INSTITUTIONAL DESIGN, SELF ALTERING PREDICTIONS AND INSTITUTIONAL THEORY

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This paper is the product of an attempt to look at institutionalism from the perspective of its applied dimension. What happens when the standard view that goes from theory to practice is reversed? What happens if instead of our typical approach that gives a position of preeminence to institutional theory and considers institutional design an extension of peripheral interest of that theory, we start by focusing on institutional design and we consider institutional theory in the light of its instrumental value to design? Making the practical and applied dimension the starting point and the filter of our approach reveals a different configuration of concepts marking and linking the practice-to-theory continuum: institutional design, reflexivity, social (as opposed to theoretical) predictions, idea-driven-social change, self altering prophecies and prestige loops are some of them. These are indeed poles apart from the configuration of concepts rooted in the positivist and post-positivist epistemology typically used to define the progression from theory to practice. Without negating or disparaging the importance and validity of the standard view, the alternative perspective subsumes it and challenges not only the ways we see institutional theory but also the way we understand institutional and social change.

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1 This paper is part of a larger project focused on the problem of institutional design and the practical applications of institutional theory. The author would like to thank Vincent Ostrom, Elinor Ostrom and Peter Boettke for their constant support of the project.
This paper examines in an exploratory way the problem of self altering predictions and uses it as a vehicle to reframe some of the ways we conceptualize the relationship between institutional theory and institutional design. Its objective is double: First, to overview the problem of those situations in which social predictions, by the mere fact of being made public, change the situations they have predicted; Second, to go beyond the theoretical dimensions into the territory of the applied-level implications of that problem. Even more precisely, the paper focuses on its implications for the new institutionalism as a school of thought or a social science paradigm\(^2\). The paper is organized into four sections. The first section discusses the relationship between institutional theory and institutional design and the central role of ideas as factors of institutional change and foundations of institutional design. In doing that, self altering predictions are identified as a specific case of ideas driven institutional change. The section defines and describes the notion and the phenomenon. The second section focuses on the problems and the challenges created by self altering predictions for institutional theory and design. The third section discusses the constructive opportunities created by self altering predictions by focusing on the concept of “prestige loops”. The fourth section explores what self altering predictions and prestige loops may mean for institutional theory and design and for the advancement of the new institutionalism agenda.

\(^2\) This practice-oriented perspective is based in the Mercatus Center at George Mason University agenda that attempts to build a bridge between theory and practice, between theoretical work in new institutional theory and its practical applications in public policy and international development. More specifically it is the result of the Mercatus research program focused on institutional design and social change.
Institutional Design, Institutional Change and Self-Fulfilling Prophecies

Institutional design – the practice of analyzing and devising the rules of the game that the agents will play as they make decisions in specific action arenas - is the domain where the practical relevance of institutional ideas and theory is tested (Ostrom, 1993; Goodwin, 1996; Weimer, 1995, Koremenos et al, 2004). While institutional theory is an epistemic basis of institutional design, institutional design could be seen as an extension in the practical realm of institutional theory. Institutional design, ideas driven institutional change and (self fulfilling) predictions are intrinsically linked. By its very definition, institutional design points out toward the ideas driven institutional change in its most unadulterated and rational (conscious) form. The process of institutional design is deliberated, intentional, explicit and rooted in strategic rationality. As such not only it implies a very robust predictive element but also it illuminates the role of ideas in the neatest and the most explicit mode possible.

An implicit and explicit recognition of the pivotal role of ideas and predictions in institutional change and design lays at the core of institutionalist literature. Thinking of institutions in terms of “rules of the game” (North, 1990; 1994) evokes the notion that ideas and knowledge about how rules function improves the game both as structure and as results. A knowledge of the relationships between rules and players in the various "games of life" is the basis for using institutional analysis to design better institutional arrangements (Ostrom, 1982). If institutions are the “rule of the game”, then institutional
design is the process by which the rules of the game are imagined, drafted and advanced for adoption by a society or social group. This process needs the development of ideas – a knowledge of or a science of rules enabling both designers and actors “to understand how rules constrain choice and affect behavior” (Ostrom, 1982, 29). For practical purposes, that understanding necessarily takes predictive forms.

To sum up, the process of institutional design, based as it is in knowledge and prediction, is one of the purest and most outstanding forms of ideas driven social dynamics. Therefore, an approach to institutionalism from an applied angle in no way lessens the role of ideas and theory. On the contrary, it puts them in an enhanced, preeminent position. As such it opens a door towards a deep and surprising facet of institutionalism. If one looks at institutional order in that light, one may have the surprise to discover that in the end, the significance of these cases featuring an interplay between social reality and ideas about that reality, or in which ideas matter, is not at all marginal, abstract or pure theoretical. As such, the phenomenon shouldn’t be at all marginal to institutional analysis. A look at institutional change theory re-confirms that conclusion.

_Institutional Change and Self-Fulfilling Prophecies_

One way institutional change is usually approached in the institutionalist literature is from the perspective of long-run equilibria. However the possibility of multiple equilibria and the fact that these multiple equilibria are a norm rather than the exception,
makes the limits of this abstract notion obvious. When there are multiple equilibrium paths, the question becomes: which equilibrium is going to be actualized? Two types of possible solutions seem to emerge (Krugman, 1991). On one side, one could say that the choice among multiple equilibria is a result of past events, processes and forces that push towards an institutional configuration or another. Path dependency is one extreme member of this family of arguments consisting of a wide variety of styles of reasoning. From historical accident to historical determinism, the institutional dynamics by which “history matters” is extremely diverse.3 Thus irrespective of shape and form, the role of past events or processes in determining the long-run equilibria path is very powerful and one would expect “history” to play some role in most cases (David, 1994; Arthur, 1986; Hayek, 1973; Pierson, 2003).

