to achieve the stated goal(s);
 - b. the degree to which it is consistent with the overall priorities of the organization;
 - c. the degree to which it is economically feasible, taking into account the relative importance of the problem to the organization;
9. The separation of information and communications networks for purposes of analysis, combined with an assessment of the adequacy of each; and
10. The establishment of a formal feedback mechanism for monitoring the resulting policy during all phases of its development and implementation, combined with specific provisions for changing both the solution, i.e. the policy, and the goal should it appear necessary.

Before commencing to discuss these elements in detail, it must be emphasized that, while all of these elements embody cybernetic principles to varying degrees, several of them are considered to be more crucial than others in this regard. These are the delineation of the system, the identification of the interfaces, the separation of information and communication networks for analytic purposes, and the use of feedback. Because of the nature of the hypothesis being explored in this thesis, these four elements will be accorded greater emphasis during the remainder of this analysis.

The Problem Area

The definition of the problem area is crucial to the operationalization of many of the other characteristics included in this model and, as such, probably constitutes the most important task facing any policymaker. This definition must include information on the type of problem, the elements of the problem and the external systems which will be affected by any solution to the problem.

Problems can be categorized as either operational, managerial or developmental. Generally, as one moves from operational to developmental policies, the scope of the issues involved becomes broader. As an example, while an operational policy might be confined to establishing guidelines for dealing with a specific operational concern, a managerial policy would likely deal with such issues as the establishment of operational policies. Developmental problems are even broader in scope, and involve those issues whose resolution necessitates changes to either the structure or the overall direction of the system concerned.

Depending on the category involved, the elements can range from a small number in the case of an operational problem to an exceedingly complex matrix in a developmental concern. In addition, the length of time that a given policy may exert an effect on a system increases as one moves from operational to

developmental problems. For example, while an operational policy would likely affect an organization only as long as it is in place, a managerial policy would probably operate until all operational policies which had devolved from it had also been cancelled. The effects of a developmental policy are even more protracted, and could potentially exert an effect for years after the policy had been discontinued. In fact, numerous examples can be found of instances where policymakers in the public sector have been plagued by developmental policies instituted by their predecessors. For this reason, the scope of analysis conducted in formulating a developmental policy needs to be much more in-depth than for an operational one.

The System

Delineating the extent of the system involved in a given problem is crucial to the achievement of rationality in policy formulation because it represents the only possibility of identifying the relevant actors in the policy equation. As such, it is extremely important to the operationalization of many of the other characteristics included in this model. In this model, the term system will be used to refer to the smallest bureaucratic unit or units which are directly involved in administering the entire problem area. This definition, however, does not imply that external entities will not exercise authority over the problem area. In fact, the final authority

for a given issue will almost always rest with a larger system, of which the system itself is a sub-system. In this regard, it is obvious that separating the system from the larger system will often prove problematic. The determining factor between the two entities will usually be predicated on the directness of the control being exercised.

The size of the bureaucratic unit will vary according to the type of problem involved. For example, the smallest bureaucratic unit involved in resolving a developmental issue might be an entire ministry, whereas for a local operational concern it would likely be limited to a region or perhaps even an office. It must be noted that the extent of the system will often increase or decrease as the analysis of the problem proceeds. Similarly, the degree of actual control implied by the term "directly involved" will also vary with the scope of the problem. In general, as the scope of the problem increases, the degree of actual control embodied in the term will decrease.

The Interfaces

The importance of interfaces to the policymaking process stems from the basic cybernetic premise that all systems are sub-systems of larger systems. While the delineation of the system identifies the individuals who will be directly involved in the policy process, the identification of the interfaces focuses on the external entities which will be affected by the

policy, but will not participate directly in its formulation. The need for identifying and ranking these points cannot be over-emphasized. In order to minimize the need for changes to a policy once it is implemented, it is mandatory that consideration be given to its effect on other systems. The interfaces provide the means to ascertain the importance of this potential effect and to obtain input on how to minimize its negative aspects. Where more than one potential interface exists with the same external system, it is particularly important to rank the interfaces if effective communication is to result.

The identification of the interfaces is particularly important to the formulation of policy regarding developmental concerns. Because of the far reaching effect of such policies, it is likely that consultations and negotiations with other systems will be necessary before they can be implemented. To attempt to do so without considering this factor could well result in lengthy and expensive reassessments being necessary after the policy had been formulated.

The Informal System

Determining the existence and extent of an informal system within the structure of a formal system is one of the most difficult tasks facing the policymaker. Despite this, the profound effect that it can exert on the policy process makes it imperative that it either be identified or its existence ruled

out. An informal system can be defined as any discrepancy which might exist between a system's organizational chart and the actual functions carried out by the incumbents of the various positions. This discrepancy will be particularly crucial if differences exist between the priorities and goals of some of the relevant actors and the official priorities and goals of the system. An important practical area where an informal system can affect the policymaking process is the changes that it can bring about with regard to information and communications networks. Carried to an extreme form, the informal system can actually result in a redistribution of the power loci of a given organization.

While many organizations perceive the existence of an informal system to be undesirable and usually attempt to suppress its development, such is not necessarily the case. Once its extent has been plotted, a resourceful policymaker can utilize an informal system to bring about compromises and agreements that might not be possible through more formal channels. In any event, whether it is to be utilized or suppressed, its existence must be detected and plotted in order to avoid its potential negative effects.

System Priorities

The one characteristic upon which the policy models discussed in Chapter II placed considerable emphasis is the

question of organizational values. This is also the one area that proved the most problematic to any attempt to construct a rational model of policymaking. In this model, the concept of organizational values will be replaced with the notion of system priorities. While values are usually defined as those norms and ideals which are traditional to a given individual, group, institution or society, the term "priorities" is usually accorded a much less esoteric, and hence more easily operationalized, meaning. It is hoped that the difference between the concepts will become clearer in the ensuing discussion. At this point, it is sufficient to note that any attempt to arrive at a system's "values" will be both impossible and unnecessary.

Insofar as the establishment of overall priorities for a given organization or system is concerned, values of any sort are only one of the many elements which will form part of the equation. In the public arena, the factors which will influence the overall priorities of a given system will vary according to the particular system and time-frame involved. As a general rule, the following list can be considered indicative of the kinds of factors which will operate in most systems. It should be noted, however, that this list is not intended to be either prescriptive or all inclusive of the factors which will operate in any given system.

1. The nature of the area over which the system has jurisdiction;
2. The macro terms of reference imposed on the system by the larger system(s). These terms of reference may consist of any combination of the following factors:
 - a. explicit directions regarding the operation of the system in general;
 - b. explicit directions regarding the particular problem at hand; or
 - c. implicit expectations as to either the system in general or the specific problem at hand.
3. The political ideology of the system itself and of the larger system making up its immediate environment;
4. The available resources that can be used by the system;
5. The perceived public opinion as to the relative importance of the various sub-areas falling within the mandate of the system;
6. The perceived political implications of the various sub-areas administered by the system;
7. The personal interests and preferences of the controlling actors in the system; and
8. The degree of conflict which may exist between the personal interests and preferences of the various controlling actors in the system.

It should be pointed out that, while underlying values are implicitly included in many of the above nine factors, i.e. public opinion, political ideology and the personal preferences of the controlling actors, the explicit inclusion of higher level values (sometimes referred to as "fundamental values") as a separate factor in this model has been rejected for several reasons. First, it is felt that the determination of higher level values is fraught with methodological problems which would

severely weaken the model. Second, it is also felt that important higher level values, or a compromise among them, will always be reflected in such lower level values as political ideologies, public opinion and personal preferences.⁵ Finally, it is the contention of this model that the morality of any given value is irrelevant as long as it is operationalized in a satisfactory manner. For example, the philosophical "correctness" of the values embodied in public opinion is irrelevant as long as the opinion is measured accurately.

Despite the previous contention that the actual values used in establishing the policy were unimportant as long as the system's overall priorities were not contravened, these values will nevertheless play an important subsidiary role in the establishment of the overall priorities.⁶ Therefore, it is considered appropriate to include a brief discussion of some of the factors which affect the values of individual actors in the policy process. Richard Ericson (1969:1178) outlines the following individual value characteristics:

1. moral sensitivity;
2. service motivation;
3. extra-organizational loyalties (i.e. to other systems);
4. attitudes of tentativeness (tolerance);
5. democratic procedural orientations;
6. compassion;
7. search for "optimum stability" for the system;

8. rationality; and
9. greater self-actualization via "collegial" milieux (i.e. peer pressure).

The Problem of System Goals

The establishment of system goal(s) is predicated upon a thorough analysis of the problem area. Simply stated, a goal can be defined as a perceived means of solving a particular problem. It is important that the goal(s) satisfy the following criteria:

1. They must be formulated with a degree of precision that allows for easy conceptualization in operational terms;
2. They must be in keeping with the overall priorities of the system; and
3. They must not be mutually exclusive of other goals of the system, even though both sets of goals are consistent with the overall priorities of the system. If such an event occurs, a reassessment of both problem areas is indicated.

While specificity is a necessary characteristic of any goal(s), it is equally important that the system be willing to modify its goals should such a course of action be indicated by the progress of the analysis. This is especially important in light of the refinement process which will necessarily occur with regard to all the characteristics of the model as it is operationalized. It also should be noted that, while it is not necessary for a goal to be consistent with the overall priorities of any other system, an attempt should be made to ensure that it is not incompatible with major goals of related

systems. This will help avoid the problems discussed previously when the problem area and the interfaces were discussed.

Compiling a List of Alternate Solutions

The identification and assessment of alternate solutions is an area that engendered a great deal of criticism with regard to most of the rational models discussed in Chapter Two. To recapitulate briefly, the opponents of the rational approach argue that it is impossible to conceive of all possible solutions, much less assess them in terms of their possible consequences. This criticism is valid if the search for alternative solutions is construed as being an exhaustive one. However, it is the contention of this model that rationality can still be achieved and, indeed, even enhanced, by the use of limiting criteria in the search for alternative solutions. Thus, the following caveats are placed around the operationalization of this characteristic:

1. Only those possible solutions whose operationalization is clearly consistent with the overall priorities of the organization are to be considered; and
2. Only those possible solutions whose operationalization is within the current or projected resources of the system are to be considered;

3. Only those possible solutions whose likely consequences will not contravene the overall priorities of the system are to be considered. The determination of the likely consequences (as opposed to all possible consequences) can be achieved in a variety of ways, including the use of computer simulation models. The definition of the term likely is a statistical problem that will have to be determined on an individual basis.

The Selection of the "Best" Alternative

The selection of the best alternative from among the possible solutions identified is predicated upon the following three criteria:

1. An assessment of the potential offered by all of the possible solutions with regard to the achievement of the stated goal(s). This assessment can probably best be conducted by utilizing simulation models of some sort. If none of the identified alternatives offer an acceptable likelihood of achieving the goal(s), a search for new alternatives and/or a revision of the goal(s) will have to be carried out;
2. An assessment of the degree of concordance between the overall objectives of the system and all of the possible solutions. (Since the identification of the possible solutions ensured that all of them would nominally be consistent with the overall goal(s), the problem becomes one of degree.); and
3. An assessment of the relative costs, both financial and intrinsic, of the the various alternatives.

It must be pointed out that it is extremely unlikely that any one possible solution will represent the "best" choice with regard to all three criteria. Thus, the policymaker must be prepared to analyze the relative importance of the three criteria in relation to the particular situation at hand.

Information and Communications Networks

The assessment of information and communications networks is predicated upon the principles and characteristics which were outlined in Chapter Three. While that discussion does not need to be reiterated at this point, it is necessary to place two caveats on the operationalization of this particular characteristic of the model:

1. The extent of the analysis carried out and any remedial measures instituted must be weighed against the relative importance of the problem to the system; and
2. Any system of priorities instituted regarding the collection and transmission of information must be consistent with the priorities of the system as a whole and also take into account the importance of the problem relative to any other problems the system may be handling.

The Feedback Mechanism

The provision for the collection and utilization of feedback is the most important characteristic of this model insofar as its cybernetic elements are concerned. The technical aspects of designing a feedback network were discussed in Chapter III and need not be repeated here. It is necessary, however, to point out that the utilization of feedback must commence at the beginning of the policy development process and be continued throughout all phases of the process. It must not, as is so often the case, be deferred until the policy is completed and implemented. To do that, it is argued,

unnecessarily increases the likelihood that major changes to the policy will be required.

