Public Policy Design and Assumptions About Human Behavior

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Introduction

Public policies are made up of policy instruments or tools that are intended to achieve specific policy goals (Elmore, 1987; Rist, 1998). While there are many definitions of a public policy instrument, they all can be boiled down to one statement: policy instruments are methods of public action utilized by policy actors in order to structure and influence collective action for the purposes of achieving specific goals (Salamon, 2002b; van der Doelen, 1998). Policy instruments are intended to change individual behavior through the use of some sort of coercion, sanction, incentive, or suasion (Bemelmans-Videc, 1998; Schneider & Ingram, 1997; Stewart, 1993; Stone, 2002). Incentives and disincentives contained within policy tools are intended to promote some behaviors and discourage others (Salamon, 2002b; Stone, 2007).

Policy instruments, through their influence on individual behavior also have an influence on the wider social world (Bemelmans-Videc, 1998). In addition, in the aggregate, the influence on individual behavior translates to an influence on society in a manner that does not require “continuous and specific direction” (Stone, 2002, p. 261) and instead works through specifying and structuring specific relationships, identities, choices, and behavior, as well as creating ongoing structures for continued influence (Hood, 1983; Salamon, 2002b; Stone, 2002). Those patterns of structured relationships are intended to produce predicted and predictable changes in individual behavior to such a degree that the resulting activity and its consequences will produce “the necessary and sufficient conditions for a valued outcome” (Bobrow, 2006). In order to produce those outcomes, policy instruments contain assumptions about how people behave, how they should behave, and what types of means are necessary to achieve the stated and unstated ends (Schneider & Ingram, 1997). In other words, underlying public policy instruments are assumptions and conceptions about human nature (Somit & Peterson, 2003): what motivates and
discourages, what is seen as legitimate and illegitimate, what behaviors can be modified and what cannot, and how attempts to change behavior will be perceived and understood. However, these assumptions about human nature and human behavior have been under-explored in the public policy design literature (Rist, 1998). The policy process literature ignores attempts to solve problems through policy design and instead focuses on design as a part of the political process, something that happens in a black box (Birkland, 2011; Ingraham, 1987). The method of choosing a policy alternative based on gathering alternatives, assessing the costs and benefits of each alternative, and selecting the best choice receives more attention than questions of why certain designs are used in certain policy areas, or for certain target groups and not others (Bobrow & Dryzek, 1987).

This paper will take to heart Dror’s (1971) advice to the policy field “to be self-conscious and to consider its own paradigms, assumptions, tacit theories, infrastructures, and applications as subjects for explicit study and conscious shaping” (p. 53) Bobrow and Dryzek (1987) called for a similar self-reflection in the field to investigate underlying rationales contained in policy interventions. While Linder and Peters (1987) called for policy design research to create links between models of causation, values, and instruments, this paper adds a fourth criteria, theories of human behavior. If, as asserted earlier, policy instruments are intended to guide, change, and construct conditions for human behavior, it must be recognized that the end result of the implementation of a policy instrument is at least partly dependent on the behaviors of the targets (Ho, 2000). Assumptions about that behavior must be analyzed and dissected, not only to take Dror’s advice, but in light of modern research and theories of human behavior.

According to Lascoumes and LeGales (2007), the study of policy instruments “reveals a (fairly explicit) theorization of the relationship between the governing and governed: every
instrument constitutes a condensed form of knowledge about social control and ways of exercising it” (p. 3). I assert that an overlooked element of this condensed form of knowledge is made up of assumptions of human behavior, and those assumptions lead not only to specific policy objectives, predicted or not, but have wider ranging implications for governance. To these ends, this paper will attempt to illuminate hidden or unexplored assumptions about human behavior inherent in the public policy instrument design literature. The realm of policy instruments is expansive and includes what are traditionally considered policy tools, such as incentives, sanctions, and regulation, but also other instruments of governance such as surveillance (observing the state of the world and comparing it to some objective), methods of analysis, and the process for setting objectives. This paper will concentrate on traditional policy tools, separated here into three main categories of regulatory tools, inducement tools and knowledge tools. These tools will be reviewed in order to examine the assumptions about human behavior inherent in each. In addition, gaps in the policy design literature concerning policy instruments and their effect on individual behavior will be illuminated. Limitations of the assumptions will be identified as well as implications for public policy design. Finally, as a note of clarification, the terms “tools” and “instruments” are used interchangeably and are intended to have identical meanings.

Policy Instruments – Definitions, Assumptions, and Intentions

Policy instruments are “concrete and specified operational forms of intervention by public authorities” (Bemelmans-Videc, 1998, p. 4), intended to achieve specific goals through structuring the relationship between individuals and the state. According to Hood (1983), policy instruments are “predominantly a way of controlling society” and are integral to the continued existence of government. Policy instruments are tied to the “nature of the state” (p. 6) where
differing regimes of governance will select different instruments to alleviate the same or similar social problems (Howlett, 1991). Within different regimes of governance some policy instruments will enjoy greater legitimacy than others (Howlett, 2005). Cultural norms, ideology and public opinion influence the types of tools considered legitimate (Salamon, 2002b). While policy instruments can be directed at groups such as organizations or foreign governments, this paper will concentrate on social policy instruments intended to influence the behavior of individuals, which in the aggregate will affect a group and thus society as a whole.

The purpose of policy instruments is to change individual behavior in accordance with some societal or governmental goal (Bobrow & Dryzek, 1987; Leeuw, 1998; Schneider & Ingram, 1990). In other words, some individual action or lack of action is postulated as problematic and policy instruments are intended to change that behavior to more closely match governmental goals (Leeuw, 1998). According to Stewart (1993), policy tools are the “behavioral link between the nature of the problem and the type of action needed to solve it” (p. 324). There is an underlying assumption common to all policy tools that social behavior and processes are controllable or modifiable to some degree (de Bruijn & Hufen, 1998). Assumptions about individual behavior are inherent in policy instrument design because there must be some cause and effect relationship in order to achieve policy goals.