However there is another possible approach that avoids (or at least dampens) the determinism and/or "ad hocery" of the emphasis on the past and initial conditions. In this view the crucial factor affecting the choice of equilibrium is individual beliefs or ideas. The mechanism is simple: decisions depend on the expectations actors have about the future. When expectations feed other expectations one may have cases in which pure expectations based mechanisms are activated. The so called self-fulfilling predictions - predictions which evoke new behavior so that the prophecy becomes true- are the best known members of the family. Indeed one could imagine many cases with multiple

3 Brian Arthur, a pioneer of this approach, shows how history, “as embodied in the (random) sequence of decisions, determines the ultimate outcome”. Krugman (1987) builds “a trade model with learning” in such a way that “any existing pattern of comparative advantage is reinforced over time, so that the current state of the economy determines its future”. Similar insights have been developed in institutional theory itself (Pierson, 2003; Mahoney and Rueschemeyer, 2004). Also one should keep in mind that all approaches that focus on “general social laws” have built similar implications.
equilibria, each of which could be a self-fulfilling prophecy. If everyone thinks that the institutional equilibrium A will be the one in which most interests will be satisfied and expects that most will chose it, that may be sufficient to bring to life that equilibrium. However if they believe in B, that may be sufficient to bring to life that alternative equilibrium. In both cases that could happen even in the absence of any ex-ante coordination plan. There are many situations in which expectations rather than history are the crucial factors in determining equilibrium and institutional change. The fact that institutional change could be the result of aggregated effects of the interplay between ideas, beliefs and expectations (sometimes focalized by an institutional design) is an important step forward in understanding the relationship between structure and change (Ostrom 1998; North, 2005; Denzau and North, 1994; Yee, 1996; Sikkink, 1991; Grunbaum, 1976).

But self fulfilling expectations cases not only offer a clue to the purest forms of ideadriven institutional change but also are touching on the essence of institutional design. By its very nature “design” is not contemplative but transformative – implies change and intervention. The basic nature of the phenomenon that institutional theory and design are dealing with (i.e. human action) is special in the sense that it has an ideas driven,

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4 Classic examples of a combination of self-fulfilling prophecy and institutional design are the “common pool resources” solution mechanisms investigated by Ostrom (1992) or the "Big Push" doctrine of Rosenstein-Rodan (1943). People’s decisions to cooperate in CPRs or of the firms’ decisions to invest depend on their expectation that other firms will invest or other people will cooperate. This is the self-fulfilling prophecy side. The task of policy is to create convergent expectations around high investment or rules for governing the commons. This is the policy or institutional design side. The result are cases of multiple equilibria in which the self-fulfilling prophecy is focalized through policy designs - institutional change paths shaped directly by ideas.

5 The distinction between past driven and expectations driven processes is both theoretically and policy significant. Identifying two modes of institutional change, one in which history matters and one in which ideas (sometimes in the pure form of self-fulfilling expectations) matter, suggests a nuanced approach to institutional design. It is obvious that in most cases a mixture of history and expectations matters (Krugman, 1989). Yet, for analytical reasons it is important to start by separating the two.
reflexive feature – the ability to react and adjust to changes in rules, the environment or its own dynamics (Veld, 1991; Popper, 1957; Hands, 1998). Institutional design suggests change and introduces change, and given the nature of its object it should expect reactions, feedback, adaptation and adjustment etc. Thus reflexivity and even more precisely, self-altering prophecies, are at the core of the relationship between institutional theory and institutional design problems. A closer look at self-fulfilling prophecies as a concept and a phenomenon reveals why that is so.

For Robert Merton (1957) a self-fulfilling prophecy is a "definition of the situation" (typically a stated prediction) which evokes new behavior so that the prophecy becomes true as a result of being expressed. The notion was later extended to cover any "reflexive prophecy" or "self-altering prophecy" – i.e. any predictions that by the mere fact of being made public change the situations they have predicted. The class of such phenomena is large, as self-fulfilling prophecies take many forms and have many facets. For instance the prediction that a candidate will win can create a "bandwagon effect" that leads that candidate to victory. Conversely, it could create a reaction in favor of the opponent (an "underdog effect") and cause him to lose a race that otherwise was set to win (Simon, 1954). The first was a self-fulfilling, the second a self-defeating or "suicidal" prophecy. In a word, instances of "self-altering prophecies" abound in social phenomena. Central to all is one essential element: a claim made about the future - a prediction. The prediction could take any form, from specific, point predictions to generalizations applicable to the future. But in all cases, the reality remains the same: the predictive element sets into motion a social change process (Buck, 1963; Grunberg, 1986; Krishna, 1971; Boudon,
Due to their intriguing nature it is no surprise that these phenomena have attracted some attention in the past. While Nagel (1961: 470) noted that "the frequent occurrence of suicidal and self-fulfilling predictions concerning human affairs is undeniable", Popper identified the problem as "a peculiar complexity" arising "from the inter-connection between predictions and the predicted events":

The idea that a prediction may have influence upon the predicted event is a very old one. Oedipus, in the legend, killed his father whom he had never seen before; and this was the direct result of the prophecy which had caused his father to abandon him. This is why I suggest the name 'Oedipus effect' for the influence of the prediction on the predicted event (or, more generally, for the influence of an item of information upon the situation to which the information refers.), whether this influence tends to bring about the predicted event, or whether it tends to prevent it (Popper 1957: 13).

Nevertheless Merton is the one that made the problem famous. His initial take on the problem was as blunt as it become famous: "The self-fulfilling prophecy is, in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true" (Merton 1957: 477). As shown above, Merton extended the concept to its logical and natural dimensions. Also he elaborated its analysis. He pointed out that "public predictions of future social developments are
frequently not sustained precisely because the prediction has become a new element in the concrete situation, thus tending to change the initial course of developments” (Merton 1936: 903-904). Speaking specifically about social theory or social science, Merton reached the conclusion that the "other things being equal" condition used so often in social theory and economics is never true “because the scientist has introduced a new ‘other thing’ - his prediction”. That was undeniably a very interesting observation and as Nagel (1961: 468-473) pointed out this attribute of social science may have significant practical consequences:

... even when generalizations about social phenomena and predictions of future social events are the conclusions of indisputably competent inquiries, the conclusions can literally be made invalid if they become matters of public knowledge and if, in the light of this knowledge, men alter the patterns of their behavior upon whose study the conclusions are based (Nagel 1961: 468).

Accordingly one could see “social movements developing in utterly unanticipated directions” not only despite but also because scientific theories and their predictions. That, indubitably, means that the phenomenon “assumes considerable importance for social planning” (Merton 1936: 894; 904).

