CONFERENCE REPORT

Licit and illicit drug policies: a typology

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Summary
To foster comparison of policy interventions across the various categories of licit and illicit drugs, we develop a typology of policies intended to address drug abuse problems. The principal dimensions of the typology are policy type and intervention channel. While the typology has important limitations, as a mechanism to organize information and stimulate thought it holds the potential to improve understanding of commonalities and distinctions among policies applying to widely discrepant drug problems, both within and across cultures. As such, it could contribute to the development of more effective approaches to grappling with a diverse set of drug policy issues.

Introduction
Just as knowledge of biochemical and behavioral dimensions of nicotine addiction can inform alcohol research, understanding of tobacco and health policy may offer lessons for both scholars and policy makers interested in alcohol policy. More generally, understanding policy dimensions of either of the major licit substances of abuse might be expected to inform researchers and policy makers concerned with illicit drug abuse; the opposite relationship could hold as well.

This paper develops a typology designed to compare the nature and effects of policy interventions across categories of licit and illicit drugs. Comparison of specific policies across drugs clarifies similarities and differences in policy interventions by type of drug and facilitates a search for lessons that cross barriers that now divide the communities of interest. The analysis builds on other typologies concerning prevention activities (Ashley & Rankin, 1988; Holder & Wallack, 1986; Walsh & Gordon, 1986) and polydrug abuse (Wilkinson et al., 1987).

We begin with consideration of factors which may justify policy intervention to deal with a perceived drug problem. We then present our proposed drug policy typology, illustrate its use, and consider its limitations.

Rationale for governmental intervention
Policy formation is triggered by societal and institutional perception of a problem for which a policy response appears warranted (Kingdon, 1984; Cobb & Elder, 1972; Merton & Nisbet, 1976). Given that the practice of public policy varies significantly from one period to the next, it is tempting to adopt a simple empirical approach to defining the rationale for government intervention: it is appropriate for government to intervene when, with the consent of

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the governed, government determines it should intervene (Steiner, 1974). Although lacking in conceptual appeal (outside of a model of political decision making), this answer at least offers the virtues of simplicity and consistency.

Still, one senses that there ought to be distinct reasons to justify an intervention. This recommends a search for a conceptual model. In reviewing discipline-based models of policy intervention, we have derived a series of general principles that stretch across disciplines and constitute a coherent set of reasons for consideration of intervention. The major weakness of these principles is that, in their generality, they fail to draw sharp lines to determine when each condition is or is not met.

The point of departure for our model is the premise that well-informed adults should have the right to engage in behaviors of their choosing so long as their actions do not impose harms or costs on others. Many leading theorists would reject this premise, particularly those who define society in communitarian rather than individualistic terms (Beauchamp, 1975; Bellah, et al., 1985; Herzog, 1987; Walzer, 1983). We adopt it here because it reflects what we interpret to be the dominant ethic of contemporary Western society and it exerts significant influence in Western policy legitimation and formation. It should be noted, however, that the absence of a more compelling theoretical rationale may be a primary reason why drug-use policies are so frequent, challenged in intellectual, legal, and political arenas.

The rationale for considering intervention, given our premise, includes four basic propositions and two qualifications. Governmental intervention is properly considered when any of the following conditions exists:

- The consequence of drug use has significant adverse implications for members of society other than the individual drug user, including destruction of property, reduced productivity, increased taxes or health care costs, crime, etc.
- The drug user is a minor.
- The drug user does not possess sufficient knowledge of the consequences of drug use to make a rational decision on use of the substance.
- Society finds that the drug use in question is simply unacceptable behavior, even though none of the ingredients of the three preceding propositions is present.

The first proposition is one which should receive virtually unanimous assent in principle. The problem with it, as suggested above, is the difficulty of determining when the implications for others are significant enough to warrant intervention. Some individuals are genuinely offended when others chew gum, but in general (e.g. outside of elementary schools), society does not currently view that as sufficiently offensive to restrict the individual gum chewer's use of the product. Note that this quality can and does change over time; witness the case of smoking in public places (US Department of Health and Human Services, 1989).

The second proposition is far more straightforward. Western societies widely concur on the appropriateness of regulating the behavior of minors, whether through compulsory education, restrictions on their involvement in the labor force, or their access to licit drugs. This concurrence is based on the assumption that minors are unable to protect themselves and make mature, informed decisions (Gaylin, 1982).

Much like the first proposition, the third one suffers from the lack of specificity. How much knowledge is 'sufficient'? How does a society measure whether or not an individual possesses such knowledge? Recent litigation in the United States over cigarette producers' liability for smokers' alleged lack of sufficient knowledge of the consequences of smoking illustrates the enormous complexities of addressing this proposition.