There are basically two ways in which policy instruments influence individual behavior. The first is intended to directly affect individual behavior, for example, through the use of incentives or sanctions. The second is intended to affect the environment or context in which behavior is manifested, for example, through the implementation of knowledge tools, thus indirectly affecting behavior (Lowi, 1972). These two methods are not necessarily mutually exclusive and/or may affect different target groups in different ways. And for many policy
instruments, there is an assumption that people affected by the instrument can freely make a decision in their best interest to take advantage of an incentive, avoid a sanction, or internalize and act on information.

Policy instruments are generally separated into three categories: inducements (includes both incentives and sanctions), regulations, and knowledge or capacity tools (Bemelmans-Videc, 1998; Schneider & Ingram, 1997; Stone, 2002; van der Doelen, 1998). The decision to use a certain category of policy instrument at least partly depends on the assumptions inherent in the definition of the problem, and the amount of coercion necessary to change behavior (Schneider & Ingram, 1990). In addition, assumptions about the nature of human behavior help to determine policy instrument choice, often resulting in a self-fulfilling prophecy where policy instruments require the same behavior assumed to be part of human nature (Bobrow & Dryzek, 1987).

Economic theories of human behavior dominate the policy field, whether policy analysis, design or evaluation. Rational choice theory, in particular, can be considered a general theory of public policy. “Rational choice theory borrows heavily from economic assumptions of individual preferences, and believes that a sufficient behavioral model could be drawn from deductions of an individual’s self interested utility maximization” (Jones, Boushey, & Workman, 2006, p. 50). Rational choice models assume that people 1) have ordered, stable preferences; 2) are self-interested utility maximizers; 3) have the correction information to assess outcomes relative to objectives; and 4) make strategic decision based on their preferences, calculations of costs, risks and rewards (Jones, Boushey, & Workman, 2006). Related forms of rational choice such as institutional economics, bounded rationality and opportunism have generally replaced the strict, traditional form of rational choice as an explanatory theory of individual motivation, choice, and
behavior the concept of homo economicus, the self-interested utility maximizer is still dominant in the field (Bobrow & Dryzek, 1987; Landry & Varone, 2005).

The next three sections outline the basic definitions and functions of regulatory tools, inducement tools, and knowledge tools. The assumptions inherent in the instruments themselves and about human behavior are also explored. It is important to note that this categorization of instruments is neither mutually exclusive nor exhaustive, but instead reflects the general categorizations found in the literature. Policy instruments in each category tend to have characteristics from the other categories. This breakdown is simply for readability and analytical distinction.

**Regulatory Tools**

Regulatory tools are intended to change behavior and often originate in the legislative and administrative spheres of government. In the traditional literature, regulation as a policy instrument mostly referred to government command and control systems that mainly were concerned with regulating private businesses in order to correct for certain types of market failure. Economic regulation is mainly enforced through bureaucratic, legislative and judicial decision to “control prices, output, and/or the entry and exit of firms in an industry” (Salamon, 2002a, p. 118). Regulation as a tool has expanded from that precise definition to include other sorts of regulatory activity, usually referred to as social regulation, where regulations may be directed at firms, but can also be directed at individual behavior. Social regulation is specifically intended to improve public welfare through regulating behaviors that affect public safety, health, and well-being (May, 2002).

Economic regulation has an explicit normative component; it is intended to correct for market failures, usually concerning pricing, financial externalities, and information asymmetry
The same is true for social regulation; especially for social programs, regulation is a normalizing activity, intended to enforce social norms and behavior through laws and the threat of sanctions for transgressions (de Bruijn & Hufen, 1998; Lemaire, 1998). Regulatory tools contain four components: rules that specify the desired behavior, standards for compliance, sanctions for non-compliance, and an administrative system to enforce the rules and deliver sanctions (May, 2002). As such, there are surveillance, intrusive, coercive, and enforcement characteristics inherent in regulatory tools (Campbell, Johnson, & Larson, 2004; de Bruijn & Hufen, 1998; May, 2002). Because of the use of sanctions, regulatory tools are closely tied with government agencies who enforce the rules and apply the “stick” when firms are not in compliance (May, 2002). Regulatory tools are also based on an assumption that people will obey the law or other regulations without requiring a promise of a positive incentive (with positive referring to something being given) because of governmental authority and legitimacy (Schneider & Ingram, 1990; Schneider & Ingram, 1997).

Rationales and Assumptions Inherent in Regulatory Tools

First, and perhaps most obvious, there is an assumption that the desired behavior addressed by the regulatory tool would not occur without the specter of the regulation (Elmore, 1987). The assumption is that regulated behavior exists because firms are acting in a utility-maximizing manner, and thus efficiently in their rational calculus. The addition of regulation to change behavior involves not only a change in behavior, but extra costs to comply with the regulations, resulting in inefficiencies (Salamon, 2002a). Because of this, the traditional policy literature, views regulatory tools as the most coercive, the most inefficient, the most likely to result in shirking and moral hazards, but yet the most effective (Elmore, 1987; Lowi, 1972; Salamon, 2002a). The additional requirement of surveillance and enforcement not only adds to
the costs but creates an adversarial relationship between the regulator and the regulated, mainly because it is assumed that it is not in the regulated entity’s self-interest to follow the regulation, and will thus maximize utility through avoiding compliance (Elmore, 1987).

According to Elmore (1987), regulatory tools also contain the assumption that all targets subject to the regulation should perform the required behavior, regardless of capacity, and that the regulation contains all the information needed to comply. This assumption is expected to lead to inefficiencies in firms that do not have the capacity to comply, or who must make decisions that are not in the interest of the firm to be in compliance. Firms are expected to “engage in ‘calculated compliance’ that weights the costs and benefits of compliance,” weighing the costs of compliance against the costs of sanctions for non-compliance (May, 2002, p. 167). Sanctions are viewed as a negative method in which to induce compliance, especially compared with incentives, and it is assumed that regulated firms are motivated by fear of sanction.