All of the above, to be sure, have a direct relevance for institutional theory. Institutionalism is supposed to produce conjectures, generalization, regularities or even “laws” about the social system. Moreover, as an applied theory, its goal is to inspire and
guide social change, with the help of those very laws or theoretical generalizations it produces and supports. That means that social predictions or predictions based in social science are part and parcel of what we call institutional design. Consequently even if institutionalists shun away from social engineering and “planning” ambitions, and allow a larger space for uncertainty and spontaneous order, self altering predictions still constitute a huge challenge for their approach.

Self Altering Prophecies as a Problem for Institutional Theory and Design

Although self-fulfilling and self defeating prophecies based on nonscientific ideas represent probably the most frequent cases of self-altering prediction phenomena, this paper is concerned with predictions based on or inspired by scientific research, more precisely with institutional theory research. As it has already been noted, this interest is natural: The object of institutional theory as “a science of rules and their consequences” (Ostrom, 1993) is precisely the production of propositions, generalizations and predictions about the dynamics of choices, decisions and behavior under specific rules of the game. As many scholars pointed out, such predictions would "certainly cause actions which would upset the predictions" (Popper 1957: 13; Merton, 1936; Grunberg 1986: 478). Any regularity, observed or detected may be introduced as an institutional design principle in an attempt to change and stabilize the institutional reality around it. But once introduced it could be “reflected” by social actors through an adjustment of expectations and therefore “the outcomes of reflection may transcend the earlier observed regularity”
(Veld, 1991; Henshel, 1976; Vetterling, 1976; Buck, 1969; Kemp, 1962). As a consequence, the regularity may potentially lose its validity, because the underlying assumptions concerning human behavior have undergone change. Any regularity or law concerning institutional systems once formulated, and made public in the system where it is aimed to be a design principle is thus in danger of becoming ineffective.

In other words, the propositions produced by institutional theory that are institutional design relevant are potentially very vulnerable to reflexivity. There is a very high chance that they may become self-altering predictions. On the other hand, the attempt to reach levels of abstraction and generalization that make the propositions immune, leads to predictions that are useless for applied purposes. The bottom line is that a self-altering prediction weakens the effectiveness of prediction and scientific predictions in institutional affairs could become self altering. If that is the case, not only one has identified a difficulty in building a theory and making valid predictions about institutional affairs, but also a fundamental difficulty for institutional design.

Despite the marked relevance of the phenomenon, the institutionalist literature seems to forget it too often. Institutional design principles emerging out of institutional research sound too often as lists of propositions about natural systems impervious to reflexivity, contingency and strategic rationality. That has very important implications for the relevance and usefulness of the institutional theory and for its credibility as a policy relevant discipline. For instance, it is unclear how useful are for a social actor or group engaged in analyzing, improving or building a concrete design for an international
institution the following “rational design conjectures”, emerged out of an extensive study of “the rational design of international institutions”: (a) restrictive membership increases with uncertainty about preferences; (b) membership increases with the severity of the distribution problem; (c) scope increases with number; (d) scope increases with the severity of the enforcement problem; (e) centralization increases with uncertainty about the state of the world; (f) centralization increases with number; (g) asymmetry of control increases with asymmetry of contributors; (h) flexibility decreases with number, and so on (Koremenos, Lipson and Snidal, 2004)

Irrespective of the definition of institutional design, designing an international institution such as UN or WTO using only such “design conjectures” wouldn’t take somebody too far. Even assuming that the “conjectures” are accurate their practical relevance is a different issue. Useful as they may be, their usefulness is only marginal to the thrust of the institution building effort. Others are the conjectures and principles that give the bulk and substance to a real-life institutional design process. These conjectures and principles one uses in real life for such exercises are closer to agency, more contextual, teleological and functional. As such they open themselves to precisely the kind of vulnerabilities that are associated to the self altering prediction phenomenon.

*The Paradoxes of Prediction*

If we take seriously the relationship between public predictions, social action and
institutional change, then the problem of institutional design public predictions emerges as the central problem of institutionalism. The relevance of institutional theory itself is ultimately at stake. The problem is deeper than the notion that by the very fact of announcing the identification or implementation of a new regularity, institutional theory could alter the system is predicting about. The paradox of institutional theory and design goes even further. Following the line of logical implications one could go as far as to infer out of the impossibility to predict the dynamics of institutional systems, not only the limits of institutional theory but also the impossibility of institutional design. This argument was made by the pioneers of self fulfilling prophecy studies and reviewing it and the responses it has received is an important way to identify the limits or parameters of institutional design. In other words, the paradoxes of self altering predictions becomes a key conceptual tool helping to delineate the perimeter of institutional design, its feasibility and its relationship to institutional theory.

The first students of self fulfilling predictions were very quick to point out that due to the existence of reflexivity, institutional design is confronted with a regress, and hence a paradox: the prediction of a prediction of a prediction and so on is theoretically possible (Stack, 1978; Henshel, 1971; 1982). How could the infinite regress - prediction, self-alteration, revised prediction, self-alteration - be stopped? The question was more than a mere theoretical game - such regress invalidates the very notion of regularity-based public policy design. The impracticality of institutional design seemed thus to be a natural conclusion of a theory of rational public predictions. The theoretical possibility of regress and the prediction “impossibility” paradox were identified from the beginning as
a key problem in social sciences and generated a literature that branched into rational expectation theory (Grunberg and Modigliani, 1954; Simon, 1954; Lucas, 1976, Muth, 1961) and sociology of knowledge (Merton, 1958, Henshel and Kennedy, 1973). One can identify in the history of that literature a brief moment, prior its expansion and transformation into the “ratex” and “sociological constructivism”, when the focus on that specific problem was the main concern of the scholars involved. It looks like the attempt to solve this paradox of the ever elusive match between ideas and reality, (or expressed in institutionalist terms, between the theory of institutions and the reality of institutional processes) was crucial as a step in the legitimization of the public policy relevance of their work. How is institutional design possible despite the paradox of self-altering prophecies? Or, assuming self altering predictions, how is it possible to have a consistent theoretical account of the possibility of institutional design?

