

Basic Literature Review

Essential Readings on Public Policy Making and Decision Making



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Public policy and decision-making processes. Introducing the rationale of the P-CUBE digital educational game

1. Introduction: teaching policy decision-making

Teaching decision-making processes in a Policy Analysis course means, firstly, to represent the complexity of the decisional arenas, characterized by many actors often involved. In fact, pluralistic societies show what Charles Lindblom called 'the intelligence of democracy', i.e. policy processes in which different types of partisan but interdependent actors (politicians, civil servants, experts, economic and social representatives, etc.) mobilize resources in pursuing their objectives: a problem definition, a specific solution, the improvement of their status. In fact, they form networks considering both the vertical dimension (different territorial scales) as well as the horizontal one (relations among public, private and third sector actors). The second task is to explain two different faces of the policy change or the innovative decision. One face, that refers to a large amount of literature, regards the difficulties of significative, non-routine changes because of the need to negotiate the content of decision among many interests and values, to overcome blocking conflicts, or to manage the ambiguity of actors' position. The other face shows that innovations are in any case possible, but they do not derive automatically from the good ideas or the 'positive' moral values of a promoter: to reach an innovative decision an actor needs to select and implement strategies to cross the barriers represented by the many factors (technical, social, political) characterizing the public policy endeavours and its decisional complexity.

Finally, these elements should be collocated in the contemporary policy contexts, that present high level of uncertainty for policy makers. They have to deal with public problems that show high levels of complexity: the so-called wicked problems (Alford and Head 2017) characterized by the lack of theories able to solve them with a predictable probability. Moreover, we are living in turbulent times (Ansell et al. 2017), with many exogenous shocks caused by pandemic, economic globalization, climate changes, migration fluxes, etc.

We should add even the scientific and technological disruptive innovations that, apart their capability of also causing exogeneous shocks, they are able to discover more interconnected relations among the causes of problem, without improving our capacity to tackle them. The P-Cube educational game is clearly a way to discuss, using real situations (even if presented in a fictional way), these strategies applied to different policy sectors. It will be a tool for teachers to explain the different facets of the policy decision making, both in academic, post-graduate and training courses.

The development of this contribution is organized as follows.

In the first part (sections 2-8), the main models of decision making proposed by the public policy literature are presented and summarized.

Following the lessons derived from the first part and many empirical researches, the second part (sections 9-10) will present a framework to analyse decision-making processes (from Dente 2011; Dente 2014; Dente and Subirats 2014) and will describe the available strategies that a policy entrepreneur can use to overcome the decisional constraints and decide (and implement) non-routine contents.





2. The main models of policy decision-making

The models of policy decision-making are conceived as 'conceptual lenses' defined to organize and explain, in a theoretical manner, many empirical situations. Every model is able to represent parts of real decision-making processes; and "... these models are often assigned a descriptive value even before an explanatory one, either implicitly or explicitly; but often enough they are also assigned a prescriptive value, meaning that they are used to indicate how decisions should be made if we want to maximize effectiveness and efficiency in the solution of the problem." (Dente 2014: ch. 4).

In the following pages, we will introduce the main decisional models discussed by the policy analysis literature, considered as analytical frameworks that identifies the essential elements of the decisional process and therefore the characteristics of the decision maker, his/her cognitive features, the activities of research for a solution, the modalities and the criteria of the choice and most of all the relations among these different elements." (Bobbio 1996).

3. Policy analysis and decision: the *rational model* of decision making

The policy analysis debate on decision making starts with the critical position against the, so called, rational or rational-comprehensive model.

G. Allison (1971), in his book on the Cuban missile crisis, describes clearly the characteristics of this rigorous perspective: "In economics, to choose rationally is to select the most efficient alternative, that is, the alternative that maximizes output for a given input or minimizes input for a given output. ... In modern decision theory, the rational decision problem is reduced to a simple matter of selecting among a set of given alternatives, each of which has a given set of consequences: the agent selects the alternative whose consequences are preferred in terms of the agent's utility function which ranks each set of consequences in order of preferences." (p. 29).

The same analysis was developed, a decade earlier, by C. Lindblom (1959) in the first of two relevant articles on policy decision making.