Assumptions about Human Behavior Implicit in Regulatory Tools

Theories of rational choice and utility maximization as the major components of individual decision-making are significant assumptions in regulatory tools. The necessity for a regulatory tool assumes that an individual or firm is performing an undesirable behavior because it is in their best interest to do so. Those performing the behavior are also assumed to have a strong incentive to continue with their behavior, regardless of the actions of the state, so the strictest and most intrusive policy tool is necessary in order to stop the behavior. This main assumption about strong self-interest is coupled with the assumption that hortatory, persuasive or incentive tools will not be enough to counteract the behavior.

Regulatory tools are also assumed to be perceived by the targets as a punishment, something to be avoided, either through compliance or evasion. There is also an assumption of
offsetting behavior as a way to avoid sanction: that some other undesirable, but unregulated behavior will be performed in order to comply with the letter of the law but to still achieve utility maximization (Campbell, Johnson, & Larson, 2004). The existence of surveillance or monitoring mechanisms as part of many regulatory tools is additional evidence of an assumption that individuals or firms will attempt to avoid complying with the regulation. This strong adherence to self-interest and utility maximization leads to a rather negative view of human nature, one that requires regulation, monitoring, force, and a show of legitimate power of the government (Lemaire, 1998). Individuals and firms are assumed to be immune to calls for the public good if the change in behavior leads to reduced utility.

**Inducement Tools – Incentives and Sanctions**

Inducements are known by many names: incentives, sanctions, subsidies, contracts, and levies (Hood, 1983; Leeuw, 1998). The purpose of an inducement is to motivate an individual through the promise of a reward or penalty to behave in a certain way without the level of government coercion inherent in regulations (de Bruijn & Hufen, 1998; Stone, 2002). Inducements allow the targets to choose whether to change their behavior based on the relative desirability or utility of the inducement offered (de Bruijn & Hufen, 1998). This aspect is important in modern governance, especially in the U.S. where voluntary compliance, as opposed to coercion is preferred, and according to Church and Heumann (1989), is considered morally superior. Inducements generally “rely on tangible payoffs, positive or negative, to induce compliance or encourage utilization” (Schneider & Ingram, 1990, p. 515). Inducements are often used when the causes of the problem are unknown, complex, or considered to be unlikely to change through policy instruments. For example, according to Hood (1983), an advantage to using inducements is they can be used to encourage a variety of behaviors within the same
problem context and to induce targets “to positive or creative activity or to choose the best means of achieving some broadly specified goal” (p. 52). Besides affecting motivation to take a certain action in order to receive an incentive or avoid a sanction, inducements require the targets to have the capacity to act in the desired way. So, inducements are intended to affect a target’s motivation so they can reveal their otherwise undemonstrated capability (Church & Heumann, 1989).

Inducements create a decision-making structure that is based in calculations of reward and loss, as well as creating structures of experiences, obligation, agency, and actions (Hacker, Mettler, & Soss, 2007). “By definition, a public policy based on rational choice operates through the use of incentives and sanction: we assume that preferences are determined exogenously, and that individuals will change their behavior according to their calculation of gain versus pain” (Stewart, 1993, p. 317). Sanctions are often equated with regulatory tools, but also fall under the realm of inducements, in opposition to incentives. Sanctions tend to be used to discourage actions that are considered harmful, undesirable, or deserving of stigmatization (Schneider & Ingram, 1990). Sanctions are intended to increase the cost of undesired behavior through penalties (Houston & Richardson, 2004). While the target is considered to be free to decide whether to perform the sanctioned behavior or not, there is a specific, calculable financial deterrent (van der Doelen, 1998).

Rationales and Assumptions Inherent in Inducements

Inducements are often compared to regulation, especially command and control or centralized types of regulation tools. In this way, regulation tools are often times set up as a straw man to inducements. Because regulations are assumed to be the most coercive, inducements are presented as a policy instrument that is based on free will and agency, and thus
much less coercive than regulations. In addition, inducements are expected to alleviate the shirking and avoidance of compliance behavior of regulations. Since regulations are assumed to require behavior that the target would not already perform, and it is assumed to be in the best interest of the target to avoid performing that required behavior, regulations actually produce undesired behavior. Inducements are assumed to alleviate this moral hazard because the inducement creates a situation where it is in the best interest for the target to comply with the desired behavior being induced rather than to avoid compliance.

As with the other policy instruments, inducements have an underlying assumption that the induced behavior would not happen, or would not be performed in the quantity or consistency desired without the inducement (Elmore, 1987). The effectiveness of financial incentives is also an assumption of inducements. Not only that the incentive will elicit the desired behavior, but that the financial incentive will be a vital part of the individual’s decision-making calculation (Elmore, 1987).

**Assumptions about Human Behavior Implicit in Inducements**

With tangible payoffs or sanctions at the core of this type of policy instrument, inducements assume individuals are rational utility maximizers whose behavior can readily be modified or influenced through the use of rewards for desirable behavior and penalties for undesired behaviors (Stewart, 1993). Individuals are assumed to be unmotivated to change behavior without a tangible payoff or threat of sanction; in other words, a calculation of cost is always present in behavior (Schneider & Ingram, 1990; Stewart, 1993). In the case of financial incentives, the incentive is assumed to be valuable enough to be effective as well as to be a source of motivation. Financial incentives contain an assumption that financial calculations are central to the individual decision making process, and through that process, influence behavior
(Church & Heumann, 1989). In addition, there is an assumption that individuals have the
desire, and ability to change their behavior in response to the inducements,
young intangible or cultural values and reduce reliance
and that the inducements “will render irrelevant intangible or cultural values and reduce reliance
on decision heuristics” (Schneider & Ingram, 1990, p. 516). In this assumption, the incentives
are not necessary to create capacity or provide resources, but simply to motivate targets that
already possess the required capabilities. This assumption is evident in incentive tools because
they require the target to demonstrate the desired behavior before receiving the incentive
(Church & Heumann, 1989). The “avoidance of goal displacement” (p. 644) is also assumed,
where any negative consequences of the behavior can be avoided or will be neutralized by the
benefits of the incentive (Church & Heumann, 1989).