Responses to the Paradoxes of Prediction

The answers to the challenge self altering predictions pose to institutionalism could be organized into three categories: The first and the easiest at hand is that although theoretically possible, the self altering prediction regress is not such a big problem in real life. The domain and magnitude of such phenomena are limited. An entire set of qualifying factors create strong limits: unpublicized predictions, highly esoteric predictions, predictions incorporating magnitudes that individuals cannot measure unaided, predictions requiring technical skills, predictions released solely to a selected audience, predictions invoking opposition from the mass media "gatekeepers," predictions about persons with limited comprehension or about social isolates,
predictions regarded as unimportant or unbelievable or predictions about unalterable events (Henshel, 1976). All of the above make the task of institutional design less vulnerable.

A second line of response is based on the observation that even if and when they take place self-altering prophecies do not automatically rule out the possibility of prediction and implicitly of institutional design. There is no reason "why public reaction to a prophecy cannot itself be subject to investigation and, ultimately, prediction", self-alteration may itself become predictable (Henshel and Kennedy, 1973; Henshel, 1976). This is both a theoretical and an empirical point. However its ultimate relevance for institutional design rests on the empirical validity of the claim. Because the problem is not "present across all of the topics of social science", by itself, "it does not demonstrate the inherent unpredictability of all events and processes of the entire domain". Some situations and predictions are immune to self-alteration while others are more vulnerable. By implication, that applies to institutional design situations.

Third, as an entire line of literature originating in Grunberg and Modigliani (1954) and Herbert Simon (1954) tried to show, under specific conditions it can even be formally demonstrated that a "coordinated" "prediction exists for certain self-altering situations such that the infinite regress of prediction/self-alteration/revised prediction/self-alteration/... comes to a halt in a finite number of steps" (Henshel, 1976; Grunberg and Modigliani, 1963; 1965; Galatin, 1976; Devletogou, 1961). The problem of infinite regress is thus eradicated. These theorems do not identify the specific solution but demonstrate that such solutions is conceptually possible. In other words "such possibility theorems merely show that the door is not barred; they do not furnish the precise tools for
opening it” (Henshel, 1976).

The three types of arguments could lead (separated or in conjunction) to further elaborations of the answers to the paradox of prediction. For instance one could make the case that institutional design is still possible despite the regress paradox because of the uncertainty, knowledge asymmetries and other structural information imperfections present in social systems. Thus institutional design prediction becomes operational due to the “a-rational” dimension of the social system. In fact, the introduction of that dimension gives a more realistic representation of the nature of the system than the full information, full rationality implied in the abstract assumptions that lead to the theoretical possibility of an infinite regress, with no accurate public prediction possible. That is to say that the models and discussions of institutional design assuming full rationality are bound to exaggerate the magnitude of self altering predictions. Also they distort the reality of institutional design, or do not capture realistically the situations when design prediction accomplish their task. An alternative approach integrating ignorance, asymmetric information and learning opens thus the door for further elaborations that look at the problem from a more nuanced angle. An approach that emphasizes the key role that learning plays in the process and the internal dynamics of the systemic incorporation of learning, is definitely more intricate than the initial rational choice prediction-regression models imply.

A telling example of how this alternative could be developed is offered by Veld (1991, 3-19). Veld outlines a process in which institutional design is not a matter of total success
(i.e. the design is 100% implemented and effective) or total failure. Instead the attention shifts to the more realistic situation when one has a mixture of design effectiveness combined with a structural diminishing effectiveness of design and control due to a process of learning and adaptation. In it, the institutions, or more precisely the individuals affected by the institutional design, gradually change and adapt as they react in a reflexive manner. Initially they will take the new rule as an incentive to change their behavior in a direction that corresponds more or less to the intentions of the designer. But “that change at the same time, in many instances, contains deviation from their own most preferred alternative, and therefore is experienced as a disagreeable event”. It is just natural that “in due course the reflecting actors will utilize their learning capacity to avoid the disagreeable effects of the policy concerned”. In other words, actors do not predict from the beginning and then get trapped or paralyzed in a prediction regression cycle instantly set into motion. Instead, they learn and adjust their behavior as time goes by. The learning lags and the time factor are crucial. At the same time, the processes affecting the application of design principles, while still reflexive, are different from the pure logic of reflexive alteration. In general they will gradually succeed better and better as time goes by. “Avoidance, sabotage, disobedience, resistance, and any other kind of creative activity to restore the original level of satisfaction can be observed. Thus the objectives of the regulating will go through a gradual decrease of effectiveness” (Veld, 1991, 5). Cycles could appear in this case too – though they are of a different nature: “…we might expect that after a correcting accumulative policy measure a new period of diminishing effectiveness will start. A seemingly infinite series of interactive actions could take place. … gradually the corrective adaptations will decrease in impact, that as a
consequence effectiveness will decrease more and more until eventually crisis will emerge” (Veld, 1991, 4-6). In conclusion, cycles and regress seem to be an intrinsic part of the institutional design problem. But that is not always, and not even most of the time the result of self-altering prediction mechanisms. The bottom line is that once a layer of complexity and realism is added over the initial model, the dynamics of the reflexive phenomenon looks quite different. A “gradual decrease of effectiveness” of the institutional change as prompted by the institutional design principle is different from the total and instant annulment of the design concept from the very beginning, through the regress of prediction - self-alteration - revised prediction - mechanism.

The diversity of mechanisms by which ideas, knowledge and learning affect institutional design and institutional change could be thus larger than initially thought of. And the self-altering predictions’ domain, although sizeable, is less extended than the pure rational choice based theory may lead us to believe. The self-altering prophecies at work in reality are less clear-cut and more intricate than the theoretical models imply. Yet, when all is said and done and the feasibility domain has been delineated with a modicum of clarity, the bottom-line remains the same: self-altering prophecies remain a key challenge for institutional design and institutional theory. The fact that the challenge is more empirical and situation-dependent and difficult to generalize makes it even more noteworthy.