The core elements of the rational-comprehensive model, following Lindblom and Allison, are:

- A unified actor: even if an organization is analyzed (or a group of actors) the decision-maker is conceived as an anthropomorphized, unitary rational agent as if it were an individual person with one set of preferences, one set of perceived choices, and a single estimate of the consequences that follow from each alternative.
- Goals and Objectives: represent the preferences of the actor and the expected consequences; the decision maker is expected to be able to rank in order of preference each possible set of consequences that may result from a particular action; the clarification of goals and objectives is made before the analysis of the alternatives (first the ends are isolated, then the means to achieve them are sought).
- Alternatives: the rational agent must choose among a finite set of alternative courses of action; all possible policy alternatives are outlined.
- Consequences: to each alternative is attached a set of outcomes (consequences) that will ensue if that alternative is chosen.





- Comparison: the decision maker undertakes a systematic comparison of his multitude of alternatives to determine which attains the greatest amount of values.
- Choice: ration choice consists of selecting the alternative whose consequences rank highest in the decision maker's payoff function, i.d. that optimizes the benefits-costs ratio.

In economics, this model constitutes the fundamental assumption of the consumer theory and the theory of the firm. As Harsanyi underlines, the prescriptive theory of rational choice, using a hypothetico-deductive form, "...explains a wide variety of empirical facts in terms of a small number of theoretical assumptions that a person's behaviour will be rational if he chooses among different goals according to a consistent scale of preferences, that is, according to the relative importance or utility he assigns to each particular goal." (Harsanyi 1969: 515). At the same time, Harsanyi recognises that the normative theories of rational choice, from classical economics to modern game theory, "... ignore the limited information-processing ability of human decision-makers, and so cannot be expected to make fully realistic predictions about the human decision-making process." (Harsanyi 1969: 516).

In fact, Lindblom claimed that this approach can be practiced only to simple problems, because "... it assumes intellectual capacities and sources of information that men simply do not possess, and it is even more absurd as an approach to policy when the time and money that can be allocated to a policy problem are limited." (Lindblom 1959: 80). And Allison, referring to the theorists of rationality arguments, comments that this model is too heroic for many empirically oriented social sciences (Allison 1971: 31) and that it "... can lead the analyst to believe that what is doing the work in his or her explanations or prediction is the general assumption of rationality when, in fact, most of the heavy lifting is being done further, more specific, assumptions or evidence about the agent's objectives, the agent's conceptualization of the situation, and the agent's assessment of benefits and costs." (Allison 1999: 19). These elements conducted Allison to the elaboration of two other, famous, ways to explain the Cuban missile crisis; one based on the 'Governmental Politics' model (i.e. leaders' characteristic, political relations, etc.), and another based on organizational processes. This latter paid some relevant concepts to the theory of the bounded rationality developed by Herbert Simon, that represents a relevant starting point of new approaches to policy decision making.

4. Challenging the rational framework: the *bounded rationality* model

The 'bounded rationality' model is one of Herbert Simon's main contributions in the field of organization studies, developed starting from his 'Administrative Behavior' book (Simon 1947; see also Mintrom 2015). In synthesis, the term 'bounded rationality' is used to designate rational choices that takes into account the cognitive limitations of the humans and of the decision maker among them: limitations that regards (even in a period characterized by the digital innovations – see Simon 1983) both knowledge and computational capacity, and affect the human cognitive operations for discovering alternatives, computing their consequences under certainty or uncertainty, and making comparisons among them. Conclusion resulting both from the empirical research and from the behavioural psychology studies (for example the research of Kahneman and Tversky – see Tversky and Kahneman 1974 quoted in Simon 1983:17; and Kahneman 2003; more recently see Thaler and Sunstein 2008).





From this recognition derives that a decision maker will be incapable of making objectively optimal choices. But this conclusion doesn't mean that the decisions made under these constraints aren't rational: in fact, there are different modes of rationality. In particular, Simon defines as a 'substantive rationality' - the rationality of the classical economics - when a behaviour is appropriate to the achievement of given goals within the limits imposed by given (external) conditions and constraints; on the other side, a behaviour follows a procedural rationality when it is the outcome of an appropriate deliberation (Simon 1976). The procedural, bounded rationality strategy of decision finds its foundations through emphasizing the distinction between effective/procedural and theoretical/substantive behaviour (Simon 1976). The distance appears in statements regarding the difficulty of the agents of carrying out, in practice, the "steps" of the theoretical/substantive rationality: (i) theoretical rationality requires knowledge of all possible alternatives; however just a few of these alternatives are in fact considered; (ii) theoretical rationality requires full knowledge and anticipation about all future consequences that will follow each alternative; however such knowledge is always very fragmentary; (iii) the evaluation of the consequences has to be 'predicted', and such prediction will depend, among other things, on imagination (Simon 1947, pp. 80-81).