NOTES

1. Dror and Etzioni actually made explicit reference to such cybernetic factors as feedback loops, etc. However, these elements were "tacked on" to their models as appendages rather than included as essential parts.
2. With respect to this criteria, the term "functional" is being used to denote considerations dealing with the actual intended function of the system in question. In addition, with the exception of political and financial concerns, it will also include all pragmatic issues related to the administration of the system.
3. In fact, as will become apparent as the model is developed, this definition is not independent of all of the elements of the model. However, it is independent of those elements which will be designated as "cybernetic" elements for the purposes of this analysis.
4. In some respects, this approach is similar to the "black box" concept discussed by Beer in Cybernetics and Management (1966).
5. While it certainly can be argued that the same higher level values are often used to justify conflicting lower level values, and that lower level values will change much more frequently than their higher level underpinnings, it is felt that accepting the need for reassessing the problem when changes in the lower level values occur is more practical than attempting to project the higher level values involved in the issue.
6. It is important to distinguish between the controlling actors who set the overall priorities of the system and the controlling actors who formulate a given policy in accordance with these overall priorities. They may or may not involve the same individuals.

V. JUVENILE CONTAINMENT LEGISLATION AS A CASE STUDY

The previous chapters of this thesis conducted a review and analysis of the fields of cybernetics and policy analysis which culminated in the development of a cybernetic model of policymaking. In order to provide a basis for assessing both the descriptive adequacy of this model and at least the preliminary validity of the hypothesis being explored in this thesis, it is now intended to examine the development of juvenile containment legislation in the provinces of British Columbia, Ontario and Alberta. It must be stressed, however, that this chapter is intended to be mainly descriptive, and that the major process of analysis will be conducted in the next chapter.

Specifically, this chapter will examine the enactment of the following statutes: the British Columbia Corrections Amendment Act, the Ontario Training Schools Amendment Act and the Alberta Child Welfare Amendment Act. Because the emphasis of the model is on the achievement of rationality in the policymaking process rather than on the development of effective policy, the discussion of these statutes will be exclusive of the implementation stage. Before discussing the individual statutes, however, it is felt that the aims of this thesis will

be enhanced by first providing a brief outline of the overall context within which juvenile containment programs operate.

The Socio-Legal Context of Juvenile Justice in Canada

The single most important factor affecting the administration of juvenile justice in Canada is the federal-provincial division of responsibility with regard to criminal matters. Section 91 of the British North America Act accords the Federal government the sole power to enact criminal legislation. At the same time, Section 92 of the Act places the administration of justice under provincial control. While this jurisdictional split affects all areas of the criminal justice system, its effects are more pronounced in cases involving juvenile offenders for at least three reasons.

First, the border between federal and provincial spheres of responsibility is more ambiguous in the administration of juvenile justice than in the rest of the criminal justice system. For example, while negotiation, legislation and court decisions have resulted in a reasonably precise division of responsibility between the Federal and provincial governments regarding adult offenders, the overlap and conflict between the Federal Juvenile Delinquents Act and provincial child welfare legislation has been well documented (Grosman, 1971; James, 1959; MacDonald, 1965). For example, numerous offences are covered by both federal and provincial legislation, a situation

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which accords authorities in the juvenile justice system a good deal of latitude as to which legislation they will invoke. Several writers have argued that, because little control is exercised over the discretion of officials in the juvenile justice system, this situation results in a real threat to the civil liberties of juveniles (Fox, 1972; Larsen, 1979). While it is not intended to discuss this issue in any depth in this thesis, the fact that vastly different dispositions are possible under the federal and provincial legislation lends some validity to this contention.

A second way in which the federal/provincial jurisdictional split disproportionately affects the juvenile justice system results from the lack of a clear distinction between criminal and civil matters which is inherent in provincial legislation regarding juveniles. This is particularly true in legislation regarding residential care facilities. Since the actual implementation of those elements of the Juvenile Delinquents Act relating to incarceration is contingent upon the provisions of provincial legislation, this unclear distinction often results in the mixing of "hardcore" juvenile offenders with "abused" and "neglected" children. This situation has been the subject of an intense controversy dating back to the period before the passage of the Juvenile Delinquents Act and, indeed, played a significant role in the enactment of at least two of the statutes discussed later in this chapter.

A final characteristic of juvenile justice which exacerbates the jurisdictional fragmentation brought about by the British North America Act is the provincial propensity to repose authority for juvenile programs in several different statutes. Because these different statutes and their related regulations are frequently administered by different ministries, administrative fragmentation often results. As an example, it is not unusual for a juvenile to be placed under the concurrent supervision of both a probation officer operating under the auspices of a provincial correctional agency and a child care worker attached to a social work team (Ekstedt, 1980:9). In addition to the administrative problems that such a situation creates, the different operating philosophies which often characterize the two types of agencies may well create tension and conflict which could exert a detrimental effect on the juvenile concerned.

In addition to problems arising out of the jurisdictional fragmentation created by the British North America Act, a far more fundamental issue centers around a philosophical disagreement which cuts across all levels of the system. At present, the official guiding philosophy underlying the administration of juvenile justice is that of parens patriae. Simply stated, this doctrine asserts that juvenile offenders are to be considered as errant children in need of guidance and protection. Any disciplinary measures which may prove necessary are to be administered in a manner consistent with the behavior

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outline

of a concerned parent, with every effort being made to avoid treating the juvenile as a "criminal".

This official attitude, however, is not without controversy. Interestingly, the major opposition to parens patriae emanates from two groups who find the doctrine unacceptable for entirely different reasons. On one side of the argument are those individuals who contend that parens patriae accords juveniles the licence to commit any sort of deviant act without fear of retribution (Parker, 1967b; Wilson, 1976). In opposition, however, another group argues that instead of according juveniles freedom from criminal responsibility, the doctrine deprives juvenile offenders of rights which adults enjoy as a matter of course (Catton, 1976; Kaniel, 1974; Lazor, 1976). While it is not intended to discuss the relative merits of these two viewpoints in this thesis, it must be pointed out that this controversy will exert a profound effect on any legislation regarding juveniles. This will be particularly true if that legislation deals with their incarceration.

This latter point leads to the final aspect of juvenile justice to be discussed in this section. While the Federal government and the provinces share responsibility for the administration of juvenile justice in Canada, the overriding legislation in the area is clearly the Juvenile Delinquents Act. While provincial legislation can define how this act is to be applied, no provincial statute may directly contradict its terms. For this reason, it has often been argued that any real

change in juvenile justice must originate with the Federal government. However, this position is beginning to change and this section will conclude with a brief outline of some of the events which have precipitated this change.

The Juvenile Delinquents Act was enacted in 1908. While its provisions were heavily criticized at that time, it nevertheless has remained virtually unaltered in the years since (Larsen, 1979:16). Indeed, no serious attempt was made to alter its provisions until 1971, when "Bill C-192" was drafted with the stated aim of replacing the entire Juvenile Delinquents Act with a completely new statute. Unfortunately, the proposed legislation, entitled An Act Respecting Young Offenders and to Repeal the Juvenile Delinquents Act, proved unable to survive the previously mentioned philosophical strife. In an attempt to achieve a compromise between the "law and order" and "civil libertarian" factions, the Bill failed to meet the approval of either group. As a result, it was sidetracked into numerous parliamentary committees and allowed to die on the order paper.


The 1971 attempt at reform was followed by the drafting of the Young Persons in Conflict with the Law Act in 1975. Unfortunately, this particular proposal has become a casualty of the political climate which has characterized the past five years. Largely due to the existence of three different governments and the occurrence of two elections during the period of its development, this proposed legislation has yet to become law. Instead, it has undergone numerous revisions and is now

entitled the Young Offenders Act. While it would be premature to suggest that it will suffer the same fate as "Bill C-192", the uncertainty resulting from the political instability at the federal level has led the provinces to take the initiative in reforming the field of juvenile justice (Osborne, 1979). The remainder of this chapter will be devoted to discussing three examples in which provincial governments initiated major changes with regard to the administration of juvenile justice.

Juvenile Containment in British Columbia

The drafting of the 1977 amendments to the Corrections Act presents a unique case in the analysis of juvenile containment programs because British Columbia was the only province which lacked statutory provisions for incarcerating juveniles during much of the period under analysis. Thus, in order to discuss the development of the Corrections Amendment Act in an adequate fashion, it will be necessary to review some of the background events which led to this situation.

Section 20 of the Juvenile Delinquents Act provides that the provinces may, either through order-in-council or by legislation, establish secure facilities for incarcerating those juveniles who are considered unsuitable for other types of remedial measures. Prior to 1969, two such facilities existed in British Columbia. Established under the Training Schools Act, these "training schools" were operated by the child welfare



authorities within the Ministry of Human Resources. During the 1960s, the whole notion of incarcerating juveniles became the subject of a large-scale controversy around the philosophical issues discussed in the previous section (Larsen, 1979:45-51). In addition, the specific manner in which the training schools were being administered came under attack from social scientists, lawyers, judges and even the child welfare authorities themselves (Ekstedt, 1980:10). The effect of these problems was further exacerbated by the antagonism and lack of cooperation which characterized relationships between staff working in the training schools and probation officers attached to the Ministry of the Attorney General.

As a result of the political pressure arising from this situation, the Social Credit government of W.A.C. Bennett became convinced that the best method of handling the problem would be to eliminate the training schools. Accordingly, the Training Schools Act was repealed in May of 1969. This action effectively eliminated secure facilities for juvenile offenders in British Columbia. As a result, the juvenile courts were left to deal with problem juveniles using whatever other resources which might be available. Some of the more creative judges utilized extremely long pre-sentence remands,¹ while others included attendance at forest camps and other community based programs as conditions of probation orders (Larsen, 1979:50). These solutions, however, were far from satisfactory in that they often exerted a negative effect on the juveniles concerned. As

well, it has been argued that they exacerbated the professional rivalry which had long existed between juvenile court probation officers and the child welfare authorities (Ekstedt, 1980:8).

By the middle of 1972, the pendulum had swung back and political pressure began to mount (often from the same groups that had opposed the training schools) for a return to some form of secure facilities for sentenced juvenile offenders. However, before the Social Credit government could react to this pressure, it was defeated at the polls by the New Democratic Party. The new Premier, David Barrett, who had an extensive social work background in the criminal justice field, was firmly opposed to increasing the use of institutional programs in corrections. Thus, for the next four years, little was accomplished with regard to the establishment of secure juvenile institutions. This occurred despite an increased level of public concern which even went as far as the forming of vigilante committees in some communities (Ibid).

Despite the New Democratic government's opposition to the establishment of juvenile institutions, it nevertheless instigated two events which were to have a profound influence on later developments in this area. The first of these was the passage of the Administration of Justice Act in 1974. This legislation placed all lower courts in the province under the direct control of the Ministry of the Attorney General and provided the statutory authority for the establishment of regional justice councils. The first of these changes increased

the influence of corrections and probation personnel in later conflicts with the child welfare authorities, while the latter provided a forum for increased public input to the administration of justice.

At this point in time, a greater degree of support for secure juvenile facilities existed within the bureaucracy of the Ministry of the Attorney General than was the case in the Ministry of Human Resources. As well, public sentiments also appeared to favor a return to the incarceration of juveniles.² Thus, while the government was still opposed to re-opening secure facilities for juveniles, the passage of the Administration of Justice Act unintentionally increased the potential effectiveness of the "juvenile containment" lobby.

The second event which contributed to the eventual development of the juvenile containment program was the establishment of the 1974 Royal Commission on Family and Children's Law under the chairmanship of Mr Justice Thomas Berger. While the mandate of this Commission primarily centered around an evaluation of the Unified Family Court experiment, one of its major recommendations was that a separate Ministry of Family and Children's Services be established to consolidate the administration of all family and youth services under a single ministry. This proposal triggered an increased level of cooperation between the Ministries of Human Resources and the Attorney General who put aside their traditional differences to respond to what they perceived as a threat to their common

interests (Id:9). Because of the increased responsibilities accorded to the Ministry of the Attorney General by the Administration of Justice Act, this situation virtually assured the entrenchment of the Ministry of the Attorney General as the primary authority with regard to programs for juvenile offenders.