Self Altering Prophecies as an Opportunity for Institutional Design

19
Once the resilience of the self-altering predictions challenge is established as a fact and its empirical, case by case nature revealed, the search for solutions becomes more of a practical than a theoretical problem. This is the point where institutional theorists may decline the challenge and give the floor to the applied institutionalist. However when considered from a different angle, self-altering predictions have, in addition to their troublesome aspect, a very interesting and constructive facet. The theoretical lenses they provide may lead us to identify not only obstacles but also mechanisms meant to help institutional design and development. And this facet may lead to critical insights on the nature and success of the work of institutional theorists. Indeed in an ironic way, the best illustration of the institutional design relevance potential of self-altering predictions is precisely in the area of schools of thought or scientific disciplines. More precisely the concept of self-altering prophecies may put us in the position to identify avenues through which the phenomenon they designate is working in establishing and sustaining the disciplines of social science. The corollary is that self-altering predictions could be put to work for the advancement of institutionalism through an enhanced understanding of the way it, as a school, could improve its impact, prestige and effectiveness. In order to do that, one has first to introduce the key concept of “prestige loops”.

*Prestige Loops and Institutional Theory*

The origins of the concept of “prestige loop” could be found not only in the abstract theory of self fulfilling prophecies but also in the plain observation that the practical
performance of a social theory or discipline is a condition of its prestige. Once a social theory is employed in practice, the results, predictions and applications matter. The more successful they are, the more prestige the theory and discipline will get. The more prestige will get, the more it will be employed, used, referred to etc. This standard feedback mechanism is straightforward and uncontroversial. This is a virtuous circle that any discipline or theory wishes to set into motion. (Or a vicious one if its functioning the other way round and then the disciplines try to avoid it). Yet in discussing this essential feedback loop, one important possibility is forgotten: that disciplinary prestige can influence predictive power. What if and in what measure the very prestige of a predictor sets into motion the self fulfilling mechanisms leading to the confirmation of the prediction? This is indeed a very intriguing phenomenon. Scenarios in which the prestige of predictions is generating self fulfillment are not difficult to imagine:

We are concerned here with a "feedback loop" which incorporates as variables the prestige of a discipline and its predictive accuracy. The "prestige loop" begins with a prediction from a source identified with a particular discipline. The prestige of the discipline, via one of several paths, affects the accuracy of the prediction, and this degree of accuracy, in turn, acts upon the prestige of the predictor and his discipline (Henshel, 4).

The process is further illuminated when one shifts the attention from single predictions, to a sequence of predictions and then to their long-run consequences. In both cases the reliability of the prediction will be strongly influenced by the credibility and prestige of
its source. But in the case of reiterated predictions the initial prediction alters the context of the following predictions. The credibility of the next forecast will be affected by the previous predictions. Each new round builds on the previous rounds. Thus the reiteration process generates an increase or decrease of prestige. Election polls predictions constitute an excellent example in this respect. Polls affect contributions. A poll predicting a winner results in an increase of enthusiasm and contributions. Funding affects logistics, strategy, advertising and staffing. The election results reflect these factors. That increases the prestige of polling. Next electoral cycle, polling predictions get attention, prestige and even more influence.

Each individual increment of influence extended on predictive power by changes in disciplinary prestige may be small, but once a threshold is passed, "deviation amplification" can occur (...) and make small incremental changes cumulatively important. One could speak of a prestige loop for individual prophecies with a built-in multiplier effect (Henshel, 1976, 43).

The phenomenon, if properly understood, could offer indeed a unique understanding of the relationship between social sciences and social reality and more precisely in our case between institutional theory, institutional design and institutional change. And that could lead to a new perspective on the avenues available to institutionalism as a school to build its own strategy of disciplinary and institutional development.
The Nature of Prestige Loops

Probably the most productive way to frame the discussion of the issue is to take as a guide the pioneering work of Richard Henshel. Taking for granted the chain of influence from predictive power to disciplinary prestige, Henshel reversed the direction of the influence arrow, closed the loop and elaborated the most advanced exploration up to date of influence of prestige on predictive power (1975; 1976; 1990; 1993). Following Henshel one could get not only the best overview of the prestige loop problem but also open the way for the application of its conclusion to the specific case of institutionalism. In his view, prestige loops “represent radical departures from accepted views about the nature of prediction” but are more than a theoretical curiosity. They are a challenge to the way we understand the relationship between theory and design, between ideas and reality. The circularity defining them “is no mere game of the intellect but a severe practical problem” because it is not just a matter of prediction but also a matter of social construction and control. Henshel pressed the discussion to deal explicitly with the issue of design: The more a discipline is involved in creating/designing systems, the more chances it has to stabilize the range of the social reality of disciplinary interest under a set of regularities. The more that happens, the more its predictive power will be manifest and the confidence in it will consequentially grow. In fact one could classify various types of natural and social systems as points on a continuum in function of the different mechanisms and processes by which degrees of organization and “stabilization” are introduced. And that, in his view, is related to how “regularities”, once introduced, influence prediction capabilities through prestige loops. At one extreme are “engineered
systems" – artificial systems that give almost full control over their functioning to their draftsmen. At the other extreme of the continuum are the “unaltered systems”. In between are the “designed systems” (Henshel, 1976, 4, 43).⁶

From this perspective, engineering systems could be seen as a reference point and a yardstick for the assessment of the relationship between theory, prediction and design. The ultimate test for a science is its ability to produce engineered systems. Once the test is applied to social sciences, two facets of the same reality are revealed. First, the fact that there are few engineered systems in society has definitely something to do with the limited predictive capacity of social sciences. Second, the fact that successful social prediction is very rare may have something to do with the fact that there are few engineered systems in society. However, notes Henshel, “rather than an "either/or" choice this can be viewed as a vicious circular process”. As long as a science “is low in prestige it lacks the power and legitimacy to create engineered systems”. But “so long as engi-