In the reality, the search is incomplete, based on uncertain information and partial ignorance, and usually terminated with the discovery of satisfactory, not optimal, courses of action. (Simon 1985: 295).

Another constraint that affects the decision makers is the time-binding character of decisional processes. The necessity to decide because of external pressures and the many problems that characterize the agenda, limits the amount of time that decision makers can devote to a single decisional process. Moreover, it is important to add that in organizational and institutional contexts the decision maker is not – in general – a single person but is a simple term to indicate a plurality of actors, and they should spend a certain amount of time to find a convergence on the goals of a policy included in the decisional agenda, due the different individual expectations and risks' perception (Simon 1997, ch.6).

With these constraints, the actors do not have the possibility to search and to analyse all the alternatives: "It is obviously impossible for the individual to know all his alternatives or all their consequences, and this impossibility is a very important departure of actual behaviour from the model of objective rationality." (Simon 1997: 77).

In this situation (schematically depicted), the decision maker(s) will use a procedural rationality approach, based on the following criteria:

- Limit the attention to few available alternatives
- Adopt a sequential process, evaluating one of the alternatives at a time (without comparison among the alternatives)
- The choice is made when a satisficing alternative has been found, i.e. a choice good enough for all the actors' expectations
- Here the actor(s) stop the selection process, without evaluating the remaining proposals (and can start to deal with another problem or perform other activities).

Simon does not justify satisficing by arguing that it is equivalent to optimizing: "... If a problem is sufficiently easy, then satisficing might well converge to optimizing, just as more general cognitive limitations (e.g., working memory's storage capacity) might be invisible for some





problems but 'show through' when people confront more demanding ones." (Bendor 2010: ch. 3).

In synthesis, the bounded rationality model presents, in its essence, the following main characteristics: "...the acceptance of the cognitive limits and the explicit adoption of a less strict decisional criterion compared to the one implicit in the rational model. It has a prescriptive value, meaning that it suggests accept the first alternative that appears satisfactory without searching any further, and a descriptive and explicative value, meaning that it assumes that the decision maker's choice not only needs not to be the one best way to solve the problem, but can also be based on incomplete or even wrong analyses." (Dente 2014: 17).

5. Bounded rationality, democratic pluralism and policy change: the *incremental* model and its legacy

Charles Lindblom follows Simon, and the other early contributors to empirically-based theories of decision making, in the recognition that human problems are extraordinarily complex, while our analytic capacities and resources are quite limited. Extending these and related cognitive and organizational insights to governmental settings, Lindblom investigated the strategies available for coping with multi-actor decision processes, complexity, uncertainty, disagreement, and the costliness and other limitations of analysis. The result, developed in two seminal articles (1959 and 1971), was the so called 'incremental' model.

The foundations of the descriptive part of the decision-making processes, from which the model finds its starting points, are based not only on the limitations explained by the bounded rationality debate, but even on the pluralistic vision of the democratic political system emerged, in particularly, from the research of Dahl (1961) and Lindblom himself, among others. In a pluralistic system, power resources are distributed – albeit unequally (Lindblom underlines that not all interests are represented by participants in it, nor are participants influential in proportion to the numbers of citizens for whom they act) – and many individuals and groups have the opportunity to influence the governmental agenda or to use their veto power. Moreover, power is dispersed among so many interest groups that the result is the balance of their relative bargaining position; no one can dominate all the others in all or even the most policy sub-systems and relative key decisions: "With some exceptions, an influence resource is effective in some issue-areas or in some specific decisions but not in all. Virtually no one, and certainly no group of more than a few individuals, is entirely lacking in some influence resources." (Dahl 1961:228; for some relevant critics regarding the pluralistic theory of power see: Bachrach and Baratz 1962 and 1963; Lukes 1974).

From this point of departure, Lindblom observes that, in pluralistic democracies, policies that regards ordinary issues (different from great and constitutional issues) are decided greatly by decentralized decision-making processes in which the various somewhat autonomous and partisan participants (partisan in the sense that everyone follows their own interest) interact and mutually affect one another. In fact, these interactions and conflicts allow the representations of the many values and interests of the society, and are at the basis of what he defined in another book (Lindblom 1965) 'the intelligence of democracy': "...that fragmentation of policy making and consequent political interaction among many participants are not only