Not only is behavior assumed to be malleable based on the inducements, but that the
behavior will change in the predicted way within a certain timeframe (Stone, 2002). In addition,
when the behavior changes, it is assumed that change was the result of a rational decision-
making process resulting in a decision that has maximized utility (Schneider & Ingram, 1990).
Deterrence theory assumptions assumes that “individuals respond to the severity, certainty, and
celestiy (speed) of punishment” (Schneider & Ingram, 1990, p. 516), and that individuals use the
knowledge of the punishments in their calculations related to the undesirable behavior. A cost
calculation that is too high will result in an individual decision to refrain from the behavior
affected by the punishments or sanctions. While the individual cost level influencing people to
change behavior is considered to be different for individuals, it is assumed that all individuals
perform this calculation and choose to change their behavior when the perceived cost is too great.
In addition, it is assumed that individuals are capable of changing their behavior in the specific
way required by the sanctions once the cost assessment has been made (Houston & Richardson, 2004).

**Knowledge Tools**

Information tools, learning tools and capacity building tools can all be subsumed under the term “knowledge tools”. Knowledge tools are meant to provide information to the target that is assumed to be lacking, whether it be instructions about the correct place to dispose of hazardous household material or capacity building tools that teach people a new job skill. A simple way to look at knowledge tools is as an effort to persuade targets to change their behavior based on a new acquisition of facts or other types of information (Stone, 2002; Weiss, 2002). The provision of this knowledge, skill, training, information, or capacity is intended to change individual behavior, and to change that behavior based on the given information and in the desired manner. In other words, knowledge tools are intended to change or refine preferences in order to elicit certain behavior (Wildavsky, 1987).

The major distinction of knowledge tools is the absence of economic or material resources given by, or taken away by the state. “Only data, facts, knowledge, arguments, and moral appeals are offered” (Vedung & van der Doelen, 1998, p. 104). Compliance is encouraged through suasion, advertising, and monitoring of behaviors but without otherwise changing the situation (Weiss, 2002; Woodside, 1986). Targets of knowledge tools may eventually benefit or be deprived based on their actions influenced by knowledge tools, but as a result of the target’s own decision, not one of the state (Vedung & van der Doelen, 1998). Policy analysts often suggest knowledge tools as a starting point for policy intervention because of their non-coercive nature (Hood, 1983).
Knowledge tools rely on cooperation for policy goals to be achieved. Because knowledge tools generally do not contain government-generated sanctions or rewards they are often considered a “soft instrument” (de Bruijn & Hufen, 1998, p. 18), usually perceived as weak at best and ineffective at worst. There is also some consensus in the literature that the information contained within the knowledge tool must be compatible with targets’ values, context, and interests (de Bruijn & Hufen, 1998). Without subsequent and oftentimes, consistent action on the part of the target matching the desired purpose of the knowledge tool, there will be no measurable effect.

*Rationales and Assumptions Inherent in Knowledge Tools*

If the definition of a policy tool is something that attempts to make people behave in a way they wouldn’t otherwise behave, then the rationale for a knowledge tool is that people aren’t behaving in the desired way because they either don’t know that they should, they don’t have the capacity to behave in the desired way because of a lack of knowledge or skill, or they don’t believe they should change their behavior (Schneider & Ingram, 1990; Weiss, 2002). Implicit in this rationale is that it is unnecessary to incentivize or sanction the target in order to elicit the desired behavior. Instead, lack of information or capacity is the primary barrier, and once the appropriate information is relayed to the target, the desired behavior will follow (Schneider & Ingram, 1997; Stone, 2002).

According to Stone (2002), knowledge tools reduce the need for coercive action or force because in the rational model, information will resolve conflict between actual behavior and desired behavior. “Most conflict is seen to derive from ignorance, not from fundamental differences in character or interest” (Stone, 2002, p. 306). The provision of information is thus a persuasive tool where reasoning based on information is fundamental to the assumptions (Stone,
In addition, targets are assumed to be “free agents”, making rational decisions about their behavior that can be automatically and continuously altered with the influx of new information or skill (Schneider & Ingram, 1997, p. 518; Weiss, 2002). The lack of information is viewed as a barrier that once removed, will allow the desired behavior to proceed and that no other incentive or motivation is necessary (Schneider & Ingram, 1990).

An important assumption of knowledge tools is that there is no explicit mandate to change behavior. Behavior responding to the tool is not only seen as voluntary, but as having been subject to “no stronger means of influence than plain recommendations and concomitant reasoning” (Vedung & van der Doelen, 1998, p. 104). In other words, targets are free to decide whether they want to follow the recommendations or change behavior based on the information contained in the knowledge tool. As such, knowledge tools are considered the least intrusive or coercive policy tools, intended to motivate particular behaviors but in the end, requiring no action (Vedung & van der Doelen, 1998). Because there is no formal mandate or sanction for lack of compliance, knowledge tools are often considered to be objective, factual, and non-coercive (Schneider & Ingram, 1997). The content of the knowledge tools, the actual facts, information or capacity building skills are considered to be true knowledge that is unaffected by ideology or values (Vedung & van der Doelen, 1998).

Another related assumption concerns the effectiveness of knowledge tools. Knowledge tools are considered to be the least effective policy tool because “the provision of information does not always lead to change in behaviour” (de Bruijn & Hufen, 1998, p. 19). Knowledge tools are considered voluntary on the part of the target, and as such, are considered to have a low rate of changing individual behavior. In addition, because knowledge tools are expected to create capacity, returns on investment may occur far into the future and “are often uncertain, intangible,
and immeasurable” (Elmore, 1987, p. 178). Regulation and inducements are considered more effective, especially when wide-spread compliance is deemed necessary (Vedung & van der Doelen, 1998).