⁶ Henshel’s starting point is an ideal type taxonomy of phenomena that is vital for any discussion of prediction and design. A designed phenomenon is the product of purposive manipulation of physical or social reality “organized in function of a set of goals explicitly recognized by the manipulators”. An engineered phenomenon is a type of designed phenomenon “constructed according to the findings of science” in which “scientists are in control with respect to the design characteristics”. In a sense the engineered phenomena imply a “strong” form of design. Finally there are unaltered phenomena, that are neither designed nor engineered. A mere overview of the typology makes clear that predictions about unaltered phenomena, predictions about designed systems and predictions about engineered systems pose different problems. In each category predictions have different effectiveness. “Designed systems constructed under the auspices of science (that is, utilizing scientifically distinguished regularities) generally yield predictions superior to predictions about designed systems constructed by other means”. In general, “engineered systems permit immensely stronger prediction than other designed systems”. However “the existence of a differential quality of prediction in engineered, designed, and unaltered phenomena does not imply differential worth to efforts to predict in these situations” (Henshel, 1976, 4). Yet one should recognize that the stronger the engineering element of design, the stronger the ability to make predictions about that system. However, to understand “prestige loops” one should not go so far as to the extreme example of fully functional engineered systems that fuel the reputation of a specific theoretical disciplinary perspective. Instead one could see the three types of systems (unaltered – designed- engineered) as shades on a smooth continuum. That could open up a clearer perspective on the different mechanisms and processes by which degrees of “stabilization” are introduced and how “regularities” once introduced through prestige loops influence prediction capabilities.
engineered systems are absent, disciplinary prestige remains low because social phenomena in an unaltered state do not lend themselves readily to prediction”. Leaving aside for a while the issue of social engineering and its moral and political implications, the emphasis should be put on the “dilemmas of social research” given by “a peculiar circularity”. As Henshel synthesizes the issue:

So long as engineered social systems are lacking, prediction will remain impoverished, although progress in limited regions may be detectable. Yet without the assurance provided by predictive successes, the confidence to think in terms of system creation and the conviction required to overcome resistance to such creation is lacking. This failure to create scientifically based designed systems in society results in predictive mediocrity, so that the circle remains unbroken (Henshel, 1976, 41-42)

The example of economics seems to confirm this idea. Economics comes closest among social sciences to the materialization of its theories through institutional arrangements and thus very close to the border between what Henshel called “designed systems” and “engineered systems”. Economics is indeed considered by many the sole social discipline that comes close to inspire something comparable to engineered systems. Because of its many applications, both at the macro and micro level (the Federal Reserve System, production and distribution optimization systems in business etc.), economics has a considerable impact on "the way in which major contemporary social institutions are organized and carry on their business" (Biderman, 1969:129; Wible, 1998; Coats, 1993).
And when institutional arrangements "take forms that accord with the postulates and conceptual apparatus of the science [of economics]", that definitely facilitates the strong prestige and influence economics has. In other words, economics is a paradigmatic case study of how a social science, a discipline "with sufficient prestige", can eventually "shape the institutional forms of its subject matter", and "pervade the thinking on the subject that many of its postulates appear obvious a priori science" (Biderman, 1969: 130).

The ramifications of the process, once set into motion, go even further. For instance, once a theoretical framework is institutionalized, data start to be created or collected on the pre-defined conceptual lines of the theory that is inspiring the institutional design. That has, to be sure, consequences for the mother discipline. With more data (and also data that happen to be pre-fitted to a theoretical framework) the status and the potential of "scientific analysis" of the discipline increase. In the case of economics it looks like "the life of the society produces data that accord directly with the models of economics with regard to units, processes, and relationships, precisely because these models are the ones used to guide and rationalize so much of social activity" (Biderman, 1969: 129). Not only data are more available but also the standards and criteria through which policy evaluations are made "become, unconsciously, quite close to the mode of thinking of the scientist, so that the predictive validity of his instruments becomes increasingly easy to demonstrate" (Biderman, 1969; Henshel, 1976). Thus in the end the very existence of available data may work as a reconfirmation mechanism for the disciplinary paradigm inspiring the data collection in that specific frame.
The feed-back loops may also explain the financial and public support for a discipline. As many have pointed out, the growth of a discipline depends to a considerable degree upon the financial support it receives. The number and quality of researchers of a school of thought depend in a significant measure on the available resources (Wible, 1998; Coats, 1993). But financial support could be also seen as part of a feed-back loop. "Support enhances predictive power, predictive power enhances prestige, and prestige in turn unlocks the coffers. Where and how does this cycle begin? The concept of the prestige loop may provide a conceptual tool for this question in the sociology of science" (Henshel, 1976, 41-42)

To sum up, prestige loops are far from a mere theoretical construct. The mother discipline of new institutionalism, economics, offers an outstanding example of this phenomenon at work. Once locked in a prestige loop, social science predictions get increasing self-fulfilling attributes and set into motion a dynamics that in the case of economics has pushed it as a discipline to visibility and social influence. In fact a two-way street between effectiveness in applications and disciplinary reputation has been opened. Thus, in the end one could identify in the problem of self altering prophecies elements of outstanding practical relevance.
Implications of Self Altering Predictions and Prestige Loops for Institutionalism as a School

The problem of self altering prophecies, and the feed-back loops in institutional design raises a series of important challenges for the way we understand not only the link between institutional theory and institutional reality but also the nature of what counts as disciplinary success and of the means mobilized to achieve it. Using the perspective and criteria offered by self altering predictions and prestige loops, one could distinguish two routes of disciplinary prestige and influence. The two are the result of a distinction between two operating modes of self altering predictions. The first is cultural. In this case institutional theory infuses with its assumptions the common culture and the public discourse. The second is institutional. In this case institutional theory is inspiring institutional designs and novel institutional arrangements.

The Cultural Mode

As regarding the cultural route, the key question is in what measure the potential future success of institutional theory may be a function of an offer of ideas and insights that might easily be assimilated into the common cultural assumptions\(^7\). In this respect economics – the mother discipline – may have already exhausted the potential existing out there. Currently the voices of those complaining about the measure in which models of man used in economics (opportunistic maximizers) influence the organizational

\(^7\) The “disciplinary influence on common cultural assumptions may lead to an apparent increase in the accuracy of the field’s perspective, and this may in turn enhance the prestige of the field”.
behavior and management practices etc could be heard louder and louder (Goshal, 1996). The debate over the ethical implications and the behavioral and organizational dynamics encouraged by the daily use of homo economicus assumptions in understanding and managing firms have generated a series of reactions amounting to a small critical literature (Moschandreou, 1997). Seen in the light of this literature, economics offers the perfect example of how a theoretical or discipline’s perspective diffuses and is incorporated into the culture and assumptions of a social group or society. Economics would share this honor with popular psychology - the psychological views about personality, attitudes and character that become at one point fashionable and then become part of the culture. For instance the more concepts shaped by a specific psychological outlook such as “inner directness” and “outer directness”, “introversion” and “extroversion” get disseminated, “the more accurate the general predictions of that perspective seem to be”; and “the more surveys confirm the correctness of the perspective, the more confident its spokesmen become”8. Models of man in economics and its behavioral assumptions may have passed the threshold of such a process.