In late 1975, the political climate changed once again with the election of the Social Credit government under Bill Bennett. Within three months, the question of establishing juvenile institutions had "...become a major policy issue at the cabinet level..." (Id:11). However, this switch in policy orientation was complicated by the fact that many high level bureaucrats in the Ministries of Human Resources and the Attorney General were not sympathetic towards the creation of juvenile institutions. This situation represented a definite attitudinal shift with regard to the Ministry of the Attorney General, a factor which can be ascribed, at least partially, to the previous government's hiring of numerous professionals who possessed specific skills with regard to non-institutional programs. Further, because considerable work had already been carried out with regard to the expansion of non-institutional programs, this change in priorities created practical problems of a significant nature. Nevertheless, the government insisted on maintaining its policy orientation and directed senior officials³ in the two Ministries to prepare proposals on how best to proceed with the development of juvenile containment facilities.

Having outlined the historical context leading up to the decision to develop a program for the incarceration of juveniles, it now becomes necessary to discuss the specific process by which this decision was operationalized. This process can be divided into three distinct phases for analytic purposes. The first of these was "pre-drafting negotiation" phase in which the cabinet attempted to engender support for its new policy among the senior officials of the Ministries of Human Resources and the Attorney General.

While a significant portion of the bureaucracies of both Ministries were opposed to the incarceration of juveniles, they nevertheless complied with the cabinet directive to develop proposals with regard to the issue. Almost immediately, negotiations were initiated between the two Ministries in order to clarify the jurisdictional responsibilities of each with regard to institutions for juvenile offenders. As a result, an agreement was reached whereby the Ministry of the Attorney General would assume full responsibility for the construction and operation of any containment facilities which might be considered necessary (Id:12). It can be argued that this agreement ruled out amendments to the Protection of Children Act as a legislative vehicle for implementing the program. Thus, at a very early stage in the process, the province reduced its options with regard to the legislative alternatives for implementing the proposed program. As will be noted later, this situation was to play a significant role in the eventual

development and implementation of the juvenile containment program.

Despite the early compliance of the senior officials with the cabinet directives, they nevertheless still remained firmly opposed to the reinstatement of secure facilities for juveniles. John Ekstedt, then Commissioner of Corrections, argues that the series of proposals and counter-proposals which were exchanged between the cabinet and the bureaucracy went so far as to constitute a high-level policy dispute (Id:13). He further noted that when a group of senior bureaucrats, i.e. regional managers and above, wished to conduct research into certain functional aspects of the proposed program, they were informed that such factors were not even at issue. This controversy was eventually resolved in favor of the cabinet position; however, several concessions were made to the senior officials before this was accomplished. The most important of these was the agreement that the program would totally disclaim any notions of rehabilitation (Id:14). It was the hope of the senior officials that this stipulation could be used to ensure that entry to the program would be limited to those juveniles who actually represented a threat to the community.

As a result of this disclaimer, several additional conditions were accepted by the cabinet regarding the operation of the containment programs. For example, it was agreed that admission and release criteria were to be clearly established before the first containment center was opened. In addition,

approval in principle was also obtained for both internal (by the Inspection and Standards Division of the Corrections Branch) and external (by an independent Youth Program Committee) monitoring of the program during all phases of its operation. Finally, it was also agreed that the containment program would not be administratively autonomous from community-based programs. In this fashion, senior officials in the Ministries of Human Resources and the Attorney General, who as a group still favored community based programs, were able to retain control of the relative resources allocated to the containment centers vis a vis non-institutional programs.

Following the negotiations discussed above, the development of the Corrections Amendment Act entered the "drafting and passage" phase. One of the most important factors which influenced the drafting part of this phase was the Young Persons in Conflict with the Law Act (later renamed the Young Offenders Act) which was being drafted by the Federal government. At the time that the issue of containment programs was being debated, section 20 of the Juvenile Delinquents Act clearly stipulated that the establishment of admission and release criteria for secure juvenile facilities was a judicial function. Thus, in making the decision to implement a program which placed these issues under administrative control, the government of British Columbia was aware that any such legislation would almost certainly be ruled ultra vires by the courts in the event of a constitutional challenge. However, discussions with the Federal

Ministry of Justice indicated that the Federal government was sympathetic to the British Columbia position and would include provisions legitimizing this approach in the new Young Offenders Act which was then being drafted. As a result, the British Columbia government decided to press ahead with the development of legislation which was obviously unconstitutional at that time (Id:16).

In contrast to the lengthy and convoluted process which had characterized the first phase, the actual drafting of the Corrections Amendment Act was relatively short and uneventful. Since the establishment of juvenile containment centers was a political initiative from its inception, little attempt was made to involve lower level civil servants, i.e. professionals such as probation officers and child care workers, in the process (Id:20). While an internal working document, the Youth Containment Program Review (Ministry of the Attorney General, 1977c), was circulated, its distribution was limited to supervisory level bureaucrats and above. Further, this document was not released until after the amendments were passed and, therefore, could not have influenced their enactment.*

Similarly, in spite of the fact that public opinion was instrumental in convincing the government of the need for some form of juvenile institutions, any attempt to solicit public input as to the exact form that such facilities ought to take was minimal. The Ministry of the Attorney General did publish the pamphlet, The Corrections Amendment Act: Highlights and

Background Information (Ministry of the Attorney General, 1977b) for general distribution; however, this occurred after the legislation was complete and was intended to inform rather than solicit feedback.

This attitude carried over into the legislature when the legislation, introduced as Bill 55 on June 21, 1977, came up for second reading on September 1, 1977. While some objections were raised about the lack of emphasis on rehabilitation which characterized the Bill, the majority of the debate centered around administrative concerns. Perhaps the most significant of these was the issue raised by Scott Wallace regarding the centralization aspects of the program.⁵ The Attorney General, Garde Gardom, declined to discuss the matter in any detail and simply replied that since detention centers already existed in or near large cities, it would be more efficient to utilize them than to construct the new facilities which would be necessary to achieve decentralization.

Despite the tame tone of the debate, an attempt was made to have the proposed legislation referred to a "standing committee" instead of to a "committee of the whole house".⁶ However, the Attorney General refused on the grounds that "... (w)e have to get it passed. The program is already underway." (B.C. Legislative Assembly Debates, 1977:5196). When the legislature sat in committee on September 6, 1977, the Attorney General's report was adopted without a great deal of discussion. The

Bill passed third reading the same day by a 25 to 15 margin and received royal assent three weeks later.

The Corrections Amendment Act was proclaimed on December 15, 1977, upon which it entered the "executive action" phase. As was noted earlier, the government of British Columbia was well aware that the new legislation would contravene the provisions of the Juvenile Delinquents Act. However, the expected federal support, either in the form of the Young Offenders Act or amendments to the Juvenile Delinquents Act, did not materialize. Thus, when the inevitable court challenge occurred, the legislation was declared ultra vires by the British Columbia Supreme Court in April 1978 (R. v. P.D.P. 41 CCC (2d) 130).

In reaching this decision, the court articulated three separate points with regard to the legislation. First, the containment centres were not industrial schools within the meaning of section 20(1)i of the Juvenile Delinquents Act and, as such, usurped the federal government's sole prerogative to enact criminal legislation. This effectively rendered the entire statute inoperable. Second, while section 20(1)d of the Juvenile Delinquents Act made it possible to commit an offender to the care of a "...suitable person..." as a condition of probation,⁷ the court ruled that commitment to a containment centre constituted a sentence in and of itself and thus could not be construed as a "condition" of probation.

The most important point contained in the decision, however, was the argument that the release criteria (admission

criteria were not at issue in this court challenge) incorporated in the legislation would place offenders under the sole control of the Commissioner of Corrections once they were committed to a containment centre. Since section 20(3) of the Juvenile Delinquents Act stipulated that juvenile offenders must remain under the control of the juvenile court at all times, this aspect of the legislation would be ultra vires even if the rest of the legislation were valid. These three points were upheld by the British Columbia Court of Appeal in January 1979 (R. v. P.D.P. 45 CCC (2d) 271), and the Province of British Columbia was once again without the statutory authority to establish secure facilities for juvenile offenders.

In order to counteract this court decision, the provincial cabinet passed an order-in-council designating the containment centers as industrial schools in accordance with section 20 of the Juvenile Delinquents Act. This action immediately rendered most of the legislation valid. However, because the court had specifically ruled against the administrative remission of any part of a term of incarceration in an industrial school, the release criteria incorporated in the British Columbia legislation had to be dropped.

While the first court decision severely curtailed bureaucratic control over the containment program, a further court challenge was to restrict it even more. In November 1980, the British Columbia Court of Appeal ruled that under the provisions of the Juvenile Delinquents Act, the sentencing judge

had the sole authority to determine all aspects of the offender's disposition including the location of any incarceration that might be imposed (R.v.T.W.; R.v.S. 25 BCLR 243). Since federal legislation takes precedence over provincial legislation when both are intra vires of the same substantive area, this decision removed the administrative control over admission criteria which had been included in the Corrections Amendment Act.

Juvenile Containment in Ontario

The authority for incarcerating juvenile offenders in the province of Ontario is contained in the Training Schools Act which is currently administered by the Ministry of Community and Social Services. In 1978, this statute was amended by the passage of the Training Schools Amendment Act. While the changes encompassed within this piece of legislation were mostly of a technical nature, it is important because it represents the final conclusion to a lengthy period of analysis and change which saw the administration of juvenile justice in Ontario undergo radical shifts in both ministerial responsibility and operating philosophy. Thus, in order to place the enactment of this statute in a proper perspective, it will be necessary to conduct a detailed analysis of a prolonged series of events which preceded its drafting. While many of these events exerted no direct bearing on the actual drafting of the 1978 amendments,

it is argued that these antecedent events are essential elements of a wide-ranging reform process which ended with the passage of the Training Schools Amendment Act.

This process began in 1969 with a study carried out by the Ministry of Correctional Services into the classification system used in Ontario training schools. The aims of this study were two-fold:

1. To assess the adequacy of the factors which influenced the initial classification of juvenile offenders into different types of programs; and
2. To identify the factors involved in the rehabilitation of offenders as they moved through the training school system and out into the community (Birkenmayer & Lambert, 1972).

It should be noted that at this time the Training Schools Act provided for two categories of admission:

1. Under section 8 of the Training Schools Act which stated that a child under the age of sixteen could be admitted to a training school upon the application of any person if the following three conditions could be established:
 - a. That the parent or guardian was unable to control the child or provide for its necessary social, emotional or educational needs; and
 - b. That other types of care would be insufficient or impractical;
 - c. That the child needed the training and treatment available in a training school.
2. Under section 9 of the Training Schools Act which stated that a child could be sentenced to a training school if he was between twelve and sixteen and had committed an offence against a statute in force in Ontario whose contravention would render an adult liable to incarceration.

While many of the subsidiary issues examined by the study are irrelevant to this thesis, the discussion contained in the study report regarding the inadequacy of the criteria used to assess the rehabilitation of individual juveniles at various stages of the training school process exerted a significant impact on the administration of justice in Ontario during the period from 1972 to 1978. Noting that the incidence of recidivism has traditionally been the accepted indicator of the success or failure of correctional programs, the report argued that extensive consultations with staff involved in juvenile programs suggested that this factor was merely the one indicator that frequently came to the attention of the Ministry. The report further argued that earlier indicators of the offender's lack of adjustment to community norms could usually be identified if sufficient followup care was provided (Id:24).

This latter assertion instigated a series of events which ultimately resulted in the amalgamation of all children's services⁸ under the auspices of a single ministry. The notion that the rehabilitative functions of the training schools could be enhanced by providing closer post-release supervision contributed to the growing belief that the administrative segregation of the various components of the juvenile justice system was counter-productive to the aims of the system as a whole. In addition, this belief added impetus to the movement to accord local authorities greater control over the administration of juvenile justice. Once started, this process gained momentum

so quickly that by 1974 the "...amalgamation and regionalization of juvenile services..." was well underway (Ontario:Ministry of Correctional Services, 1974:16).⁹

Concurrent with this process, the Ministry of Correctional Services ordered a detailed review of the various alternatives to incarceration which might be employed to deal with juvenile offenders (Ontario:Ministry of Correctional Services, 1976a). Examining such areas as the legal rights of juveniles, inter-agency cooperation, education, the prediction of delinquency and family counselling, this study added further impetus to the notion that radical changes in the administration of juvenile justice were necessary.