methods for curbing power (as they are seen to be in a long tradition of thought incorporating both Montesquieu and the founding fathers) but are methods, in many circumstances, of raising the level of information and rationality brought to bear on decisions." (Lindblom 1971: 524); and "... this will reduce the stakes in each political controversy, thus encouraging losers to bear their losses without disrupting the political system." (Lindblom 1971: 520). To sum up and mixing the different starting points, the actors – among other obstacles – lack sufficient knowledge of cause-and-effect to understand complex social problems, and there is not enough time and money even to conduct most of the partial studies that are feasible. Actors do not know all their goals or the tradeoffs they are willing to make among them; and they disagree about almost everything and have no satisfactory analytic method for resolving disparate perceptions and priorities into collective choices (Arrow 1963; Braybrooke and Lindblom 1963; Woodhouse and Collingridge 2018). So, policy effects are difficult to anticipate, and the likely emergence of unintended consequences makes it important to be able to attribute emerging problems to specific policy choices and reverse these choices accordingly. Moreover, interests and ideologies are heterogenous and conflictive, which not only makes policy objectives the subject of contestation and change, but also makes it more difficult to organize consensus on more radical, large-scale deviations from the status quo (Adam et al. 2021).

In this context, Lindblom argues that actors, in policy making, move forward through 'partisan mutual adjustment' processes and decide when a majority has been founded: "... Participants make heavy use of persuasion to influence each other; hence they are constantly engaged in analysis designed to find grounds on which their political adversaries or indifferent participants might be converted to allies or acquiescents." (Lindblom 1971: 524). Because the need of bargaining to overcome conflicts and to construct a prevailing coalition, the divisive alternatives will be left aside and selected options that differ in relatively small degrees from the status quo: "Agreement on policy thus becomes the only practicable test of the policy's correctness." In other terms, the result will be an incremental decision: "Democracies change their policies almost entirely through incremental adjustments." (Lindblom 1958: 54 and 84) and "...this will reduce the stakes in each political controversy, thus encouraging losers to bear their losses without disrupting the political system." (Lindblom 1971: 520). In other words, incrementalism acknowledges that agreeing on small policy adjustments is often superior to insisting on large reforms that cannot find a majority. Lindblom argues that in most decision situations opponents with different values and ideologies will hardly find it possible to agree on these principles but yet be able to agree on specific policies (Lindblom, 1959, p. 83). This notion is an important part of Lindblom's argument as he considers that "a good policy is one that is agreed upon" (Migone and Howlett 2015: 83; see also Bendor 2015).

At the same time, Lindblom refuses the criticism of conservatism; in fact, he claims that "...incrementalism in politics is not, in principle, slow moving. It is not necessarily, therefore, a tactic of conservatism. A fast-moving sequence of small changes can more speedily accomplish a drastic alteration of the status quo than can an only infrequent major policy change." (Lindblom 1971: 520). More recently, the idea that a series of little incremental changes could produces relevant reforms is at the basis of the Punctuated Equilibrium Theory (PEC), which theorizes the co-existence of long periods of incrementalism and very rare events of drastic





policy change (Baumgartner & Jones, 1993; Baumgartner et al., 2017; Howlett and Migone 2011).

From this descriptive model, Lindblom derives a normative, prescriptive framework: the so-called disjointed incrementalism as a practical strategic tool for decision-makers, superior in effectiveness to the rational model and to a centralized decision-making for complex problem solving. This tool has been synthetized as follows (Lindblom 1971: 517): a) limitation of analysis to a few somewhat familiar policy alternatives (all of which are only incrementally different from the status quo); b) an intertwining of analysis of policy goals and other values with the empirical aspects of the problem; c) a greater analytical preoccupation with ills to be remedied than positive goals to be sought; d) a sequence of trials, errors, and revised trials; e) analysis that explores only some, not all, of the important possible consequences of a considered alternative; f) fragmentation of analytical work to many (partisan) participants in policy making.

The incremental wave was reinforced by the research of Aaron Wildavsky on the budgeting processes, showing that both individual political actors and the system as a whole operated pretty much as Lindblom described, using coordinating mechanisms and heuristic rules to deal with the policies complexity and uncertainty. In fact, actors assume that agencies have a base budget to work from, and rarely examine an entire budget from scratch because they are overwhelmed with information if they try, and they proceed instead to add or subtract small increments to or from the base (Wildavsky 1964; Heclo and Wildavsky 1974).