One may be tempted to say that it is time for new institutional economics to circulate an alternative view of rationality, behavior or model of man, maybe on the lines defined by North (2005). Yet it is doubtful that this is the main front where new institutional economics as institutional theory could get the most in terms of advancing its agenda. The reason is double: First is the fact that new institutional economics is an institutional

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8 The logic of the process is clear: (1) a model of man with associated general predictions, (2) widespread acceptance of the model and the predictions, (3) corresponding changes in thinking and behavior, (4) expert studies that confirm that people do indeed conform to the model, (5) heightened prestige of the viewpoint, (6) greater popular acceptance of the view, (7) more changes in thinking and behavior (Henshel, 1976).
theory, therefore it has to live or die in the institutional design realm. The second is more subtle and has to do with the dynamics of culturally induced self fulfilling predictions as opposed to institutionalized prestige loops. The cultural diffusion of a discipline's perspective could undoubtedly lead to greater prestige. But studies warn that “the incorporation of a perspective into the world-view of a culture can so trivialize the predictions derivable”. Thus predictions come to appear "obvious" and not worth any attention. In short, “becoming part of the Weltanschauung can be a two-edged sword in terms of disciplinary prestige: the predictions tend to become more accurate, but may seem less striking” (Henshel, 1976). Economics is again a case in point. The Public Choice school went through a similar cycle. Many of the novelties introduced in the 1970-80’ by its particular take on political behavior are considered common places today in the Weltanschauung of social scientists.

The Institutional Mode

All of the above lay bare the crucial role the direct practical applications of theoretical insights to institutional change have in a general strategy aimed at disciplinary advancement. Of exceptional importance are the applications aimed at designing institutional systems and arrangements that once institutionalized create the conditions for the emergence of robust prestige loops. A key lesson one could learn from the study of self altering prophecies and feed-back loops is that prestige is a rare and powerful resource. The strategic corollary is that prestige should not stay idle and instead of
dissipating should be centered around a focal point. Once a discipline has gained it, prestige, irrespective of its source, should be actively managed, exploited and invested. It is prestige that sets the reinforcing feed-back loops in motion. Therefore for a discipline such as institutionalism to take off, the administration of prestige seems to be a priority. The existence of self-alteration in prediction about social phenomena, and especially the existence of prestige loops associated with these predictions, implies that the institutional theory can conceivably alter its own accuracy and prestige by a judicious selection, or withholding, of predictions. Well targeted, well publicized predictions could do more for the advancement of the agenda than over the board generalizations aimed exclusively at a closed academic audience. It looks like institutionalism can influence the accuracy of its own performance (predictive or design) through a wise administration of the combined effect of institutional theory predictions and the institutional designs associated to them. In other words, self altering predictions shed a totally new light on the paths of advancement of the school.

If that is the fact then institutional design becomes decisive for the prospect of the school because to be effective, ideas and theories are packaged and presented to the public not so much as a corpus of knowledge but as institutional designs or institutional design solutions. Thus one of the key questions in evaluating the state of the discipline is in what measure institutionalists have accomplished this task. The current demand for institutional design solutions in areas such as international development, transition

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9 The epistemic prestige gained by the members of the epistemic community needs to be converted and materialized in institutional forms. DC North in economics, the Ostroms in political science are powerful prestige reservoirs. This strategy in no way should be seen in a narrow way as reduced to the standard academic or scholarly prestige.
societies, post conflict reconstruction has been huge. However, the current supply of such solutions has been utterly insufficient. Institutionalism seems to be strong on theoretical conjectures and empirical retro-dictions and weak on applications. Moreover, the very notion of what institutional design represents as a practical process seems to be in great need of elaboration and clarification. General advice on rules and their implications for human behavior is one thing. Giving directions and concrete solutions to concrete problems in concrete situations is something else. Institutional design, by its very nature, combines general knowledge with local and tacit knowledge. Therefore the anchoring in the local knowledge of the institutional context in which it is supposed to be applied is of special significance. But even if its function is not fully understood and its approach underdeveloped, it is safe to conclude that institutional design is the ultimate test and also the ultimate guarantee of the viability of institutionalism as a school of thought and as a discipline.

A Change of Perspectives

The recognition of the role of prestige loops and self fulfilling prophecies has a series of implications for the institutionalist agenda. The most fundamental is a reconsideration of the relationship between the pure epistemic element of the discipline (theoretical and empirical generalizations) and the nature and objectives of the applied agenda. Although its methodological literature speaks of confrontation of theories, hypothesis testing etc. the truth is that the places where the institutional theory gets its final validation and is
confirmed as a worthy pursuit, is the institutional change practice (Wible, 1998; Goodwin, 1972). Because institutional theory it is at its core a science of rules and behavior within rules, institutional theory, maybe more than any social science, lives or dies through its social applications. That doesn’t mean that epistemological and methodological accuracy defined on the standard social science criteria are not important. Yet their role is instrumental. If the processes identified as “prestige loops” are a good predictor of disciplinary success, then the academic disciplinary arena could not be seen in isolation from the larger arena that includes the domain of applications. Overall that implies the reconsideration and the adjustment of the falsificationsist-verificationist views of how institutionalism ideas advance. The sociology of the “growth of knowledge” phenomenon becomes as important as its epistemological teleology. And in this respect, prestige loops emerge as the pivot that links the theoretical and the practical agenda of institutional theory and as a key in the study of its advancement.