This process of analysis began to exert an attitudinal change which was reflected in training school populations. For example, a 1976 analysis of trends in training school admissions showed that, during the period from 1973 to 1975, the number of juvenile offenders incarcerated had declined steadily while the average age had increased (Birkenmayer & Polonoski, 1976).¹⁰ During the same period, an Inter-Ministerial Council on Troubled Children and Youth was established by the Ontario cabinet to investigate the entire question of juvenile services (Ontario Legislative Assembly Debates, April 4 1977:84). The work of this body led to the cabinet decision to create a separate division of the Ministry of Community and Social Services to take responsibility for all services to children and juveniles. In addition, it was also decided that policy control over the

administration of children's services was to be decentralized and vested in local Childrens Services Committees (Ibid).

The announcement of these decisions in the Ontario legislature on April 4, 1977 did not engender a great deal of controversy despite the fact that they represented a radical change from the status quo. However, some concern was voiced regarding the amount of coordination which would be necessary to implement these changes in an effective fashion; and whether or not the the Ministry of Community and Social Services possessed sufficient technical expertise to assume responsibility for correctional programs. In response to these concerns, the Minister of Community and Social Services established a research unit headed by an Ontario family court judge to conduct a detailed analysis of both areas. In addition, this unit was also directed to examine the potential effect of related federal and provincial legislation, including the proposed Young Offenders Act, on the intended changes. As a result, when the Children's Services Act was introduced into the Ontario legislature on June 27, 1977, it met with little opposition and passed the second reading, committee and third reading stages in one day (Ontario Legislative Assembly Debates, 1977:643-654).

With the passage of the Children's Services Transfer Act,¹¹ the Ministry of Community and Social Services moved quickly to assess its new area of responsibility. In December of 1977, the newly created Children's Services Division published a consultation paper analyzing the possibility of amending several

statutes which affected the delivery of children's services in Ontario (Ontario:Ministry of Community and Social Services, 1977). The major aim of this study was to identify issues of immediate concern to the development of transitional policy to bridge the gap between the status quo existing at the time the Children's Services Act was passed and the full implementation of the new legislation. Specifically, the paper examined the Child Welfare Act, the Day Nurseries Act, the Children's Boarding Homes Act, the Children's Mental Health Centres Act, the Provincial Courts Act and the Training Schools Act with regard to their effect on the development of overall priorities and the setting of standards and guidelines for the delivery of children's services. In addition, the paper also examined the effect of these statutes on such considerations as budget constraints and children's rights.

This paper was immediately followed by the introduction of the Training Schools Amendment Act into the Ontario legislature on June 8, 1978. The actual passage of this legislation was uneventful and it engendered little controversy during either the second reading or committee stages. While some concern was voiced about the apparent lack of a clearcut philosophy regarding the overall administration of children's services, it was obvious during second reading that the Bill was widely regarded as necessary "housekeeping" legislation resulting from the passage of the Children's Services Transfer Act the previous year. In fact, it was noted by at least one member that, for the

most part, the amendments simply created the de jure statutory authority for procedures that had already been implemented (Ontario Legislative Assembly Debates, June 19, 1978:3649). The most important information to be derived from the passage of the legislation relates to the fact that the Child Welfare Amendment Act, the Children's Mental Health Centres Amendment Act, the Unified Family Court Amendment Act and the Children's Institutions Act were introduced and debated concurrent with the Training Schools Amendment Act. From the debate on these Bills, it became clear that their drafting had been a coordinated effort and that they were viewed as a "package" (Id:3640-3670).

One final aspect of the Ontario reform process remains to be dealt with in this section. During 1978, the Ministry of Community and Social Services published four additional consultation papers dealing with the establishment of priorities for children's services in 1978, planning for the establishment of local Children's Services Committees, the setting of standards and guidelines for the overall delivery of children's services and the setting of standards and guidelines for children's residential care facilities (Ontario:Ministry of Community and Social Services, 1978a, b, c & d). In particular, the latter two papers provided an in-depth analysis of such important factors as accountability, enforcement, children's rights, budget constraints and the effect that interaction between the relevant provincial statutes would exert on any attempt to draft an overall set of standards and guidelines

applicable to all aspects of children's services. While these papers were actually published after the Training Schools Amendment Act was introduced for first reading, it seems apparent from the provisions of this legislation that these papers influenced its drafting. In any case, the fact that these studies were carried out serves as one more indicator of the depth of analysis that the Ontario government engaged in when reorganizing the administration of juvenile justice in the province.

Juvenile Containment in Alberta

The statutory authority for establishing juvenile containment programs in Alberta is contained in the Child Welfare Act which is administered by the Child Welfare Branch of the Department of Social Services and Community Health. The 1977 amendments to this legislation appeared to represent a radical philosophical change insofar as certain aspects of the incarceration of juveniles was concerned. Despite this, however, the enactment of the Child Welfare Amendment Act was not characterized by either the level of analysis which accompanied the drafting of the Ontario legislation or the degree of political controversy which surrounded the British Columbia process.

The extent of the changes embodied in the Child Welfare Amendment Act can best be exemplified by examining the

provisions of the Child Welfare Act regarding the incarceration of juveniles prior to the amendments. Previous to 1977, section 78 of the Child Welfare Act provided that where an offender was sentenced to an industrial school under section 20 of the Juvenile Delinquents Act, the order would be construed as making the juvenile a temporary ward of the Director of Child Welfare. The section also provided that the Director had full authority to determine all aspects of the juvenile's further disposition, including incarceration, in any manner he deemed appropriate. Unfortunately, Part 6 of the Act, dealing with the "confinement of children", did not contain any criteria for determining which categories of juvenile offenders should be incarcerated. In addition, it did not place any restrictions on the length of time that a juvenile could be confined. When these two factors are considered in light of the fact that periodic reviews of individual cases were not mandatory, it is obvious that the pre-1977 incarceration of juveniles was subject to almost unlimited amounts of administrative discretion.

With the passage of the Child Welfare Amendment Act, this situation underwent a radical change. First, while section 78 of the Child Welfare Act was retained, the new amendments accorded juvenile court judges the authority to issue a compulsory care order requiring the Director of Child Welfare to incarcerate the juvenile for up to ninety days. In addition, while the Director retained the discretion to incarcerate offenders in cases where the judge had not specifically ordered it, the maximum period

allowed for such incarceration was limited to thirty days. While these periods could be extended when considered necessary, a review of each individual case was required before doing so.

An even more important change was that evident in the sections dealing with the criteria for incarceration. The amendments stipulated that incarceration could only be employed in cases where it "was in the best interests of the juvenile". While this criteria is admittedly vague, it appeared to place an emphasis on treatment that had been lacking in the previous legislation. The importance of this emphasis is further evidenced by the fact that the provisions regarding compulsory care applied equally to incarceration under both the Child Welfare Act itself and the Juvenile Delinquents Act.¹²

Thus, it appeared that the new legislation would implement significant changes with regard to both the legal rights accorded to juveniles and the emphasis placed on treatment. The extent of these changes makes the benign nature of the process by which the Child Welfare Amendment Act was enacted all the more surprising. For example, during the years immediately preceding the introduction of the legislation (i.e. 1974 to 1977), the annual reports of the Department of Social Services and Community Health devoted very little space to discussing the incarceration of juveniles. The only exception was the report for the year ending March 31, 1975 which briefly noted that the secure juvenile custodial facilities were operating at full capacity and that admissions to non-secure community based

residential homes were increasing at a steady rate (Alberta:Department of Social Services, 1976:16-17). While this rather cryptic reference could be interpreted as implying that the secure facilities were over-taxed and that the overflow was being diverted into non-secure facilities, the Child Welfare Branch did not conduct any formal studies to evaluate the problem.

The actual passage of the Child Welfare Amendment Act serves as an illuminating example of how quickly a legislature dominated by the governing party can dispose of an otherwise contentious issue.¹³ Introduced as Bill 37 on May 2, 1977, the legislation passed second reading on May 12, was reported in committee on May 17, passed third reading on May 18 and received royal assent the same day. The tone of the debate during the second reading and committee stages was tame. While mild concern was expressed over the fact that the Director of Child Welfare could still order confinement on his own volition, the majority of the comments were almost obsequious in commending the Minister of Social Services and Community Health on the excellent nature of the legislation.

Despite the lack of controversy which attended its passage, an examination of the debate on the Child Welfare Amendment Act provides some interesting insights into the drafting of the legislation. First, during the second reading and committee stages it became abundantly clear that considerable pressure had been exerted on the Minister of Social Services and Community

Health by the Alberta juvenile court judges to remedy the situation whereby only the Director of Child Welfare could order the incarceration of a juvenile offender.¹⁴ In addition, it was also noted that several legal opinions had been tendered to the effect that this aspect of the previous legislation was in contravention of the Juvenile Delinquents Act.¹⁵ The combination of these two factors was undoubtedly the major impetus behind the drafting and introduction of the amendments. Thus, it appears that despite the fact that the legislation superficially increased the legal safeguards accorded to juveniles with respect to incarceration, its real intent was to facilitate the placement of juvenile offenders in secure custody. This assertion would appear to be supported by the fact that the avenues for incarcerating juveniles were actually increased by the passage of the Child Welfare Amendment Act.

Another important point which became obvious during the debate over the amendments is that the Ministry of Social Services and Community Health had conducted almost no analysis into the technical problems associated with the incarceration of juveniles prior to the drafting of the legislation. When questioned about such factors as the demographic distribution of the juvenile delinquent population, the appropriate cut-off age for admission to secure facilities and the projected effect of the amendments on existing secure facilities, the Minister of Social Services and Community Health admitted that little information was currently available about such issues. In fact,

when pressed further, she was forced to concede that she did not even possess accurate figures regarding the existing capacity of secure juvenile facilities in the province (Alberta Hansard, May 17, 1977:1404). While an assessment of this latter question was conducted before the Child Welfare Amendment Act was proclaimed on October 1, 1977 (Id, October 14, 1977:1473), the fact that such a study was not carried out prior to the drafting of the legislation is surprising considering the importance of the issue.

NOTES

1. It must be noted that only facilities for sentenced offenders were affected by the repeal of the Training Schools Act. Detention centers for juveniles who had not yet been sentenced were operated under municipal authority until 1974, and under other provincial legislation thereafter.
2. It must be conceded that this point is somewhat equivocal. While the public appeared to support secure juvenile facilities, it is not clear whether the justice councils ever advocated such a course of action. Further, it is not even clear if they ever played a significant role in the controversy.
3. In this discussion, the term "senior officials" will be used to denote Assistant Deputy Ministers and above.
4. It must be conceded that this document was circulated prior to the proclamation of the Corrections Amendment Act and, thus, could have influenced any regulations which might have been promulgated.
5. While Wallace's main concern was that utilizing only one or two centers in the lower mainland and Vancouver Island would result in unsophisticated rural delinquents being exposed to their more sophisticated urban counterparts, the fact that the Ministry of the Attorney General was reorganizing on a regional basis at that time was also

relevant to the issue. This question was not raised, however, and the implications of this omission will be discussed in the next chapter.

6. It should be noted that a "standing committee" is relatively independent of the original drafters of a particular bill. On the other hand, when a bill is referred to a "committee of the whole house" the original drafters simply consider the points raised in second reading and report back to the legislature. While the latter procedure is the normal course of action for most legislation, standing committees are often utilized for legislation which is considered important and/or politically sensitive.
7. This was, in fact, used by some judges to commit juveniles to forest camps after the repeal of the Training Schools Act in 1969.
8. Ontario appears unique in using this term, which apparently covers all social and legal services provided for children. It makes no distinction between delinquents and non-delinquents, and encompasses everything from day nurseries through to foster homes and adoption services.
9. This report also mentioned the establishment of an informal task force, comprised of field personnel, to make recommendations regarding the best method of proceeding with the amalgamation and regionalization. However, the work of the task force does not appear to have been published.
10. It is worth noting that section 8 of the Training Schools Act which provided for the commitment of children who had not actually committed an offence was repealed in 1975. However, this amendment was not proclaimed until 1977 and thus could not have been directly responsible for the shift in training school populations.
11. Although the legislation was introduced as the Children's Services Act, its name was changed to the Children's Services Transfer Act during the committee stage. As a result it will be referred to as such during the remainder of this discussion.
12. It should be noted that Alberta traditionally did not segregate delinquent and non-delinquent children insofar as institutional care was concerned. However, prior to the 1977 legislation, the two types of admissions were covered by different sections of the Child Welfare Act.
13. The party standings in the Alberta legislature when this statute was enacted were 45 Conservatives, 4 Social Credit, 1 NDP and 1 Independent.