The fourth proposition falls perilously close to the empirical model suggested above. Nevertheless, its inclusion is essential, as it undoubtedly represents a major reason for governmental intervention. It may be particularly useful in explaining policies that are formulated to reflect changing public opinion and social values by elected officials eager to appear responsive to issues with high political saliency (Price, 1978).

There are two significant qualifications to these rationales for governmental intervention, although each can be construed as covered by the four main points. First, Donald Kennedy argues that government:

"has special obligations to those exposed to risk wherever there is incentive to exploit (that is, wherever benefits accrue to the persons who generate the risk), and where there is a purposive or commercial element in the addition of the risk" (Kennedy, 1983, p. 51).

Clearly, these conditions apply to both licit and illicit drug use, from the multi-billion dollar adver-
tising blandishments of the cigarette and alcohol producers to the street corner tactics of the heroin pusher. We view them, however, as simply a variation of our third proposition.

The second qualification is that intervention may be warranted when the substance in question is addictive. We say may be warranted because it is possible to conceive of a knowledgeable, rational adult choosing to adopt a behavior which he or she knows to be addictive. We do not consider addiction to constitute grounds for a wholly independent rationale for intervention because the major ingredients are included in the four basic propositions, namely adoption of the behavior as an adult and possession of adequate knowledge of the addiction potential and implications.

Realistically, lack of appreciation of addiction by drug experimenters creates a special situation in which addiction converts ‘youthful indiscretion’ into a major adult problem. Surveys and simple common sense strongly suggest that this characterizes most cigarette smoking, much alcoholism, and much dependence on the illicit drugs. (Bonaguro, McLaughlin & Sussman, 1987; US Department of Health and Human Services, 1988).

In outlining the four propositions, we have been careful to describe them as circumstances under which intervention may be considered, rather than automatically undertaken. To convert consideration into action, a contemplated intervention should have to satisfy an additional criterion: it should have to be sufficiently effective and efficient that the ‘cure’ would not be worse than the ‘disease’ (Nadelmann, 1988; Wolf, 1988).

Policy typology
Having determined when governmental intervention may be contemplated, we turn to the issue of how government can intervene. Governmental interventions range from the provision of information to outright prohibitions on the possession or use of a drug. In Fig. 1, which presents our drug policy schema, three broad categories of intervention are arrayed at the top of the matrix from left to right according to their increasing degree of coerciveness: information/education, economic incentives, and regulation (statutes and rules).

While we believe that this classification schema covers all relevant policy options (with the important exception of the null option, i.e. doing nothing), it must be emphasized that each of these three broad categories encompasses a diverse set of policy options with varying degrees of coerciveness. The information/education category, for example, includes everything from the least directive health information presentation (e.g. the US Federal Trade Commission’s publication of the tar and nicotine yields of cigarette brands) to formal education in elementary and secondary schools. The category of economic incentives includes excise taxation of licit drugs, restrictions on producers’ deduction of advertising expenses for tax purposes, mandatory insurance coverage of drug treatment and rehabilitation, and so on. The regulatory category can range from the relatively innocuous, such as the largely ignored minimum purchase age for cigarettes, to the most stringent of controls, such as felony penalties for violating laws regarding the sale of narcotics.

Figure 1 includes a second dimension: the point of intervention. Interventions can be applied directly to the end user of a drug, or they can operate indirectly on the end-user through their effect on the supply chain or other intermediaries, i.e. other individuals or organizations. In each case, the effect on the end user is of ultimate interest.

The point of intervention of a direct intervention is the drug user or potential user. For example, a law prohibiting possession of marijuana for private use affects the user directly. Interventions that influ-
ence the user through their application to some other group are indirect. Within the category of 'other groups' are organizations that are part of the drug supply chain—producers, wholesalers, retailers—and other intermediaries, groups or systems that are neither end users nor part of the supply chain, such as the school system or restaurant owners.

As reflected in the structure of the typology, indirect interventions often represent different policy types for the intervention channel and the end user. To illustrate, the law prohibiting the possession of narcotics with the intent to sell is a formal regulatory intervention from the perspective of the parties immediately impacted by the law—drug dealers—but from the perspective of the narcotics user (or potential user) it represents an economic intervention, because it drives up the price of the drugs. A state law requiring public schools to provide health education about alcohol and drugs is a regulatory measure as perceived by the schools (which are categorized as 'other intermediaries', since they are neither end users nor part of the drug supply chain). To the ultimate recipients of the health education program, however, the intervention is informational and educational.