On the other side, Lindblom's theory was read as an attempt to legitimize and reinforce a conservative bias in policymaking that favours elites over marginalized groups (Etzioni 1967, p. 35; Hayes 2001). These critics argued the necessity to follow a third way (Dror 1967 and 2017; Etzioni 1967, 1986 and 1989), or in fact multiple third ways (Bendor, 2015), that combine elements of the branch method of limited successive comparison with more ambitious efforts of optimization. For example, Etzioni proposed the so-called 'mixed-scanning' approach, an adaptive strategy that involves two sets of judgments. The first regards the fundamental guidelines and directions to orient the policy choices; the second informs the incremental decisions, based on trial and errors. In these terms, Etzioni wrote, "mixed scanning seeks to make the best possible use of partial knowledge rather than proceed blindly with no knowledge at all." (Etzioni 1989: 53).

More recently, Hall (1993, p. 820) and Sabatier (1988) also underlined that policy change not always follows a merely incremental dynamic (in which only policy instruments or instrument settings are modified and adjusted) but can sometimes show a more fundamental departure from well-established policy paradigms.

In any case, these theoretical and empirical insights do not contradict that incrementalism is considered even today the standard model of the policy change studies and of democratic decision-making; because they also underline that paradigmatic shifts or disrupting changes are rare and in general the outcome of external shocks and crisis.

6. The 'garbage can' model and the multiple streams framework

Cohen, March and Olsen contribution 'A Garbage Can of Organizational Choice' (1972) introduces new elements to the decision-making scenario, underlying that ambiguity is an





integral part of the policy-making process in organizations. The authors studied decisional situations in organizations, including the public ones, that are not meeting the preconditions of more rational models and that they define as organized anarchies. These decisional situations, that are considered as the quite normal ones, are characterized by:

- problematic preferences: there are many actors involved in many decision processes and a decision process start often with a situation in which there are inconsistent and ill-defined preferences; for example, quite often time constraints force politicians to make decisions without having formulated precise preferences, and actors discover or clarify their goal through action instead of before through the so-called sequence 'preferences-action';
- unclear technology: often solutions are not definitive and actors face levels of uncertainty regarding the expected outcome; so, in many situations actors operate on the basis of simple trial-and-error procedures;
- fluid participation: participants vary in the amount of time, attention and effort they devote to the different processes; and physically they can change during the different phases of a decisional path, in particular in the case of long processes, due the replacement of some positions, new actors that discover interest in the issue, etc.; in this situation, the interpretation of the decisional content continually change during the process.

From this point of view, the axioms of the rational models (well-defined goals, a well-defined solution and a substantial participant involvement) collapse, because of goals and technology are hazy and participation fluid. Problems, choices, and decision makers arrange and rearrange themselves. In the course of these arrangements the meaning of a choice can change several times, if this meaning is understood as the mix of problems discussed in the context of that choice. Problems are often solved, but rarely by the choice to which they are first attached. Moreover, a major feature of the garbage can process is the partial uncoupling of problems and solutions. Although decision making is thought of as a process for solving problems, that is often not what happens: problems are worked upon in the context of some solutions, and decision makers happen to make action possible: "The garbage can process is one in which problems, solutions, and participants move from one choice opportunity to another in such a way that the nature of the choice, the time it takes, and the problems it solves all depend on a relatively complicated intermeshing of elements." (p. 16).

From this analysis the authors derive a representation of the decisional processes as "... a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work." (p. 2).

To come back to the model's denomination, a decisional opportunity is like a can, into which various kind of problems and solutions are dumped by participants as they are generated. In an organization we could have many cans operating during the same period, and the mix of 'garbage' will depend on the open cans, on the labels attached to the cans, on the problems and solutions available, on the participants interested and active into the different cans, and on the speed with which a can will be removed by the scenario (due to the definition of a decision or to the fact that the actors were not able to reach a choice). The simultaneous, parallel cans open





explain the different level of attention that actors can dedicate to the various issues, and even the fact that some actors could be neutral or not active in a specific can.

Finally, Cohen, March and Olsen conceptualize the dynamic of these processes and how the actors organize their involvement and influence. The main idea is that at the basis of the decision-making processes operate four different streams, that can be viewed as independent:

- problem stream, with some actors active because of the issues of interest that they want to address;
- solution stream, with some actors active to offer solution to problems and to explain that are able to manage even issue non currently recognized as a problem ("... you often do not know what the question is in organizational problem until you know the answer.", p. 3);
- participant stream, with actors that come and go, due the different opportunities currently open and the demands they are interested; in other words, the decisional situation is influenced by contingent factors;
- choice opportunity stream: every organization has recurrent occasions of decision (budget distribution, recipient definition, allocation of responsibilities, etc.) and other non-regular situations.