14. It is interesting that a 1977 board of review into the operations of the Alberta Provincial Courts published a report on the juvenile justice system immediately after the passage of the Child Welfare Amendment Act which severely criticized the amendments for not going far enough in transferring authority from the bureaucrats to the courts (Alberta:Board of Review into the Provincial Courts, 1977:21).
15. However, the amendments still retained some provision for non-judicial incarceration. While the court decisions resulting from the British Columbia process would indicate that this aspect of the amendments would still be in contravention of the Juvenile Delinquents Act, it does not appear to have been challenged in court.

VI. DISCUSSION

As has been reiterated throughout the preceding chapters, the major aim of this thesis has been to assess whether placing greater emphasis on the use of cybernetic concepts during the policy process will achieve greater rationality in the formulation of public policy. Specifically, it was hypothesized that the degree to which cybernetic principles are embodied in a particular policy process will be positively correlated with the degree of rationality achieved by that process. In this chapter, it is intended to assess the preliminary validity of this hypothesis by examining the processes by which juvenile containment legislation was enacted in the provinces of British Columbia, Ontario and Alberta. Before this can be accomplished, however, several of the major concepts embodied in the above hypothesis must be defined in operational terms.

The two most crucial of these concepts are the terms "cybernetic principles" and "rationality". As was noted in Chapter III, cybernetic theory is not only complex, but is also frequently subjected to conflicting interpretations. This ambiguity gives rise to a myriad of possible operational representations for the concept. In this analysis, however, the "degree to which cybernetic principles are embodied in a particular policy process" will be taken to mean the degree of correspondence which can be identified between the process in

question and the four cybernetic elements of the model. With regard to rationality, the definition postulated in Chapter IV is considered sufficiently precise for the purposes of this discussion.

Another concept which will affect the following analysis is the parameters to be placed around the term "policy process". While the definition of "policy" advanced in Chapter IV is considered satisfactory from an operational perspective, some clarification is necessary regarding the scope to be applied to the term "process". In testing the above hypothesis, the policy process will be considered terminated once the policy is actually formulated and proclaimed. No attempt will be made to assess whether the events resulting from the implementation of the policy were also rational.¹ However, the court challenges which resulted from the enactment of the British Columbia Corrections Amendment Act are included in the analysis because they were anticipated by the policymakers and led to almost immediate changes to the policy. For this reason, they are considered an integral part of the policy process.

Having postulated the operational definitions necessary for assessing the validity of the hypothesis, the remainder of this analysis will be presented in the following manner. First, a descriptive "mapping" will be conducted in which the individual policy processes will be related to the elements of the model. This process will allow for the assessment of the conceptual adequacy of the model in descriptive terms and, as well, will

provide the basis for ranking the three policy processes in terms of their cybernetic characteristics. Following this, the relationship between the policy processes and the cybernetic elements of the model will be summarized and the processes will be ranked with regard to the degree to which cybernetic principles were utilized. Finally, the policy processes will also be ranked in terms of the degree to which they correspond to the rationality definition postulated in Chapter IV. The results of these latter two analyses will then be combined to arrive at an assessment of the validity of the hypothesis under consideration.

Mapping the Model

In this section, the three policy processes will be related to the model on an element by element basis. Because the assessment of the hypothesis itself will be deferred until later in this chapter, the discussion in this section will not attempt to rank the individual processes in any way. Before commencing this "mapping" process, however, it is necessary to reiterate a point made earlier in this thesis regarding the structure of the model.

In Chapter IV, the elements of the model were dealt with as if they were discrete entities. While this approach will also be followed in this discussion, it must be pointed out that many of the elements are inter-related to a large degree. As a result,

it will become obvious during the mapping process that many of the same events are relevant to several different elements. Further, it cannot be over-emphasized that any appearance of a temporal sequence regarding the operationalization of the model is largely illusory. Indeed, it is a major contention of the model that all of the elements must be operationalized as early as possible in the process and continually re-analyzed throughout all remaining stages of the process.

British Columbia

The most significant point to be kept in mind when relating the development of the containment legislation in British Columbia to the elements of the model is the fact that this legislation created a program which had not existed prior to its enactment. This factor ensured that the problem area was a developmental concern from the outset. In spite of this, however, the government of the day made little attempt to analyze the problem in any depth. Not only did the provincial cabinet insist on proceeding with a predetermined course of action against the advice of numerous senior officials in the Ministries of Human Resources and the Attorney General, but it also declined to solicit detailed input from either the public or professionals working in the two ministries. While it was clear that public opinion had favored a return to the use of secure juvenile facilities several years previously, no attempt was made to

ascertain if such was still the case. Further, it is unclear whether the government even bothered to ascertain if the magnitude of the "juvenile delinquency problem" had remained at its previously high level.²

In defining the extent of the system to be directly involved in the development of the legislation, the policymakers engaged in a more in-depth process of analysis than had been evident during the investigation of the problem area. In this case, senior officials in the two Ministries themselves instigated a series of negotiations which led to the Ministry of Human Resources abdicating responsibility for the new program in favor of the Ministry of the Attorney General. This decision effectively reduced the size of the system from two ministries to one. However, the fact that the program was a political initiative from the outset ensured that the system was never reduced further to encompass only the Corrections Branch.

While these negotiations can be viewed as a positive step, their result nevertheless limited the legislative alternatives available to the policymakers later in the process. In addition, little evidence exists to indicate that that an adequate investigation was conducted into the points of interface between the Ministry of the Attorney General and other systems which would be affected by the new program. For example, it is clear that the policymakers never involved other relevant sub-systems, such as the courts, in the policymaking process. Further, the failure of the later negotiations between Ministry of the

Attorney General and the Federal Ministry of Justice is also indicative of an inappropriate choice of contact points, i.e. interfaces. Thus, the usefulness of the negotiations carried out between the various federal and provincial ministries was severely limited by a failure to carry the process through to its logical conclusion.

Attempting to delineate the role played by overall system priorities in the development of the juvenile containment legislation is complicated by the fact that the decision to implement the containment program occurred as a direct result of a change in government. Prior to the defeat of the New Democratic government in 1974, it was clear that the overall priorities of the system responsible for the administration of juvenile justice had favored the the use of the least restrictive alternative insofar as correctional programs were concerned. However, the election of the Social Credit Party changed this situation in a radical fashion, with the new government placing an emphasis on the maintenance of order and the protection of the public.

However, this philosophical change in the surrounding environment was not immediately reflected in the priorities of the system itself. In fact, the decision to develop the containment program was made in the face of considerable opposition from senior officials in the Ministries of Human Resources and the Attorney General (which then compromised the system directly involved in the problem). Thus, it seems clear

that the change in priorities which eventually occurred in the system represented a direct imposition of the new priorities of the larger system, i.e. the entire government.

The dictation of the system's priorities by a larger system makes it necessary to discuss the factors which influenced the priorities of this larger system. From the speed with which the Social Credit government instigated the development of the containment program after being elected, it appears that the political ideology of the new government played the dominant role in determining its priorities. In addition, it is likely that related factors such as perceived public opinion, perceived political implications and the interests of the controlling actors also exerted significant effects. It is important to note that the direction of these factors in the larger system contrasted sharply with their corresponding directions in the system directly involved in the problem. The fact that the larger system was able to impose such a radical shift in priorities on the smaller system would suggest that the informal system in the latter was poorly developed.³ In any case, there is no evidence to suggest that the government ever attempted to ascertain the nature and extent of the informal system when it tried to engender support for the containment program among the senior officials. This omission, it is felt, may well have exacerbated the conflict between the senior officials and the cabinet.

In addition to imposing a set of overall priorities upon the system responsible for juvenile justice, the new government also dictated its goals. The clearcut commitment to the protection of the public, when combined with the perceived public opinion regarding the issue, led to the conclusion that the establishment of secure facilities for juvenile offenders was necessary in British Columbia. Insofar as the three goal selection criteria stipulated in the model are concerned, the decision to establish a juvenile containment program was certainly easy to translate into operational terms and, as well, did not contravene the overall priorities of the system after the changes were imposed. While it might be argued that the goal clearly contravened the priorities of the informal system, this latter entity was not sufficiently well organized to resist the changes.

Despite this apparent concordance between the selected goals and the system's overall priorities, there is no indication that any attempt was made to consider alternate means of solving the problem, i.e. alternate goals. In addition, no evidence exists to indicate that the policymakers ever investigated the possibility of conflict between the containment program and other goals of the system. While juvenile containment as a concept did not appear to contradict any other major goals of the two ministries involved at that point,⁴ the apparent disregard of this issue serves as yet another example of the lack of analysis which characterized the process.

The alternate solutions which were considered during the development of the juvenile containment legislation can be categorized along functional, structural, legislative and administrative dimensions. While the factors involved in the different dimensions were not conceptually independent of each other, they will be dealt with separately in this discussion.

Functionally, the policymakers quickly reduced their options to a choice between treatment and non-treatment models. While both of these possibilities would have been in accordance with the overall priorities of the system, no evidence was uncovered to suggest that any formal consideration of this issue was ever made. A similar omission can be identified with regard to the likely consequences of either alternative. It appears that the decision to implement a non-treatment program was motivated by a desire to appease some of the senior officials who still remained opposed to the whole concept of incarcerating juveniles. Certainly, there was little indication that the policymakers ever explicitly investigated the potential effect that such a program might exert on the juveniles themselves.

This lack of attention to the potential effect of the proposed program on incarcerated juveniles was also evident in the selection of the structural framework. In this regard, the policymakers weighed a centralized approach, in which the entire province would be served by one or two large facilities located in major urban centres, against the possibility of establishing numerous smaller facilities in various locations, i.e. a

decentralized approach. Again, both proposals nominally fell within the overall priorities of the system, and this time both options appear to have been assessed with regard to the cost factor. However, it appeared obvious during the legislative debate that no attention had been paid to the likely consequences of either approach insofar as their potential effect on the juveniles was concerned. In any case, it was clear that expediency was considered more important than any negative effect that a centralized model might exert on delinquents from rural areas. This factor also appeared to have been the reason for choosing a centralized model despite the fact that the rest of the correctional system was reorganizing along regional lines. It can be argued that this latter approach created a situation in which the establishment of the containment program actually conflicted with other goals of the system. As well, the choice of the centralized model appeared to indicate a complete disregard for the "intrinsic" costs associated with the various alternatives.

From a legislative perspective, the containment program could have been implemented through four different statutory alternatives: an order-in-council made under the authority of section 20 of the Juvenile Delinquents Act, amendments to the Protection of Children Act, amendments to the Corrections Act and the drafting of a completely separate statute dealing only with the incarceration of juveniles. For reasons which are unclear at this point, the possibility of utilizing an

order-in-council was either not considered or ruled out at a very early stage of the process. In fact, this decision would appear to have been made by the cabinet before the analysis of the problem was actually started, and thus constituted part of the terms of reference imposed by the larger system. As well, since the administration of the Protection of Children Act is the responsibility of the Ministry of Human Resources, amendments to this statute were ruled out by the agreement which accorded the Ministry of the Attorney General sole responsibility for the proposed program.

Thus, it appeared that the only alternatives which were seriously considered during this stage of the process were amending the Corrections Act and enacting totally new legislation. While both of these possibilities satisfied the criteria stipulated in the model, amending the Corrections Act was identified as the most appropriate course of action. While this alternative may well have been the most logical choice considering that the Ministry of the Attorney General would be responsible for the administration of the program, there is no evidence to suggest that the possible disadvantages of this approach were ever analyzed.⁵ Considering that many other provinces were moving toward a complete separation of children and adults insofar as legislation was concerned, this omission is surprising.

The selection of the administrative alternatives proved to be one of the most crucial aspects of the development of the

containment program. The choice was clearly between establishing industrial schools in accordance with section 20 of the Juvenile Delinquents Act and opting for a program in which admission and release criteria were administratively determined. Despite the fact that the government was aware that the latter approach was unconstitutional, it was decided to implement such a program. While negotiations were carried out with the Federal Ministry of Justice in this regard, the faulty nature of the information received indicates that these negotiations were not conducted in an effective manner.