Assumptions about Human Behavior Implicit in Knowledge Tools

A major assumption about knowledge tools is that they will not be effective if the target does not receive some sort of direct benefit.

The strongest case for information-dispensing action can be brought to bear in situations where the target individual is unaware that the action lies both in his own and in the community's interest. Another potentially interesting situation is the case where the potential targets know that the action lies in the interest of the community, but do not know that the individuals' own interest would be promoted as well. (Vedung & van der Doelen, 1998, pp. 108-109)

This assertion implies a rational actor who is maximizing their utility, where a benefit to the public good that may or may benefit the individual is estimated to satisfy utility less than a benefit directly to the individual.

Knowledge tools are intended to be non-coercive and legitimate, making the assumption that targets will view the knowledge tool as a neutral, technical tool that they can choose to heed, take part in, or not. On the other hand, some of the literature acknowledges a symbolic characteristic of knowledge tools. In many cases, knowledge tools are intended to send a specific message. For example, abstinence only sex education is intended to send a message that abstinence, rather than other forms of birth control is the best method. This is a technical, but also a symbolic and moral message. From this perspective, the rational choice assumptions about
human behavior are not as apparent, and interpretive assumptions come into play. Targets are expected to internalize the symbolic message and learn from it in order to change future behavior.

**Limitations**

The assumptions about human nature that are inherent in policy instruments have limitations that are sometimes acknowledged in the literature, but often are not. This section provides a brief exploration of the limitations of many of the assumptions about policy tools and their connection with human nature and behavior.

**Facts as Objective and Neutral**

The assessment and use of policy tools is often based on an assumption that facts are neutral and describe “the true state of the world” (Stone, 2002, p. 310). Whether facts are neutral or are socially constructed tends to be confined to the discussion of knowledge tools, but there are other areas in which the limitation of the assumption of neutral facts plays a significant role in the policy instruments.

Knowledge tools are most often thought of as relying on neutral, objective facts. But Stone (2002) contends that there is no such thing as an objective fact; rather that facts are produced through social processes that “come not from direct observation but from social knowledge, from the accumulation and presentation of observations and beliefs” (p. 310). Additionally, the task of determining a policy problem that influences the use of a knowledge tool requires a judgment that some state of the world is bad and a different state would be good, or at least better. A judgment about the type of behavior to recommend, teach, or inform is also a judgment call that legitimizes certain types of behavior and delegitimizes others (Vedung & van der Doelen, 1998). Schneider and Ingram (1997) assert that knowledge tools “do not rely on intangible values, symbolism, imagery, labels, and the like to influence behavior” (p. 519).
However, the assumption of the public good could be considered an intangible value that is rife with symbolism, imagery, and labels. If a primary rationale for the use of knowledge tools is to benefit the public good, a corresponding assumption must be that there is a well-defined or agreed-upon definition of the public good, which it can be argued, is not the case. In addition, knowledge tools (like the other policy instruments mentioned) have as an objective to change or shape behavior in a specific way. The specific behavioral objective of a policy instrument is an expression of a specific value, leading to the promotion or legitimation of one behavior over another.

Asserting facts as objective and neutral also contains an underlying assumption that there is no coercion or power involved in the provision of information. The traditional literature considers knowledge tools to be the least coercive and most voluntary. Hood (1983) contends that most information used as knowledge tools can be considered propaganda “in the sense that it is designed to persuade or to structure the informee’s perception rather than to convey purely neutral or technical information” (p. 29). This quote, while recognizing the possible coerciveness of the information contained in knowledge tools, also seems to make an assumption that there is possible neutral or technical information that could be communicated. In terms of policy, this may or may not be the case, indeed, information may be inaccurate or untrue (Weiss, 2002). In addition, facts and information, especially relating to knowledge tools have a normative component. “Using the power and resources of government to spread some ideas and perspectives (but not others) disempowers citizens, induces passivity, and enhances the power and status of government officials. These effects can in no way be described as lenient or voluntary; indeed, they may be more intrusive in more enduring ways than other tools of public policy” (Weiss, 2002, p. 221).
Free Will, Agency and Coercion

Assumptions about free will and individual agency underlie each of the three general categories of policy instruments, especially in the case of incentives and sanctions. Policy in general is coercive because of its purpose to affect human behavior in certain ways. “Policy is deliberate coercion – statements attempting to set forth the purpose, the means, the subjects, and the objects of coercion” (Lowi, 1970, p. 315). Regulatory tools, which tend to include sanctions, are considered to be coercive and intrusive, while incentives are thought to be motivating rather than coercive. In the literature, sanctions are synonymous with punishment and limiting free choice, and incentives with rewards and promoting free choice (Salamon, 2002b). However, assuming that incentives are not problematic because they allow individuals to freely choose whether they will comply with the behavior that will produce the reward, and that sanctions smother free will and agency bears investigation.