**Classification of prominent drug policies**

The use of the typology is demonstrated by placing a dozen major policies (Table 1) within the typology cells and considering the policies' applicability to each of four categories of drugs: the two principal illicit drugs, tobacco and alcohol, illicit drugs taken together as a category (e.g. marijuana, heroin and cocaine), and prescription drugs (as they are abused by legitimate recipients of prescriptions; we consider fraudulent acquisition of prescription drugs to represent illicit drug use).

<table>
<thead>
<tr>
<th>Table 1. Prominent drug control policies</th>
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<tr>
<td>1. Mandated education</td>
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<td>2. Public service announcements</td>
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<td>3. Product warning labels</td>
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<td>4. Broadcast advertising ban</td>
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<td>5. Supply interdiction</td>
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<td>6. Excise taxation</td>
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<td>7. Mandated insurance premium differentials</td>
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<td>8. Possession ban</td>
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<td>9. Restriction on use by place</td>
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<tr>
<td>10. Minimum age of purchase</td>
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<td>11. Product composition regulation</td>
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<td>12. Mandated workplace screening</td>
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These twelve policies appear in the drug policy typology in Fig. 2. A line through a substance name indicates that the specific policy is not feasible for the specific drug type; brackets indicate a potential but not currently existing policy for the relevant drug type; otherwise there is an existing policy for the identified drug category.

This selection of policies shows that prominent policy options pertain to each of the drug types, for each state of existence (i.e. existing policy, potential, infeasible), and for each of the three policy types. In general, policies channelled to the end user through an intermediary (supply chain or other) reflect regulatory measures imposed on the intermediary.

Four of the cells are occupied by two policies. In each instance, comparison of the two policies offers insight worthy of generalization. The pairing of the 'mandated education' and 'broadcast advertising ban' policies in cell 19 offers an obvious conclusion: policies that seem related qualitatively often will fall within the same cell of the matrix. These two policies operate in opposite directions, the former providing information, the latter withdrawing it. But the shared objective is to increase the effectiveness of the desired message, either by supplying more of it or by restricting the availability of competing messages.

The policy pairing in cell 11, involving the interdiction of drug supply and excise taxation, offers an intriguing lesson: policies that on their surface appear to be unrelated may in fact share much in common. The former applies to illegal drugs, while the latter pertains to legal products. Yet in both cases, the measure represents a regulatory intervention imposed on the supply chain intended to reduce drug consumption through an economic incentive which operates on the end user. In both cases, the net effect of successful policy implementation is to raise the price of the drug type and thereby discourage consumption. Supply interdiction appears here to be the analog for illicit drugs to excise taxation of licit ones. In this context, the effectiveness of supply interdiction can be interpreted in terms of its effect on street price and, in turn, the effect of street price on consumption. The first of these has been estimated recently (Reuter et al., 1988). The effect of street price on consumption has not been studied thoroughly, but careful analysis of the price elasticity of demand for cigarettes and alcoholic beverages (Cook & Tauchen, 1982; Lewit & Coate, 1982) provides a model for consideration of the likely effects of price increases for illegal
drugs. Similarities in response to price or cost for the legal and illegal drugs of dependence have been demonstrated in laboratory studies with both humans and animal models (Griffiths et al., 1980).

The policy pairing in cell 3 combines the two preceding conclusions. An outright ban on possession (policy 8) and restriction of use by place (policy 9) sound similar in nature, yet each applies uniquely, the former to illicit drugs and the latter to licit drugs. Thus, there are policy types that are qualitatively similar, even if they can only be applied to one category of drug or the other.

The final policy pair, in cell 12 (minimum age of purchase and regulation of product composition),
offers an intriguing comparison of policies for the licit drugs and the 'in between' category of prescription drug abuse. We consider the latter 'in between' licit and illicit because prescription drugs are not available for unrestricted purchase, yet neither are they illicit. Minimum age of purchase (policy 10) is an existing policy for tobacco and alcohol and a potential policy for prescription drugs. Conversely, the regulation of product composition (policy 11) applies currently to prescription drugs and remains possible for tobacco and alcohol.

The fact that several cells, comprising three entire rows, are blank does not mean that no interventions are available. For example, education programs for restaurant and bar owners concerning their liability under 'dram shop' laws would fit into cell 6 and the liability which is placed on the owner would fall into cell 9. A sharp increase in the cost of a liquor license might fall into cell 9 as well. Thus, this brief examination of findings from the typology must be considered simply illustrative of the potential lessons that can emerge from use of the typology.