Thus, out of all the functional, structural, legislative and administrative combinations which were possible, the Ministry of the Attorney General decided that amending the Corrections Act to provide for the implementation of a centralized program, based on a non-treatment model which embodied a large measure of administrative control, represented the best alternative. It is worth noting that this decision represented the first time that the informal system was able to exert a significant influence on the policymaking process. Throughout the entire process, most senior officials in the Ministry of the Attorney General had remained opposed to the incarceration of juveniles. In return for nominally lending their support to the establishment of a containment program, they managed to achieve a compromise whereby the Attorney General, with the concurrence of the cabinet, modified the system priorities to include the notion that incarceration was

to be employed only as a last resort. This modification was instrumental in the choice of the non-treatment model, and also contributed to the administrative admission and release criteria which were included in the legislation.

Assessing the adequacy of information and communication networks is always difficult in any retrospective analysis. In this particular situation, all that can be concluded is that the Ministry of the Attorney General utilized a closed loop communication network. More important than the technical characteristics of the networks, however, is the manner in which the information is used once it is collected and transmitted to the decisionmakers. Referred to as feedback, this issue is considered the most crucial element of the model in cybernetic terms.

Several factors can be identified to suggest that the Ministry of the Attorney General made little use of feedback during the development of the containment legislation. First, any attempt to solicit input from either the public or juvenile justice professionals was minimal. In addition, it would appear that no liaison existed between the development of the containment program and the regional reorganization of the rest of the Corrections Branch. However, the most important indication of the lack of emphasis placed on the use of feedback arose during the debate on second reading of the proposed legislation. In a significant move, the Attorney General refused to send the Bill to a standing committee (where it would be

subjected to a thorough scrutiny) on the grounds that the program was already underway and that immediate passage of the legislation was necessary. Such an attitude reinforces the assertion made in Chapter IV that even the most complete information possible will be useless if the decisionmakers are unwilling to consider alterations to a policy proposal.

Ontario

Relating the Ontario process to the elements of the model is both simpler and more complex than in the case of British Columbia. First, the fact that the Ontario reforms encompassed two major legislative initiatives raises analytical issues which were not present in British Columbia. On the other hand, however, the absence of any real political controversy simplifies many of the issues which proved so problematic in analyzing the British Columbia approach. This paradox is especially evident in the definition of the problem area. This phase of the policy process began as a managerial problem centering around the need to devise a method of achieving greater continuity in the follow-up services provided to juveniles upon their release from incarceration. Once underway, however, the scope of this analysis quickly expanded into a developmental problem involving the reorganization of all aspects of children's services in Ontario.

The depth of analysis carried out during this process presents a sharp contrast to that conducted in British Columbia. Instead of allowing political expediency to determine many aspects of the developmental process, the Ontario policymakers engaged in a thorough analysis of the problem before even attempting to establish goals. Evidence for this assertion can be found both in the number of formal studies which occurred and in the willingness of the system to involve field personnel (through the informal task force) and related systems (through the Interministerial Council) in the decisionmaking process. A further example of the willingness of the system to analyze and redefine the problem area is the speed with which the Minister of Community and Social Services established a research unit to investigate the concerns raised in the Ontario legislature during the debate on the Children's Services Transfer Act. All of these features serve to underline the commitment to investigation and analysis which characterized the changes in the administration of children's services in Ontario during the period under discussion.

Another element of the model which will be affected by the previously mentioned paradox is the delineation of the system directly involved in the problem. In contrast to the British Columbia situation, where the early involvement of radical changes to the status quo also created considerable ambiguity as to the extent of the system, the routine nature of the Ontario problem initially limited the system to the Ministry of

Corrections which was then responsible for juvenile residential programs. Despite the ensuing enlargement of the system to include the Ministry of Community and Social Services, its delineation continued to occur smoothly, with all available evidence pointing to a high degree of cooperation between all of the relevant actors in the process. This also appears true of the later reduction of the system when the enactment of the Children's Services Transfer Act switched responsibility for juvenile residential programs to the Ministry of Community and Social Services. Indeed, it can be argued that the careful investigation and analysis which attended these changes was responsible for the fact that several radical philosophical and administrative shifts were implemented with a minimum of friction.

An issue which is conceptually and pragmatically dependent on the delineation of the system is the identification of the interfaces with the surrounding environment. In this particular situation, this dependency was a mutual one. Not only did defining the boundaries of the system lead to the identification of the interfaces, but the use of the interfaces once they were identified also led to the redefinition of the system through the work of the Interministerial Council on Troubled Children and Youth. In addition to precipitating changes to the system, the use of the interfaces continued even after these changes were completed, an assertion which is borne out by the fact that numerous statutes relating to children's services were amended

concurrent with the 1978 Child Welfare Amendment Act.

Considering that many of these statutes had been under the purview of other ministries prior to the passage of the Children's Services Transfer Act, the smoothness with which the amendments were enacted testifies to the effectiveness of the negotiations between the Ministry of Community and Social Services and the other ministries.

The role played by overall system priorities during the changes which occurred in the the delivery of children's services in Ontario presents few analytical problems when compared to the British Columbia process. A major reason for this lies in the fact that the system was well defined from the outset and thus avoided much of the ambivalence and conflict which occurred in British Columbia. Equally important, however, was the fact that the political ideology of both the system itself and the larger system surrounding it, i.e. the Ontario government, remained constant throughout the period of analysis. Thus, despite changes in the system itself, the overall system priorities remained committed to the delivery of children's services in a manner which would best facilitate the development and adjustment of all children in accordance with normally accepted standards of behavior. However, because conflict over system priorities never became an issue during the reform process, it is difficult to identify any specific factor or factors as playing an important role in their development.

All that can be concluded is that whatever these factors were, they did not change significantly during the period under discussion.

In sharp contrast to the stability exhibited by the system's overall priorities, the constant revision which characterized the development of the goals serves as an excellent example of why a thorough analysis of the problem area is crucial to the selection of goals which are both appropriate and achievable. Initially, the process began with a search for a means of improving the follow-up services provided to juvenile offenders upon release from incarceration. As the analysis proceeded, however, it became apparent that the real problem centered around the lack of continuity and cooperation which was evident in the whole area of children's services. This realization caused the policymakers to revise their goals in order to address this broader problem.

Although the desire to achieve greater continuity and cooperation with regard to children's services was within the overall priorities of the system, such a concept was really too general to be easily operationalized. This led to further analysis which, when combined with input from related systems (through the Interministerial Council on Troubled Children and Youth), led to the decision to amalgamate all children's services under the auspices of a single ministry. While this decision necessitated changes to the boundaries of the system, it nevertheless also defined the goal in operational terms for

the first time, a factor which is crucial to any notion of rational policymaking.

While the acceptance of complete amalgamation as an operational goal automatically ruled out less radical alternatives to achieving the broader objective of greater coordination in the delivery of children's services,⁶ at least two sets of options nevertheless remained for consideration. The first of these was the choice as to the ministry which would assume responsibility for the amalgamated services. At least four different ministries were involved in the delivery of children's services; however, the Ministry of Correctional Services and the Ministry of Community and Social Services were clearly the most important in terms of resources and the number of programs administered. In deciding between the two, it was clear that many of the services did not involve the criminal justice system. As a result, the Ministry of Community and Social Services was identified as the best alternative.

The second set of options involved the "centralization versus regionalization" dilemma which had also been an issue in British Columbia. In this case, both of the alternatives appeared compatible with the overall priorities of the system. However, the fact that the Ministry of Correction Services had previously implemented a limited regionalization of juvenile services provided some experience upon which to base a decision. In addition, the Ministry of Community and Social Services had also commissioned a planning study into the feasibility of

administering the amalgamated services through local Children's Services Committees. While the complete results of this study were not available until after the introduction of the Child Welfare Amendment Act, the combination of its initial results with the previous experience gained by the Ministry Of Correctional Services convinced the Ministry of Community and Social Services to implement a regionalized model as the best alternative.

The single most striking feature of the information and communications networks developed during the Onatairo process is the degree of care which was taken to ensure that a thorough information search was carried out. Utilizing open loop networks from the outset, the policymakers displayed a commendable commitment to analyzing the problem area from all angles, with special attention being paid to the perspective of related systems. In addition, the information gained from each phase of the analysis was continually used to focus and redefine the direction of later phases. In fact, the commitment to the analytic ideal was such that both the goals and the extent of the system itself underwent several changes as a result of the continual search for information. This early and continued use of feedback stands in sharp contrast to the British Columbia process where it was decided to press ahead with the containment program despite the objections of many senior officials and opposition politicians.

Alberta

The lack of analysis which characterized the enactment of the Alberta Child Welfare Amendment Act makes it extremely difficult to relate the policy process to the model. The definition of the problem area appeared to have resulted almost solely from pressure brought to bear by the Alberta family court judges. With the exception of several legal opinions which noted that certain aspects of the legislation then in force contravened the Juvenile Delinquents Act, no evidence exists to suggest that an investigation was ever conducted into the validity of the judges' complaints. Similarly, the potential ramifications of the desired changes were never analyzed in any detail. Further, while the Ministry of Social Services and Community Health is readily identifiable as the system directly involved in the problem, the policymakers did not attempt to assess the system's existing resources or to identify any related systems which might be affected by the legislation.

Identifying the other elements of the model is even more difficult. Insofar as system priorities are concerned, some aspects of the legislation would appear to reflect an increased emphasis on the legal rights of juveniles. However, the involvement of the family court judges in precipitating the amendments, combined with the fact that the avenues for incarcerating juveniles were actually increased by the legislation, would suggest that the more immediate goal of the

policymakers was to clarify and solidify the system's legal position vis a vis the incarceration of juvenile offenders. While it would appear that increasing the avenues for incarceration could potentially conflict with an increased emphasis on civil rights, there is no evidence to suggest that the policymakers ever considered this aspect of the legislation.

Little evidence can be found to suggest that the policymakers considered any alternatives other than the approach embodied in the amendments. In fairness to the officials involved, part of the reason for this may be attributed to the fact that the Alberta changes were much less radical than those imposed in British Columbia and Ontario. Nevertheless, the concern that was raised regarding the retention of provision for non-judicial incarceration, i.e. by the Director of Child Welfare, indicates that at least one obvious alternative existed. The fact that the complete elimination of non-judicial incarceration does not appear to have been considered serves as a further example of the lack of analysis which characterized the entire policy process. Finally, the quick rejection of so obvious an alternative when it was raised in the legislature also points out the total unwillingness of the policymakers to be influenced by feedback from any source.

Ranking the Cybernetic Factor

From the mapping process conducted in the previous section, it would appear that the model outlined in Chapter IV is conceptually adequate to the degree that the various elements can be operationalized in terms of the policy processes under discussion. The final question remaining to be addressed with regard to the model is the degree to which the individual processes correspond to the four elements which were identified as being crucial to the notion of a "cybernetic" model of policymaking. In this regard, a clearcut hierarchy can be identified, in which the processes remain transitive, i.e. maintain the same relative position, vis a vis all four elements.

This hierarchy is particularly evident in the emphasis placed on analyzing the extent of the system. For example, because the Alberta system appeared well defined from the outset, no formal attempt was made to assess its extent or to determine if changes might be appropriate. In contrast, the British Columbia situation was initially characterized by a degree of ambiguity regarding the extent of the system which had to be resolved through negotiations between the Ministries of Human Resources and the Attorney General. However, the depth of the analysis was dictated by practical and political considerations and, in any event, was confined to the initial stages of the process.

The analysis conducted in Ontario was easily the most thorough of the three provinces. Not only did the policymakers examine all aspects of the problem in order to define the extent of the system, but this analysis continued throughout all stages of the process. The fact that this continual analysis resulted in changes to the boundaries of the system during the later stages of the policy process further exemplifies the differences between the Ontario process and those which occurred in the other provinces.