The 'streams' concept has been picked up and developed by Kingdon (1984, 2011; Herveg et al. 2018) through its 'multiple streams framework'. He extended the model more generally to the policy decision-making processes that, in a political system, characterized the agenda setting phase, this latter defined as "... the list of subjects or problems to which governmental officials, and people outside of government closely associated with those officials, are paying some serious attention at any given time" (Kingdon 2011: 3). He conceives the political system crossed by the three streams of problems, policies and politics, that are largely independent of one another, and each develops according to its own dynamics and rules.

The problem stream regards the recognition of some conditions as undesired or unsatisfactory; the attention of people is triggered by systematic indicators, by focusing or dramatic events like crisis or disasters or by feedbacks from the implementation of current policies. Obviously, people could pay attention to certain potential problems ignoring others. The policy stream is the realm of ideas, of problem definition and hypothesis of solution, and of the generation of policy proposals; to explain its characteristics Kingdon uses the comparison with a process of biological natural selection: "Many ideas are possible in principle, and float around in a 'policy primeval soup' in which specialists try out their ideas in a variety of ways – bill introduction, speeches, testimony, papers, and conversation. In that consideration, proposal area floated, come into contact with one another, are revised and combined with one another, and floated again. ... Thus, the selection system narrows the set of conceivable proposals and select from the large set a short list of proposals that is actually available for serious consideration." (p. 20).

The political stream is composed of such factors as the institutions' life and procedures (e.g. administration or legislative turnover), interest group pressure campaigns, the national mood and ideological predominance, etc. In the political stream, underlines Kingdon, participants build consensus by bargaining, trading provisions for support, adding elected officials to coalitions by giving them concessions that they demand, or compromising from ideal positions that will gain wider acceptance.





The three streams of problems, policies, and politics have separate dynamics of their own, but there come conditions that foster the complete linkage among the streams into a single package: "... A pressing problem demands attention, for instance, and a policy proposal is coupled to the problem as its solution. Or an event in the political stream, such as a change of administration, calls for different directions. At that point, proposals that fit with that political event, such as initiatives that fit with a new administration's philosophy,

come to the fore and are coupled with the ripe political climate. Similarly, problems that fit are highlighted, and others are neglected." (p. 201). We could have even partial couplings: solutions to problems, but without a receptive political climate; politics to proposals, but without a sense that a compelling problem is being solved; politics and problems both calling for action, but without an available alternative to advocate. In any case, the complete sticking of all three streams clearly improves the probabilities that a subject will become firmly fixed on a decision agenda.

The conditions for the coupling processes are defined as 'policy windows'; an open policy window is an opportunity for advocates to push their available proposals or to push attention to their problems. And advocates keep their proposals and their problems at hand, waiting for these opportunities to occur.

Policy windows are opened by events in either the problems or the political streams. A new problem appears, for instance, caused by a focusing event (Birkland 1998 and 2007) like a pandemic, a terrorist attack, a global event (e.g. the Olympic Games, the World Expos, etc.), creating an opportunity to attach a solution to it. Considering the political stream, events like the turnover of elected member of the Parliament or of the national/local government, swings of national mood, the strong pressure of lobbies, etc., might create opportunities to insert some problems and proposals in the decisional arena, and/or reduce the chances of other problems and proposals.

There are opportunities for decisions that open in quite predictable intervals. For example, the budget sessions, the recurrent renewal of a program framework. Other windows open due to occasional events. Predictable or not, open windows are scarce and of a short duration; and they come, but they also pass, because do not stay open long. If a chance is missed, another one must be awaited. These characteristics push pressures to advocates, that try to move forward their proposals; so, fora are often overloaded. If participants are willing to invest sufficient resources, some of the problems can be resolved and some of the proposals enacted. Other problems and proposals drift away because insufficient resources are mobilized.

It is important to underline that a window of opportunity could be open in different fora at the same time (Pralle 2003): supra-national organizations, the national governments or the different national agencies, the regional or local governmental units, etc. And, obviously, a proposal could be presented in different decisional venues and in different times. So, advocates can choose which venue is considered more convenient; and, often, the 'label' of the window of opportunity might be not so relevant for the selection choice.