Limitations of the typology
The first limitation is that use of the matrix is both time- and place-dependent. While policies may always fall within the same cell conceptually, the state of application of the policies (existing, potential, infeasible) will depend on when the analysis is occurring and where the jurisdiction for policy implementation lies. Legally, some policies may be feasible at one level of government but not at another. For example, under current U.S. law, states cannot regulate the labeling of cigarettes or content of cigarette advertisements. Thus, the feasibility of changing the Surgeon General's warning on cigarette packs and advertisements differs for states (infeasible) and the federal government (feasible). With regard to time dependency, this distinction did not exist prior to federal legislation in the 1960's.

Similarly, certain long-available policy types becomes politically fashionable in different time periods, viz. today's interest in legalization of illicit drug use and military intervention to restrict drug importation. Thus, there is a dynamic dimension to use of the typology that is not captured in the static format shown here.

A second limitation is really a qualification: characterization of the policy-type dimension as progressing from the least coercive category (information/education) to the most coercive (regulation) can mask differences in coerciveness that stray from this rule of thumb. Clearly, there is considerable variation in the coerciveness of policies found within any given cell. An example is the difference between an excise tax of ten cents per bottle of beer and a tax of $10,000 per ounce on the importation of marijuana. While conceptually similar in one respect (i.e. they are both product-specific taxes), they reflect quite different policy objectives. Similarly, the actual coercion associated with a specific regulatory measure may fall dramatically short of that associated with an economic incentive. A law outlawing the sale of cigarettes to minors, if unenforced and subject to no penalty, is significantly less coercive than the aforementioned marijuana tax (DiFranza et al., 1987).

The remaining limitations are more substantive. As it now stands, the typology does not consider whether alternative policies are politically acceptable or institutionally implementable. Nor does it consider the political and bureaucratic processes by which policies are selected and implemented, or the relationship between drug policy and other policy areas on a national political agenda. Thus, we can say very little about the intensification in the 1980's of public and governmental concern over drug use and related policy options and the concomitant legitimization of a range of policy options that would have been deemed politically unthinkable in prior decades.

For a variety of reasons, the typology is of limited utility in assessing policy effectiveness. For any individual measure, the matrix offers no insight into inherent effectiveness potential. Beyond the inherent potential, a variety of forces will influence the extent to which that potential is approached. For example, the discretion of the implementing agency will influence effectiveness to varying degrees, depending in part on inherent characteristics of the policy and of the law or regulation defining it. The level of compliance with a policy will influence its effectiveness; again, the matrix is silent on this matter, both within cells and even within specific policies. Finally, the nature and level of enforcement may profoundly impact realized effectiveness (Hardin, 1982; Hawkins, 1984; Russell et al., 1986). Each of these factors could be included in the typology matrix as an added dimension, but at the price of introducing complexity that might obscure the basic purpose of the typology.

One unanticipated ‘finding’ in Fig. 2 reflects many of the typology's limitations and shows how uncritical application of the typology can lead to
misinterpretation of the policy environment. For the policies categorized in Fig. 2, three indicate that tobacco and alcohol are recorded as having existing minimum age of purchase laws (policy 10). When one considers the nature and extent of such laws and of their enforcement, one recognizes there is a dramatic distinction between minimum age laws in the cases of tobacco than to alcohol in the United States. Such an impression could be erroneous. The failure of Fig. 2 to show this reflects, for example, the fact that both tobacco and alcohol are recorded as having existing minimum age of purchase laws (policy 10). When one considers the nature and extent of such laws and of their enforcement, one recognizes there is a dramatic distinction between minimum age laws in the cases of tobacco and alcohol. Our typology does not capture such distinctions.

Conclusion
As the preceding discussion suggests, the limitations of this exercise in drug policy classification are many. At the same time, the potential for use of the matrix to generate insights into constructive approaches to drug policy development seems considerable. The process of identifying and classifying policies as they pertain to different types of drug problems can broaden perspectives on options available. Comparisons such as the supply interdiction/excise taxation pairing in Fig. 2 (cell 11) hold the potential of generating understanding of the mechanisms by which policy interventions may work, and of their possible effectiveness.

A significant strength of the policy matrix is its potential to contribute to fruitful comparative analysis at several levels, including comparisons between the major licit drug problems, tobacco and alcohol; between illicit drug issues (e.g. marijuana and cocaine); and between the broad categories of licit and illicit drugs. The typology lends itself nicely to cross-cultural or cross-national comparisons, serving as a device to stimulate consideration and analysis of different countries' approaches to both similar and divergent drug problems.

As the discussion of limitations demonstrated, this approach to classifying drug policies holds little promise of offering definitive answers to pressing social questions. Nevertheless, as a mechanism to organize information and stimulate thought, it may represent a device worthy of exploration and development.

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References


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