A similar progression is evident regarding the use of interfaces. Once again, Alberta remains at the bottom of the scale, with no attempt being made to consult related systems despite the fact that much of the impetus behind the changes originated outside the system in the form of pressure from the Alberta Family Court judges. While the British Columbia policymakers did consult with the Federal Ministry of Justice regarding certain aspects of the proposed legislation, the faulty nature of the information gained during these consultations leaves some doubt as to the efficiency with which the interfaces were identified and utilized. In any case, there is little evidence to suggest that policymakers consulted with other systems at the provincial level after the Ministry of Human Resources withdrew from the issue.

In contrast to both of these situations, the Ontario process was characterized by extensive consultations which actually resulted in two separate changes to the system itself.

Further, the fact that a group of related statutes, many of which were administered by other systems, were amended concurrent with the legislation under discussion indicates that the interfaces were utilized throughout the entire process.

Ranking the individual processes in terms of their information and communications networks underscores the difficulties inherent in attempting to isolate many of the elements for analytical purposes. For example, even the most cursory examination of the three processes under discussion quickly reveals the degree to which the analysis of the system is affected by the emphasis placed on information and communication networks and vice versa. Thus, it is hardly surprising that the scale identified regarding the previous two elements also holds true for information and communications networks.

As an illustration, the search for information conducted in Alberta was non-existent to the extent that the policymakers did not even attempt to obtain accurate data on the current state of the system, much less attempt to investigate the projected effects of their plans in any way. This can be attributed, at least in part, to the lack of concern which was exhibited regarding the extent of system itself and the possible effect of the amendments on related systems. While the British Columbia policymakers did conduct a limited information search, it did not extend beyond the initial stages of the process and was abandoned once the basic policy direction had been decided

upon.⁷ Thus, it was only in Ontario that any semblance of an effective information search was carried out. The entire policy process arose out of an investigation into a relatively low-level (in policy terms) problem and continued to expand and evolve as increased amounts of information became available. Not only was the extent of this information search directly related to changes in the system, but the search was also instrumental in precipitating such changes.

It has been emphasized repeatedly in this thesis that information is only as valuable as the manner in which it is used. Thus, this section will conclude by discussing the issue of feedback. In the case of Alberta, the almost complete absence of information and communication networks clearly relegated the use of feedback to a similar state of oblivion. To a lesser extent, this can also be said about British Columbia. While feedback played a limited role insofar as the negotiations with the Federal Ministry of Justice were concerned, the policymakers' general unwillingness to accept input from other sources is evidenced by the government's refusal to send the proposed legislation to a standing committee for a detailed examination.

Once again, the Ontario process displayed a marked contrast to those of the other provinces. Not only was feedback used to shape the course of future investigations, but it also precipitated numerous changes to such crucial elements as the goals and the system itself. It is this particular

characteristic which leads to the conclusion that the Ontario process utilized cybernetic principles to a greater degree than the other provinces. British Columbia emerges as a somewhat distant second; and Alberta exhibited no evidence of cybernetic principles in any form.

Assessing the "Rationality" Hypothesis

The previous section established a scale which ranked Ontario first, British Columbia second, and Alberta last in terms of their use of cybernetic principles in the formulation of juvenile containment policy. In order to complete the assessment of the hypothesis postulated in the introduction, it is now necessary to rank these same provinces in terms of the degree of rationality inherent in their policy processes. This will be accomplished by means of a two-stage analytical process. First, the processes will be examined to determine if the ultimate solution was within the overall priorities of the system in question. Any processes in which the ultimate solution appears to contravene the system's overall priorities will be excluded from further consideration. The remaining processes will be analyzed to determine the manner in which the following considerations were dealt with by the policymakers:

1. The functionally ideal solution to the problem;
2. The available resources of the system;
3. The relevant political considerations; and

4. The relative importance of the problem vis a vis the other problems faced by the system concerned.

The Ontario and British Columbia processes present a relatively straightforward analysis with regard to the issue of overall priorities. While, as was noted previously, the system priorities in British Columbia were largely dictated by the provincial cabinet, the establishment of secure juvenile facilities was in accordance with the commitment to the maintenance of order and the protection of the public. This remained true even after the senior officials brought about changes which stipulated that incarceration was only to be employed as a last resort. While the Ontario situation was complicated by the fact that the system itself underwent several changes, the overall priorities remained constant despite the changes in the system. In any event, the Ontario priorities were couched in such broad terms that any attempt to improve the delivery of children's services would almost surely be in accordance with them.

The case of Alberta, however, presents an entirely different scenario. On one hand, many of the provisions of the Alberta Child Welfare Amendment Act increased the procedural safeguards accorded to juveniles. In addition, the overall tone of the legislation appears to reflect an increased emphasis on the individual rights. Unfortunately, however, many other provisions contradict this philosophical stance and, in fact, the amendments actually increased the avenues for incarcerating

juveniles. Thus, the net effect of the amendments appeared to conflict with the system's overall priorities. While it must be conceded that the paucity of available information regarding the actual policy process makes this conclusion somewhat tenuous, Alberta will be dropped from further consideration.

With reference to the additional criteria listed above, British Columbia and Ontario will each be discussed separately in terms of all four elements before making any attempt to identify the more rational of the two processes. In the case of British Columbia, the question of a functionally ideal solution appears to have been almost completely disregarded during the enactment of the Corrections Amendment Act. This is evidenced by the system's reluctance to investigate such factors as the effect of incarceration on juveniles, the possibility of alternate solutions to the problem, the best way to integrate the juvenile containment program into the rest of the corrections system and the best legislative vehicle for implementing the program. While some consideration was given to the possibility of a jurisdictional conflict with the federal government, the ensuing negotiations failed to reach any binding agreements.

Thus, it would appear that economic and political considerations were allowed to dominate all aspects of the British Columbia policy process.⁸ Certainly, the availability of existing resources, i.e. the fact that physical facilities already existed in large urban centres, easily outweighed such

functional considerations as the potential negative effect that a centralized model might exert on certain classes of juveniles. Further, the only time that functional considerations appeared to play a significant role, i.e. in the adoption of a non-treatment program under strict bureaucratic control, the real motivating factor behind the decision appeared to be a political gambit aimed at appeasing a hostile bureaucracy. Thus, the enactment of the Corrections Amendment Act can be characterized as a political initiative in which few factors other than economic considerations were allowed to intrude.

In contrast to the political maneuvering which characterized the development of the British Columbia containment program, functional considerations were involved in the Ontario process from the outset. In fact, the process was actually instigated by an attempt to identify ways in which the follow-up services to juveniles could be improved. While this particular problem was quickly expanded to encompass a much broader range of issues, the initial emphasis on functional considerations was retained throughout the ensuing course of events. For example, not only was detailed research conducted initially into all aspects of the program, but this commitment to analysis was maintained despite several changes in the boundaries of the system. Further evidence of the importance accorded to functional issues is found in the willingness of the policymakers to respond to the concern raised in the legislature regarding the ability of the Ministry of Community and Social

Services to undertake responsibility for the administration of correctional programs.

The question of resources was integrated into the functional considerations almost from the outset. At a very early stage of the process, the Ministry of Corrections began to experiment with amalgamating certain of the children's services under its jurisdiction with a view to assessing both the functional and financial implications of such an approach. Further, as the analysis began to develop more fully, the issue of budget constraints appeared as an almost universal factor in the various studies which were carried out. From the evidence which is available, it appears that the functional ideal also represented the best choice from a financial perspective, i.e. the amalgamation of children's services increased the effectiveness of the services while also saving money. While this factor makes it more difficult to assess what would have occurred if such had not been the case, it can be unequivocally asserted that financial considerations never overruled functional concerns to the extent that was so blatantly obvious in British Columbia.

With respect to the remaining criteria, the reorganization of children's services does not appear to have been considered a politically sensitive issue at any point during the period under discussion. As a result, it is difficult to ascertain the effect that the existence of political conflict might have exerted on the policy process. Similarly, little attention appears to have

been paid to the possibility of conflict with other problems facing the system. While this omission may simply indicate that no potential conflict existed, its absence makes it difficult to determine how the policymakers would have reacted to such a conflict.

In summary, it is possible to identify the Ontario process as being "more rational" than that which occurred in British Columbia. This decision, when combined with the cybernetic ranking conducted in the previous section, would appear to indicate that the use of cybernetic principles was positively correlated with rationality in the policy processes examined in this thesis. However, before any attempt can be made to apply this conclusion to policy formulation in general, it is necessary to articulate several caveats with regard to the analysis carried out in this thesis.

First, because this analysis has been a retrospective one, the amount of information available regarding the individual processes has been limited in many respects. As a result, it was frequently necessary to pass judgement by default, i.e. draw inferences from the absence of certain factors. Further, both the political climate of the provinces and the problems themselves were sufficiently different to weaken the validity of any inferences drawn from differences in the individual processes. Finally, the scope of analysis in this thesis was

confined to only three separate processes. It must be emphasized that any conclusions drawn from such a limited comparative base will necessarily be tentative in nature.

NOTES

1. This latter approach is referred to as "policy evaluation" and is beyond the scope of this thesis.
2. While the Berger Royal Commission on Family and Children's Law had conducted an in-depth analysis of the problem, this had occurred under the previous New Democratic Government. In any case, most of the recommendations of this Commission were ignored in the development of the containment legislation.
3. While the model does note that the priorities of the larger system will be particularly important in cases involving problems which are politically sensitive, the direct imposition of these priorities in such a complete manner is unusual.
4. It must be emphasized that the key phrase here is "as a concept". It will be seen later in this analysis that the concept was operationalized in a manner that appeared somewhat contradictory to other system goals.
5. It must be noted that, although the Ministry of the Attorney General had been nominated to administer the program, this did not necessarily imply that the Corrections Branch had to be involved. Had a separate statute been enacted, it would have been possible to establish an independent agency to administer the containment programs.
6. As an example of such "less radical" alternatives, the Ministry of Correctional Services had commenced a much more limited amalgamation of the services under its jurisdiction as early as 1973.
7. In fact, as was noted previously, when a group of supervisory bureaucrats attempted to instigate an in-depth study into certain functional issues, they were informed that such factors were not even at issue.

8. It must be conceded that since the juvenile containment program was never placed in competition with other system programs, the effect of its relative importance when compared to other programs remains unclear.

VII. CONCLUSION

In the previous chapter, it was tentatively concluded that the use of cybernetic principles was positively correlated with the degree of rationality inherent in the policy processes under discussion. The further premise which follows logically from this conclusion is that utilizing the cybernetic model in a prescriptive fashion will increase the rationality of any given policy process. However, in the previous chapter, the model was limited to a descriptive application, with a retrospective analysis being conducted of the hypothesis under discussion. As a result, a key question remains as to whether the cybernetic model can be used to focus and control a given policymaking process from the outset.

While an exhaustive analysis of this issue is considered beyond the scope of this thesis, several factors are considered important enough to warrant a brief consideration at this point. First, while the elements of the model were judged to be adequate in a descriptive sense, it has not been possible to assess their adequacy in prescriptive terms. Indeed, it can be argued that the only way in which this could be accomplished would be to apply the model in a prescriptive fashion. Thus, this factor will have to be deferred until further research can be carried out.

A second factor which will affect any attempt to utilize a prescriptive policymaking model in the public arena is the question of political involvement. With respect to the processes under discussion in this thesis, three distinct levels of political involvement can be identified. In British Columbia, the enactment of the Corrections Amendment Act was a political initiative from the outset, with the politicians retaining direct control throughout the entire process. In contrast, the Ontario process was initiated by the bureaucracy and the politicians only became involved during the legislative phases. The Alberta process appears to represent an intermediate approach. In this case, the impetus for change originated outside the system and the politicians and bureaucrats appeared to share control over the resulting process.¹

These differing levels of political involvement appear to exhibit a slight negative correlation with the use of cybernetic principles in the respective policy processes. For example, the Ontario process was characterized by a much greater use of cybernetic principles than either the Alberta or British Columbia processes. However, it must be noted that British Columbia was ranked higher than Alberta in the use of cybernetic principles when a negative correlation would have predicted the reverse. In addition, the sample size utilized in this study was too small to allow any definite conclusions to be drawn. Despite these two factors, however, it would appear that an increased level of political involvement may inhibit the achievement of

rationality in a given policy process.