Another, central, element of the framework must be added. In fact, who is able to foster proposals and the coupling process? Kingdon introduce the policy entrepreneur figure, a key role of an individual or corporate actor that operate to connect the different streams: "Policy entrepreneurs are people willing to invest their resources in return for future policies they favor. They are motivated by combinations of several things: their straightforward concern about certain problems, their pursuit of such self-serving benefits as protecting or expanding





their bureaucracy's budget or claiming credit for accomplishment, their promotion of their policy values, and their simple pleasure in participating." (Kingdon 2011: 204). In other words, a policy entrepreneur's activity consists both in puzzling, trying to link the streams; and powering, acting with an eye to maintain or develop its status (Heclo 1974:305). Policy entrepreneurs are thus more than mere advocates

of particular solutions, they are also manipulators of problematic preferences and unclear technology (Herveg et al. 2018; Mintrom and Norman 2009).

In its case-studies Kingdon describes the activities of politicians as policy entrepreneurs, mainly; but he underlines that they not only are found at many locations, they, in fact: "... might be elected officials, career civil servants, lobbyists, academics, or journalists. No one type of participant dominates the pool of entrepreneurs." (Kingdon 2011: 204). As more recently added, policy entrepreneurs are change agents (Cels et al. 2012) that exhibit some relevant characteristics, mainly: displaying social acuity, defining problems, building teams, and leading by example (Mintrom and Norman 2009).

A policy entrepreneur acts to dramatize a problem of certain categories of people/companies or triggers a softening-up process to improve the attention of policy makers and communities to his or her ideas and proposals. And these processes could take years of efforts. When windows are open, they have their pet proposals or their concerns about problems ready and push them at the propitious moments, as surfers waiting for the big wave: "In the pursuit of their own goals, they perform the function for the system of coupling solutions to problems, problems to political forces, and political forces to proposals. The joining of the separate streams ... depends heavily on the appearance of the right entrepreneur at the right time." (Kingdon 2011: 215).

Finally, a question remains to develop: which kind of changes derive from the Multiple Streams framework?

Kingdon emphasizes, firstly, the role of bargaining and the incremental processes that characterize the agenda-setting phase: "In the process of policy development, recombination (the coupling of already-familiar elements) is more important than mutation (the appearance of wholly new forms). Thus entrepreneurs, who broker people and ideas, are more important than inventors. Because recombination is more important than invention, there may be 'no new thing under the sun' at the same time that there may be dramatic change and innovation. There is change, but it involves the recombination of already-familiar elements." (Kingdon 2011: 201). But, at the same time, he recognizes even the possibility of major, sharp changes, that is possible to recognize adopting an evolutionary, long term approach. Quoting to the Punctuated Equilibrium Model (Baumgartner and Jones 1993) he argues: "Development in the policy stream might well resemble the long process of natural selection, in which ideas are tried, revised, tried again, and gradually emerge to prominence or die away. But the agenda-setting process might be much less gradualistic. ... The historical development of an issue proceeds in jumps and step-level changes, not in gradual and incremental fashion." (Kingdon 2011: 226).

7. Levels of policy change

The issue regarding the grades of policy change is at the center of a well-known contribution of P. Hall (1993), that is relevant to consider in this review of decision-making models.





Hall observes that policymakers customarily work within a framework of ideas and standards that specifies not only the goals of policy and the kind of instruments that can be used to attaint hem, but also the very nature of the problems they are meant to be addressing. He defines this interpretative framework a policy paradigm, in analogy with the theory of scientific paradigms proposed by Th. Kuhn.

In this perspective, he derives three different kinds of policy change: first and second order changes, and a third order change: "First and second order change can be seen as cases of "normal policymaking," namely of a process that adjusts policy without challenging the overall terms of a given policy paradigm, much like 'normal science'. Third order change, by contrast, is likely to reflect a very different process, marked by the radical changes in the overarching terms of policy discourse associated with a "paradigm shift." (Hall 1993: 279).

A first order change regards only adjustment in the implementing policies, maintaining the designed direction and the stated objectives. It is likely to display the features of incrementalism, satisficing, and routinized decision making that we normally associate with the policy process.

A second order change implies an alteration of instruments or the development of new instruments without radically altering the hierarchy of goals behind a policy; it may move one step beyond in the direction of strategic action.

A third order change, by contrast, is likely to reflect a very different process, marked by the radical changes in the overarching terms of policy discourse associated with a 'paradigm shift' that derives not only as a result of autonomous action by policy makers, but in response to evolving societal transformations: "If first and second order changes preserve the broad continuities usually found in patterns of policy, third order change is often a more disjunctive process associated with periodic discontinuities in policy." (Hall 1993: 279).