Schneider and Ingram (1997) point out that while incentives are considered as rewards and sanctions as punishment, the withholding of a reward can also be considered a sanction or punishment. So rather than simply being a benign option that can be selected or not, with either utility maximization results or no effect, they would argue that there is an effect of choosing not to perform the behavior that garners an incentive, and that effect, or non-receipt of the incentive can be considered a punishment. In a related critique, choosing not to perform the incentivized behavior is an expression of free will. However, in evaluation of the effectiveness of policy instruments, the lack of a change in behavior is often considered undesirable and a failure of the policy (de Bruijn & Hufen, 1998). Treating free will resulting in unexpected or undesirable actions as a failure is a different mindset than assessing the policy in terms of the extent to which people are exercising their agency and affects future policies and choice of instruments.
The level of coercion in incentives is underplayed in the traditional literature. If individuals perform a rational calculation as their decision-making process and choose the course of action that maximizes utility, then setting up an incentive to be the option that will maximize utility does not allow for free will. It rigs the game, so to speak, and thus should not be considered free will, even if in the end, the individual maximized their utility. Additionally, if individuals always maximize utility, I argue that creating an option designed to maximize utility actually limits free will. As a presumed utility maximizer, can I refuse the option that offers the greatest utility? In addition, coercion is equated with power, with sanctions being an intrusive use of government power at best and an illegitimate one at worst. But the offer of incentives should also be considered a form of power. A certain type of behavior is being prioritized, legitimized, and normalized. According to Stone (2002), incentives contain symbolism of normal, civilized, and/or acceptable behavior which is part of power relationship where one group (policymakers) tries to control the other (targets). Is it still free will to choose that normalized behavior? Or is promoting a specific behavior a form of subjugation? I contend that it’s a form of subjugation and an exercise of power. I make no contention whether it is positive or negative, simply that incentives are not innocuous options simply allowing individuals to exercise their free will, but are actually much closer to the definition of sanctions than generally thought. It should also be mentioned that power is not only contained in the hands of the policymaker as assumed by Stone (2002). The ability to resist and choose not to perform an action is a form of power on the part of the target. Wildavsky (1987) even considers it a necessity for democracy. Resistance as power is not generally acknowledged in the literature and may have implications for evaluation research as mentioned above. But even resistance is “shaped and limited by
institutional structures,” (p. 143) or in other words, not an idealized form of free will (Piven, 2007).

**Self-fulfilling Prophecy?**

Another limitation is the consideration of assumptions of human behavior as paradoxical: if a public policy instrument is based on a specific assumption about human behavior, does that assumption actually influence the resulting behavior engendered by the policy instrument? Consider this comment by Bobrow and Dryzek (1987):

> Starting points about group definition or plausible causes of human behavior can take on a self-fulfilling character. Think for example, of Margaret Thatcher's application of social policy based on assumptions about Victorian values in British society. People are assumed to be competitive and self-reliant, rather than cooperative and community oriented; after policy has been applied, they have no choice but to be the former. Policy analysis models are more than analytic tools; they come to be believed as diagnoses of the ills of society, thus taking on a life of their own. (pp. 76-77)

What does that mean for public policy design? Several things come to mind. First, defining the nature of the problem the policy instrument is supposed to fix is not the only place where assumptions can go awry. Some policy literature has focused on issues with problem definition where competing interests define the problem in different ways leading to different solutions (Kingdon, 2003; Rist, 1998). Indeed, a focus on problem definition is important since one of the goals of policy instruments is to alleviate or lessen a perceived problem. However, the self-reflection should not end there. As suggested by the quote above, it is necessary to assess the
“attitudes, behaviors, motivations, and previous reactions to policy initiatives” of the people affected by the policy instrument (Rist, 1998, p. 156).

Policy design sets up the rules of the game, so to speak. Policies create institutions and social structures that constrain future choices about problem definition and policy instrument choice (Jacobs, 2007). These structures may even create conditions where problems are not alleviated, but persist. According to MacDonald (2003), “most social interactions take place in clearly delineated situations, with rules that are relatively well understood by those engaging in action. Moreover, interactions in social life are often repeated, so that individuals can become accustomed to their strategic environment and will be punished if they fail to act rationally” (p. 556). Policy instruments shape the political and social landscape, denoting the players and their roles. Political actors, whether policymakers or targets create strategies and are defined by and define their roles in the process. The roles and other structures (rules) of the game define and constrain action, identities, and interests (Piven, 2007). So if the rules of the game are intended to elicit and reward a certain definition of rational behavior, it makes sense when people act in accordance with that definition of rational behavior, thus reinforcing the idea that humans are rational, utility-maximizing individuals (Schneider & Ingram, 1990). Which may be true, it’s not my argument to debunk rational actor theory. But it’s important to look at the rules of the game and determine what actions, if any are a result of the rules as opposed to some aspect of human nature.

Another self-fulfilling prophecy or paradox is related to the policy analysis process and the study of policy instrument effectiveness. Traditional policy analysis and evaluation utilize statistical tools to analyze data sets within a microeconomic model of rational assumptions (White, 2002). “The assumption of rational self-interest makes it possible to analyse the policy
problem with a great deal more rigour than if we assume a broad range of motivations” (Stewart, 1993, p. 319). Are the methods used to study the effectiveness of policy instruments contributing to the prevailing assumptions about human behavior? In other words, are the limitations of what can be measured and studied through statistical analysis providing their own feedback loop to influence the types of assumptions about human behavior inherent in policy instruments?

*Meaning Making*

Another important implication of policy instruments is the role that they play in creating meaning for targets, policy makers, citizens, etc. It is generally assumed that policy instruments provide information about the intentions and goals of policymakers (Linder & Peters, 1989). In addition, policy instruments often give information about what is considered moral, desirable and normal, and define the boundaries for possible action (Soss & Schram, 2007; Stone, 2007). This information creates and modifies the social structure and culture (Wildavsky, 1987). Policy instruments have symbolic meaning: they may create meanings of legitimate and axiomatic power (Lascoumes & LeGales, 2007; Soss & Schram, 2007). Policy instruments are often specifically created in order to send a message, for example, punitive sentencing requirements for certain crimes are intended to send a message of deterrence and intolerance of that specific behavior (Rist, 1998). It may be used as a “conscious political strategy” (p. 99) in order to affect attitudes and behaviors of political actors, targets, and the general public (Soss & Schram, 2007). Different policy instruments are considered to create different meanings and different relationships between the target and the state. For example, incentives are assumed to create a reciprocal, non-adversarial relationship between targets and the state, whereas regulations are assumed to create an adversarial relationship between targets and the state (Stone, 2002; van der Doelen, 1998).
Economic theory does not take meaning making into account beyond a calculation of monetary costs and benefits. This calculation is assumed to be mechanical and automatic. Costs and benefits are also assumed to have the value regardless of the individual, another part of the theory that does not take meaning into account (Bobrow & Dryzek, 1987). In an example given by Bobrow and Dryzek (1987) of a cost-benefit calculation of demolishing a church in order to make way for an airport, the calculation of value was based on the extra costs that would be incurred by traveling to the nearest acceptable substitute. It does not take into account sentimental, historical, or other meanings that individuals might use to give value to the church.