A further factor which appears to have played a role in the three processes under discussion is the political sensitivity of the issue under consideration. In British Columbia, juvenile containment was perceived as a highly sensitive issue from a political standpoint; however, such did not appear to have been the case in Alberta and Ontario. The degree of political sensitivity appears to have been positively correlated with the degree of political involvement. Certainly, the British Columbia policymakers took a much more active role than was the case in either Alberta or Ontario. Further, the fact that political considerations dominated the British Columbia process to a much greater extent than occurred in Ontario would appear to suggest that political sensitivity inhibited the use of cybernetic principles in the policy processes under discussion.²

The final factor which remains to be discussed in this chapter is the political stability of the systems involved in the policy formulation. While all three provinces were characterized by strong majority governments during the time period under discussion, differences existed with regard to the length of time that the various governments had been in power. For example, in British Columbia, the policy process was initiated almost immediately after a change in government. In Alberta and Ontario, however, the governments had both been in power for at least a full term prior to the commencement of the policy processes. This difference may possibly account for the

greater harmony which existed between the politicians and bureaucrats in Alberta and Ontario compared to the British Columbia process. This harmony may also have been responsible for the lack of political sensitivity which surrounded the issue of juvenile containment in these two provinces.³

In conclusion, it must be emphasized that all of the inferences regarding the factors discussed above are extremely tentative. Clearly, the fact that the analysis was limited to only three different policy processes makes it impossible to draw any firm conclusions regarding the predictive power of any of these factors. However, at the very least, the relationships which appear to exist between the level of political involvement, the political sensitivity of the issue in question, the political stability of the system and the policy process point to several obvious avenues for future research into policymaking in the public arena. As well, it must be conceded that the discussion in this chapter points to the possibility that, even if the model is found to be generally valid with respect to the rationality hypothesis, it may nevertheless be rendered inoperable by the existence of certain types of political contexts. However, this possibility must not be interpreted as an abdication of the model's usefulness; on the contrary, it simply emphasizes the need for research into the issues raised in this chapter.

NOTES

1. It must be noted that the paucity of available information regarding the Alberta process makes this assertions somewhat speculative.
2. It must be noted that the Alberta process was not characterized by a high use of cybernetic principles despite the fact that the issue was not considered politically sensitive. However, the changes enacted in Alberta were much less radical than in the other two provinces, a factor which may explain this apparent discrepancy.
3. However, the lack of specific information in this regard makes this argument somewhat tenuous.

BIBLIOGRAPHY

BOOKS

- Beer, S. (1966). Decision and Control: The Meaning of Operational Research and Management Cybernetics. London:John Wiley and Sons.
- (1967). Cybernetics and Management. London:The English Universities Press Ltd.
- (1968). Management Science. Garden City:Doubleday & Company Inc.
- Beishon, J. & G. Peters (eds.) (1972). Systems Behavior. London:The Open University Press
- Birkenmayer, A. & L. Lambert (1972). An Assessment of the Classification System for Placement of Wards in Ontario Training Schools. Toronto:Queens Printer.
- Birkenmayer, A. & M. Polonski (1976). Trends in Training Schools Admissions 1967 to 1975. Toronto:Queens Printer.
- Braybrooke, D. & C. Lindblom (1963). A Strategy of Decision. New York:The Free Press.
- Deutsch, K. (1966). The Nerves of Government. New York:The Free Press.
- Dror, Y. (1968). Public Policy Re-Examined. San Francisco:Chandler Publishing Company.
- Easton, D. (1965a). A Framework for Political Analysis. Engelwood Cliffs:Prentice Hall, Inc.
- (1965b). A Systems Analysis of Political Life. New York:John Wiley & Sons, Inc.
- Etzioni, A. (1968). The Active Society. New York:The Free Press.
- George, F. (1977). Cybernetics and the Environment. London:Paul Elik.
- (1979). Philosophical Foundations of Cybernetics. Tunbridge Wells (Kent, England):Abacus Press.

- Lasswell, H. (1956). The Decision Process. College Park:University of Maryland Press.
- (1966). An Analysis of Political Behavior: An Empirical Approach. Hampden (Connecticut):Archan Books.
- Laszlo, E. (1972). The Systems View of the World. New York:George Braziller.
- Lindblom, C. (1968). The Policy-Making Process. Englewood Cliffs:Prentice-Hall, Inc.
- Mannheim, K. (1940). Man and Society in an Age of Reconstruction. London:Routledge & Kegan Paul, Ltd.
- March, C. & H. Simon (1958). Organizations. New York:Wiley & Sons.
- Simon, H. (1976). Administrative Behavior. New York:The Free Press.
- Weiner, N. (1967). The Human Use of Human Beings. New York:Avon Books.

ARTICLES

- Ashby, W. (1956). "Self-regulation and Requisite Variety." In F. Emery (ed.) Systems Thinking. Middlesex, England:Penquin Books.
- Aucoin, P. (1971). "Theory and Research in the Study of Policymaking." In B. Doern & P. Aucoin (eds.) The Structure of Policymaking in Canada. Toronto:The MacMillian Company of Canada, Ltd., p10.
- (1979). "Public-Policy Theory and Analysis." In B. Doern & P. Aucoin (eds.) Public Policy in Canada Toronto:The MacMillian Company of Canada, Ltd., p1.
- Bower, J. (1968). "Descriptive Decision Theory from the Administrative Viewpoint." In Bauer, R. & K. Gergen (eds.) The Study of Policy Formation. New York:The Free Press, p.103.
- Catton, K. (1976). "Models of Procedure and the Juvenile Court." Criminal Law Quarterly 18:181.

- Dechert, C. (1966). "The Development of Cybernetics." In C. Dechert (ed.) The Social Impact of Cybernetics. New York:Simon & Shuster, p.11.
- Ekstedt, J. (1980). "The Genesis of British Columbia Containment Centres: A Study in Policy-making." Burnaby, B.C.:Unpublished Research Paper.
- Dror, Y. (1964). "Muddling Through -- Science or Inertia?" Public Administration Review 24:155.
- Ericson, R. (1969). "Organizational Cybernetics and Human Values." In J. Rose (ed.) The Progress of Cybernetics. London:Gordon & Breach Science Publishers, p.1163.
- Fast, F. & J. Rosenzweig (1972). "The Modern View: A Systems Approach." In J. Beishon & G. Peters (eds.) Systems Behavior. London:The Open University Press, p.14.
- Fox, R. (1972). "Defence Council in Juvenile Court: A Variety of Roles." Canadian Journal of Corrections 14:9.
- Grosman, B. (1971). "Young Offenders Before the Courts." Canadian Bar Journal (NS) 2:6.
- Kaliel, B. (1974). "Civil Rights in Juvenile Courts." Alberta Law Review 12:34.
- Kerschner, L. (1969). "Cybernetics as a Model for Political Science: A Critique." In J. Rose (ed.) The Progress of Cybernetics. London:Gordon & Breach Science Publishers, p.1215.
- Larsen, E. (1979). "The Juvenile Court in Canada: Its Past and Its Future." Burnaby, B.C.:Unpublished Research Paper.
- Lasswell, H. & M. McDougal (1943). "Legal Education and Public Policy: Professional Training in the Public Interest." Yale Law Journal 52:203.
- Lazor, Y. (1976). "Appeals under the Juvenile Delinquents Act." Chitty's Law Journal 24:334.
- Lindblom, C. (1959). "The Science of Muddling Through." Public Administration Review 19:79.

- Lowi, T. (1970). "Decisionmaking Versus Policymaking: Toward an Antidote for Technocracy." Public Administration Review 30:314.
- MacDonald, J. (1965). "Juvenile Court Jurisdiction." Criminal Law Quarterly 7:426.
- Osborne, J. (1981). "Juvenile Justice In Canada: the Transfer of the Initiative." Canadian Journal of Family Law 2:7.
- Parker, G. (1967). "Some Historical Observations on the Juvenile Court." Osgoode Hall Law Journal 9:155.
- Reisman, M. (1976). "A Theory About Law from a Policy Perspective." In D. Weisstub (ed.) Law and Policy. Toronto:Osgoode Hall Law School, p.75.
- Williams, G. "The Criminal Responsibility of Children." Criminal Law Review 1954:493.
- Wilson, L. (1976). "Diversion: The Impact on the Juvenile Justice System." Canadian Journal of Criminology and Corrections 18:161.
- Zeckhauser, R. & E. Schaefer (1968). "Public Policy and Normative Economic Theory." In R. Bauer & K. Gergen (eds.) The Study of Policy Formation. New York:The Free Press, p.27.

GOVERNMENT DOCUMENTS

- Alberta:Board of Review into the Provincial Court (1977). Report #3: The Juvenile Justice System in Alberta. Edmonton:Queens Printer.
- Alberta:Department of Social Services (1972). Annual Report. Edmonton:Queens Printer.
- _____ (1973). Annual Report. Edmonton:Queens Printer.
- _____ (1974). Annual Report. Edmonton:Queens Printer.
- _____ (1975). Annual Report. Edmonton:Queens Printer.
- _____ (1976) .. Annual Report. Edmonton:Queens Printer.
- _____ (1977) .. Annual Report. Edmonton:Queens Printer.

Alberta Legislative Assembly (1977). Alberta Hansard.
Edmonton:Queens Printer.

British Columbia:Ministry of the Attorney General (1976). Annual Report of the Corrections Branch. Victoria:Queens Printer.

----- (1977a). Annual Report of the Corrections Branch.
Victoria:Queens Printer.

----- (1977b). Corrections Amendment Act: Highlights, Background Information. Victoria:Queens Printer.

----- (1977c). Youth Containment Program Review.
Victoria:Unpublished Internal Document.

----- (1978). Annual Report of the Corrections Branch.
Victoria:Queens Printer.

British Columbia Legislative Assembly. (1977). Legislative Assembly Debates. Victoria:Queens Printer.

Ontario:Ministry of Community and Social Services (1977).
Consultation Paper on Short Term Legislative Amendments.
Toronto:Queens Printer.

----- (1978a). Consultation Paper on Planning Priorities for Childrens Services in 1978. Toronto:Queens Printer.

----- (1978b). Consultation Paper on Planning for the Establishment of Childrens Services Committees.
Toronto:Queens Printer.

----- (1978c). Consultation Paper on Standards and Guidelines for Childrens Services. Toronto:Queens Printer.

----- (1978d). Consultation Paper on Proposed Standards and Guidelines for Children's Residential Care Facilities.
Toronto:Queens Printer.

Ontario:Ministry of Correctional Services (1972). Annual Report.
Toronto:Queens Printer.

----- (1973). Annual Report. Toronto:Queens Printer.

----- (1974). Annual Report. Toronto:Queens Printer.

----- (1975). Annual Report. Toronto:Queens Printer.

----- (1976a). Annual Report. Toronto:Queens Printer.

----- (1976b). A Review of Alternatives to the Incarceration of the Youthful Offender. Toronto:Queens Printer.

----- (1977). Annual Report. Toronto:Queens Printer.

----- (1978). Annual Report. Toronto:Queens Printer.

Ontario Legislative Assembly (1977). Legislative Assembly Debates. Toronto:Queens Printer.

----- (1978). Legislative Assembly Debates. Toronto:Queens Printer.

Corrections Act	BC	1970 1973-2 1974 1975 1976 1977 1979	c10 c105 c87 c57 c2 c69, c75 c2
Corrections Amendment Act	BC	1977	c69
Protection of Childen Act	RSBC	1960 1967 1968 1969 1970 1973 1974 1975 1978	c303 c38 c41 c27 c38 c71 c69 c57 c20
Training Schools Act	BC	1963 1969	c50 c27
<u>ONTARIO</u>			
Children's Boarding Homes Act	RSO	1970 1971 1978	c65 c50 c70
Children's Institutions Act	RSO	1970 1971 1972 1978	c66 c50 c58 c69
Children's Mental Health Centers Act	RSO	1970 1971 1978	c68 c50 c67
Children's Services Transfer Act	Ontario	1977 1978	c22 c67

Child Welfare Act	RSO	1970	c64
		1971	c98
		1972	c44
		1978	c28
Day Nurseries Act	RSO	1970	c104
		1971	c50
		1971-2	c11
		1973	c77
		1978	c72
Provincial Courts Act	RSO	1970	c369
		1976	c85
		1977	c22, c46
		1978	c2, c71
		1979	c5
Training Schools Act	RSO	1970	c467
		1975	c21
		1978	c66
Training Schools Amendment Act	Ontario	1978	c66
Unified Family Court Act	Ontario	1976	c85
		1977	c4
		1978	c68
		1979	c108