The corollary of the previous point is that the applied agenda of institutionalism means more than applying (more or less pre-tested or empirically established) conjectures to specific situations. It means creating institutional - reputation bases with a view to practice. Accordingly that means that institutional theory should have a preoccupation with the institutional basis of institutional theory itself. If what we learn from the study of prestige loops is true, these disciplinary institutions should have a double function, above and beyond the standard one of advancing the corpus of theoretical knowledge. The first is to create bridges between theoretical-analytical work and practice. The second is to create vehicles able to promote institutional design projects and to become thus direct
receptacles of reputation. Because the intellectual division of labor would make the consolidation of functions difficult, the institutional infrastructure of institutionalism would then consist of two layers: one of applied institutions and a second of academic ones. One could imagine that in order to optimize their effectiveness, a connection or coordination should exist between them. Together the two would create an informal network of organizations advancing a common agenda. In the light of this analysis it seems unlikely that in the absence of such a common front, institutionalism, as a discipline, could reach the critical mass necessary to have a coherent and systematic epistemic and institutional impact\(^{10}\).

The implications of this standpoint that privileges practice in relationship to theory for the way institutionalism and the progress of its agenda are seen are radical. There is a sharp contrast between on the one hand the standard views that emphasize the predictive and explanatory power of independent propositions or hypothesis and on the other hand the more holistic approach involving practical applications, prestige loops and the growth of the institutional infrastructure of the discipline itself. In the new light, the production and refutation in academic settings of the standard scientific conjectures and propositions continues to be a vital part of the process. Yet it is recognized as exactly what it is: an important input into a larger process. That means a shift from a perspective focused almost exclusively on the internal dynamics of the debates in the epistemic community (i.e. institutionalists discussing and testing their ideas in closed communities of like-

\(^{10}\) An interesting question is in what measure could ISNIE work as a focal point for such an effort in trying to convey a sense of identity and create a reputation basis for a network consisting not only of scholars and their academic bases but also of applied organizations.
minded scientists) to an enlarged perspective that balances the pure academic view with a concern for what happens outside of the discipline when the ideas produced by academic institutionalists are implemented.

Yet it is noteworthy that these potential benefits derived from a reformulation and extension of the institutionalist agenda by incorporating a practical dimension, are counterbalanced in the minds of many institutionalist scholars by a concern with the ethical implications of such an approach. Many institutionalists are aware and fear that the design of engineered social systems would entail in some cases what may count as forms of manipulation or that it implies changing or even tearing down established institutions. But in order to be able to step outside the confines of academic world, institutionalists should frontally face this ambivalence towards the applied dimension of their work. To be an institutionalist, means that the knowledge you produce, if worthy, may be used in practice for good or evil. Designed and engineered social systems might be sometimes (and in some circumstances are) a threat to human freedom or well being (Hayek, 1973). However to conclude from that all attempts to design or engineer social systems would be dangerous and immoral is a fallacy that should be equally avoided (Henshel, 1976, 58; Simon, 1969; Ostrom, 1992).

All of the above put the institutionalism as a school in a new perspective. But one could make a step further from there, beyond the discipline. One of the most important insight from this overview of the relationships between institutional theory, institutional design and self altering predictions is an understanding of the fact that this relationship implies a
new way of conceptualizing the problem of institutional change. Seen through the lenses created by the concepts of self altering predictions and prestige loop, a new framework of understanding the process of social change seems to emerge. In it, institutional theory and institutionalism are not something detached and peripheral but part and parcel of the process of change. As interventions in the system aiming at changing the system, they should be incorporated in the model of social change whenever that is the case. And in the case of contemporary post-industrial societies that is increasingly the case. Understanding social change should include explicitly the role of institutional theory, institutional design and institutionalists as agents of change. In other words, taking seriously the role of self altering predictions and prestige loops, leads to a radical change of perspective in which institutionalist ideas and the agents and organizations promoting these ideas are not mere neutral observers but elements of a dynamic and reflexive social system. With that comes indeed a different understanding of the role of institutional theorist in a social change process in which institutional theory is a factor of institutional change, institutionalism as a discipline is a vehicle of change and institutional design is a tool of change.

Conclusions

Looking at institutionalism from its applied end reaffirms that institutional design is always rooted in one degree or another in institutional theory, broadly defined as knowledge about rules and their impact on human behavior. By its very nature, it is an
attempt to change the social system in fore-determined directions based on a conceptual and abstract understanding of the system. But given the nature of that system, it seems very likely that those predicted directions or the predicted principles at work, once they become public, they will generate reactions of adaptation and adjustment from the social actors targeted by the change. Thus the problem of self-altering predictions emerges a central issue in institutional design and by implication in institutional theory. The advance of our approaches to institutional design depends in a non-negligible measure on the way we understand the role of reflexivity and self altering predictions in institutional processes. The corollary is that the practical relevance of institutional theory depends on the ways it understands and deals with the self-altering potential of its propositions once these propositions become design principles.

One could identify several modes of approaches to the problem of the relationship between self-altering predictions and institutional theory. The first is in fact a non-approach - mere neglect. The second is to see all self-altering predictions as a foundational theoretical problem and as a challenge. The third marks a shift of accent from the theoretical to the practical aspect. Institutional designs, it is said, enjoyed various degrees of success in the past without even paying too much attention to the challenge of self-altering prophecies. Self-altering prophecy situations were solved on a contextual, case by case basis. Therefore, it is tempting to treat the problem of self-altering prophecies as a theoretical nuisance and then to set it aside and consider it a pure practical problem. Finally, one could see self-altering predictions not so much as a problem but more as a means to calibrate and advance the discipline. In this respect a
special social mechanism involving self-altering prophecies, "the prestige loop", becomes a topic of special interest.

The concept of prestige loop introduces a radically new perspective. First it prepares the ground for a different model of disciplinary advancement that departs from the naïve view in which the predictive accuracy in testing isolated propositions derived from theory is the ultimate criterion of success. At the same time, this change of perspective brings a change in the way the very process of social change and the role of ideas and agents of change is understood. In other words the new perspective creates the possibility to imagine an alternative strategy for advancing the institutionalist agenda, and that, at its turn, transforms the way we see social change. If that agenda advances not so much by cumulating small bits and pieces of knowledge gathered by researchers but through a much larger process out of which design and applications are a critical element, that means that the process of social change and the intellectual agenda of the discipline are related in profounder and more intricate ways than we may have thought. That is indeed a very controversial claim. Among others it requires not only to rethink the way we do institutional theory but also a change of the way we think social change and the position and role of institutional theorists, their ideas and their epistemic community plays in the process.

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