Economic theory does not take into account the role of prior meanings, experiences, and beliefs in decision-making. Critics of rational choice theory contend that people “act largely according to prior attitudes and beliefs rather than new information” (Stone, 2002, p. 314).

Because policy instruments affect the distribution of resources and economic (and other) behaviors, they have a symbolic element that gives insight into how a problem is defined, and in turn, the state’s perceptions of that problem and the targets affected by the problem (Peters & van Nispen, 1998). “Many policy tools have nonutilitarian, justice-based dimensions in addition to the behavioral dimensions” (Schneider & Ingram, 1990, p. 515). In other words, policy instruments may contain rewards or punishments depending on the perception of deservedness of the target group. The symbolic meaning about targets contained in a policy instrument can shape identities and attitudes both by people affected by the policy instrument and those who are not (Schneider & Ingram, 1997; Soss & Schram, 2007). While this is a social constructionist view of society and meaning making, it can also be argued that even from a functionalist perspective, policy instruments can change meaning. For example, in Arizona, the regulation that determines whether someone is too impaired to drive is set at 0.08 blood alcohol level (BAC). Below that
value, there are no sanctions related to DUI, while above that level, there are sanctions. In this case, I would argue that the meaning of “too drunk to drive” changed from an individual determination of sobriety to a state defined definition of sobriety of less than 0.08 BAC.

Time is also a factor in meaning making related to policy instruments. Even if a policy instrument remains technically stable over time, perceptions about and experiences with the policy instrument are variable and change over time (Peters & van Nispen, 1998). Meaning and legitimacy of policy instruments are constructed and reconstructed over time and is shaped by many different sources such as the media, other policies and legislation, public opinion, personal experience, and efforts to resist or avoid the effects of the policy (Linder & Peters, 1998; Peters & van Nispen, 1998). In addition, there is a learning effect, where over time, target groups garner skills, insights, and interpret meanings about which target groups are considered deserving and which are not (Pierson, 2007; Schneider & Ingram, 1997). These meanings can create perceptions “about their worth as citizens, which in turn affects their orientation toward government and their likelihood of political participation” (Campbell, 2007, p. 123). The connection between perceptions and meanings gleaned from policy instruments by target groups and identification as citizens and players in the political process is a relatively new line of research, but one that is quite compelling. Target groups who are subject to invasive or burdensome policy instruments may be creating meaning about their deservedness and place in society that then affects their political participation (Campbell, 2007; Hacker, Mettler, & Soss, 2007; Ingram, 2007; Prince, 2005; Stone, 2007).

The Exclusion of Context

One of the proposed benefits of using rational choice theory as an underlying assumption for policy is the promise of parsimony and testability. However, the use of a simple theory to
explain a complex process should be questioned regardless of parsimony, and perhaps, because of parsimony. In this view of scientific inquiry, phenomena are reduced to their simplest components in order to “describe behavior of phenomena that is independent of time and place” (Sarewitz & Pielke, 2000, p. 12). In this way, with the exclusion of context, theories can be generalized to other situations, e.g. used for prediction, inference and explanation. This makes some sense from a micro-level point of view; human motivations and behaviors that are not directly affected by policy instruments seem superfluous as a field of study, since the goal is to find a policy lever that can influence behavior (Schneider & Ingram, 1990). However, from a macro-level point of view, there are some critiques to this argument. Research in the behavioral sciences has suggested that “situational factors have tremendous impact on the action of the individual, even seemingly minor situational factors” (Amir, Ariely, Cooke, Dunning, Epley et al., 2005, p. 446). If policy instruments contribute to the structure of society and define the rules of the game, there are few areas in human life that remain untouched by policy. Factors and characteristics that are difficult to measure and operationalize at the individual level, such as culture, individual ability, motivation, agency, etc., are all affected by policy instruments in some way at the macro level. Study of this macro level, ironically, may require a more nuanced view of human behavior.

Context is increasingly viewed as important to policy instruments and their success in changing behaviors and alleviating social problems (Rist, 1998). Context is important at all stages of the policy process, from defining the problem to implementation. The more recent policy choice literature stresses the importance of understanding context, especially in terms of values, beliefs and incentive systems of the targets (Rist, 1998). Context creates complexity in research and is difficult to assess and evaluate, another reason simpler models have prevailed.
“Inability to address complexity leads us to address simplicity”, where simplicity is devoid of context (Ingraham, 1987, p. 615).

Another related issue is the policy context in which subjects of policy instruments are located. Especially in the realm of social policy, individuals may be subject to many different policy instruments at the same time (Stone, 2002). Introduction of new policy instruments and modifications of existing policy instruments must compete with the other instruments intended to modify behavior on the same individual and may even be at cross purposes (Dror, 1971; Stone, 2002). If an individual is only subject to one policy instrument, such as an incentive, it is generally assumed that one incentive is enough to change individual behavior to the extent and manner desired (Rist, 1998). Even with the recognition that policy instruments are part of a larger societal and policy instrument context, the analysis of possible effects prior to implementation and evaluation of those effects after implementation often is done without the consideration of interactions with other policy instruments and/or the societal and political context in which they function (Peters & van Nispen, 1998). Once a policy instrument has been implemented and established, it becomes part of the social context, and according to Ingram (2007), shape resource allocation, citizen capability and other functions but that remain invisible or ignored because it is considered a given. The social process between the implemented policy and the targets involves negotiation, resistance, conflict resolution, and other factors that create meaning and information about a certain policy for both targets, implementers and policymakers (Landry & Varone, 2005). Accordingly, some scholars assert that this social process actually creates a situation where actions on the social environment create institutions that become part of the policy problem rather than alleviating it (Wildavsky, 1987). 

*Does a Rational Actor Assumption Beget Regulation?*
At the beginning of Julian Le Grand’s book *Motivation, Agency, and Public Policy: Of Knights and Knaves, Pawns and Queens* (2003) Le Grand provides the following quote by David Hume:

In contriving any system of government, and fixing the several checks and controls of the constitution, every man ought to be supposed a knave and to have no other end, in all his actions, than private interest. By this interest, we must govern him and, by mean of it, notwithstanding his insatiable avarice and ambition, co-operate to the public good (n.p.).

An analysis related to this quote is offered here that has implications for policy instruments specifically and governance in general. First, and most obvious, Hume seems to be advocating for a type of governance that takes advantage of man’s (in his terms) self-interested nature by using means that appeal to his self-interested sensibilities in order to work toward the common good. This is similar to the concept of the invisible hand, through which individual self-interest leads to the common good, however Hume specifically indicates that some governing of that self-interested behavior is needed.

Expanding on that idea a bit, it seems that if self-interested behavior is assumed, then accompanying governance of a specific type must also be assumed (Macdonald, 2005). In other words, not only must there be a specific type of governance that appeals to self-interest, but there must be some sort of governing (regulation) in general. With the application of market rationalities in non-economic behavior, the idea of regulating the self-interested behavior moves from the economic sphere into the social and individual sphere, expanding regulation and the state into all areas of life.

*Conclusion - Implications for Governance*
It can be said at this point that the design and choice of policy instruments has important implications for governance. “In their design and implementation, instruments are context-sensitive and profoundly tied to governance” (Eliadis, Hill, & Howlett, 2005, p. 14). The governance of the state through (at least partially) policy instruments is intertwined with notions of human nature as well as what is considered within the realm of the state and the legitimacy of state behavior within that realm (Lascoumes & LeGales, 2007; Linder & Peters, 1998; Macdonald, 2005). The types of policy instruments considered legitimate for implementation is contingent on historical precedence, values, a conception of governance and civil society, assumptions about human nature, and types of institutions (social, political, and economic) in the state. As discussed throughout the paper, all of these factors are inextricably intertwined with policy instruments. For example, the types of political institutions have an influence on types of legitimate policy instruments, which once implemented, have an influence on political institutions. Policy instruments are also not implemented in isolation; rather they are part of a complex web of policy instruments, all creating structures and relations within the social world and with unknown effects on each other, on human behavior and on the social world. The study of policy instruments as solitary interventions into people’s lives leaves this interaction and interdependence unexplored (Linder & Peters, 1984).

One of the implications of ignoring the theories of human behavior inherent in policy instruments is to allow policy instruments to be seen as simply a solution to a defined problem, devoid of values, symbolism, social control or normative connotations. A rational decision-making process is assumed where a problem is defined, tools are designed, analyzed, and implemented to help alleviate or solve the problem. But what this view leaves un-illuminated is that government is involved in the social process/social world and is not only trying to solve
problems, but is actively shaping the social world in the process. Policy instruments have technical and social characteristics, both of which help to define relationships between the state and targets (Hacker, Mettler, & Soss, 2007). A policy instrument is a human creation, not neutral, technical instrument (Ringeling, 2005; Stone, 2002). “It is a particular type of institution, a technical device with the generic purpose of carrying a concrete concept of the politics/society relationship” (Lascoumes & LeGales, 2007, p. 4). Policy instruments are strategies for achieving objectives, and as such have some sort of normative quality (Bemelmans-Videc, 1998). This relationship is constantly adjusted to and resisted against by people on both sides of the equation (Pierson, 2007; Stone, 2002). Rational choice theory does not take symbolic meanings into account, so it stands to reason that if a technical instrument also has symbolic qualities, then the influence on human behavior might not be limited to a rational choice calculus.

Ignoring implicit assumptions about human behavior that underlie policy tools also allows society to be seen in the aggregate, as a supposed whole, rather than as individuals living in a social world. It takes the human or the person out of public policy and replaces them with a representation; a representation based at least partly on behaviors elicited by policy tools that may or may not have occurred otherwise, and on assumptions about behavior that may or may not be applicable. The literature on policy instrument design assume that humans have a certain system of motivation and the design of policy instruments simply needs to adapt to that system. However, defining problems in certain ways, offering certain types of policy solutions and not others, focusing on some problems and not others, affects human behavior implicitly in such a way that subjects must act to conform to a policy tool which then is used as a definition of human behavior. This gets at the possibility that perhaps motivation is not exogenous to policy instruments, but rather is, at least partly, endogenous (Le Grand, 2003). Modifying the
assumption about policy instruments’ effects on human behavior and motivation might lead to new insights or ways of thinking and researching.

Policy design “pursues values by recommending purposeful activities” (p. 200), but policy instruments function in an inconsistent, fluctuating environment fraught with competing values and high levels of uncertainty (Bobrow & Dryzek, 1987). In this type of setting, it is reassuring to rely on a model of human behavior that is simple, parsimonious, and testable. There is increasing evidence that humans “rarely behave purposively, consistently, and with the goal of maximizing their expected utility” (MacDonald, 2003, p. 553). This does not mean to throw out the assumption of rational choice. It means that it is critical to ask questions about the epistemological implications of rational choice assumptions of human behavior and the subsequent research that follows (Macdonald, 2005). What does it mean to frame the field in this way rather than another? What is being included and excluded, legitimized and delegitimized, and privileged and disadvantaged? What values drive the field and its assumptions? Would a value other than the pursuit of efficiency create a different form of governance? In addition, it is crucial to acknowledge that policy instruments are historically situated and are contingent on a certain conception of public policy and governance (Macdonald, 2005). Again following Dror’s (1971) advice, the addition of alternate and multiple models for human behavior that allow for more complicated and nuanced assumptions could bring new insights into human behavior and the effect of policy designs and implementation on that behavior. At one point in time, economic rationales and assumptions transformed the study and design of policy instruments. It is not impossible to think that another rationale could do the same.
References