The contribution of Hall and the idea of different level of changes based on their magnitude is of value if we want to escape from the dialectic between incrementalism and radical changes to reach a better description of the reality of policy decisions. In fact, there are policy decisions that moves the contents just a little in comparison with the previous situation; there are policy decisions that outline radical changes; and we can have policy decisions that introduce innovations, but without disruptive changes.

8. Strategies, learning, interactions and networks

One feature of the incremental and garbage can models is the focus on the relations among the different actors involved, that are at the same time autonomous but even interdependent: actually, these relations assume the characteristic of strategic interactions defined in terms of "...an encounter among intelligent and resourceful actors who are likely to respond to any moves in order to improve their own situation." (Scharpf 1997: 99). In other words, a decisional process cannot be considered an action of an innovative actor against a passive social situation, but this policy entrepreneur should consider how to anticipate the opposers' reactions to reach the expected coordination of behaviors that will sustain the decision.

The strategies available to the innovators are the content of different fields of the public policy literature. Here we can remember the contribution of the game theory and the distinction between non-cooperative and cooperative games, even if mainly used in highly structured and frequently recurring interactions among a limited number of actors (Scharpf 1997); the change





management and change agents literature, with the emphasis on the need of reforms leaders to overcome internal and external resistance (see for example Mintzberg 1983; Behn 1988; Kotter 1996; Kelman 2005); the consensus building approach (for example Susskind et al. 1999; Susskind 2014), that underlines the role of a mediator and the strategies to foster cooperation through package deals and issue linkages; the causal mechanisms approach to policy change (for example Barzelay and Jakobsen 2009; Busetti and Dente 2018). The P-Cube game will develop in deep this part, that in fact represents a central content of the educational goals.

A second relevant feature regards the learning processes. Actors (can) learn during the decisional activities, redefining their expected goals and the perceptions regarding the goals of other actors; they often start with an incomplete understanding of the situation and of their purposes (see for example Hirschman 2014; Levitt and March 1988; March 1988) and through puzzling (Heclo 1974) they adjust understandings and beliefs related to the decisional process (Dunlop & Radaelli, 2013) and learn more about the problem and solutions (for example they can learn from the experience of others and from good practices; see Barzelay 2007; Vecchi 2013), about the positions of the people involved, and about the available strategies to overcome the opponent groups. P-Cube will focus on the capacity of the policy entrepreneur to learn during the decisional process, designing different levels of a game set, to drawing lessons from students' errors or from processes that can't have a positive end for the innovator perspective.

A third element regards the decisional styles or the main interactions' categories through which analyze the relations among actors. Richardson (1982) and Scharpf (1988, 1997) proposed the distinction among confrontation, bargaining and problem solving: "At the most general level, each of these 'styles' may be characterized by specific value orientations and sanctioning strategies: 'problem solving' by the appeal to common ('solidaristic') values and by resort to ostracism and exclusion as the ultimate collective sanction; 'bargaining' by the appeal to the individual self-interests of all (necessary) participants and by resort to incentives; and 'confrontation' by the appeal to the interests of the dominant individual or coalition and by resort to power and coercion as the ultimate sanction." (Scharpf 1988: 259). P-Cube will adopt this categorization to orient the selection of the innovator's strategies.

The last factor regards the group of actors that interact in a decision-making process. The P-Cube project refers to the networks' literature and the networks analysis (see Adam and Kriesi 2007), which stresses that policy actors are dependent on each other because they need each other's resources to achieve their goals. In any case, P-Cube does not assume any particular ex-ante assumption regarding the networks' configurational characteristics. For example, the Advocacy Coalition Framework underlines the semi-permanent or stable relations among the actors of a coalition and among two or more coalitions in a specific policy sub-system (Sabatier and Jenkins-Smith 1993; Jenkins-Smith et al. 2017). The framework followed by the P-Cube project considers micro-contexts in which is not possible to affirm the stability of the actors' groups; with this orientation, the term 'network' will define generically different and contingent types of possible interactions among public and private actors in a





policy decision-making process: in other terms, different constellations of actors representing the set of actors that are actually involved in particular policy interactions (Scharpf 1997:72).

9. The decision-making framework at the basis of the P-Cube educational game

9.1. Introduction: some preliminary points

The P-Cube educational game will be based on a framework that assumes many of the element developed by the models and contributes presented in the previous sections (Dente 2011; Dente 2014; Dente and Subirats 2014; see for example Dente and al. eds. 1998, for case studies based on the framework).

Here the main factors are presented in a synthetic way, underlining that their use for the P-Cube digital game may require some simplifications and even developments. The focus of the game is the analysis of policy innovation processes; they always refer to the existence of an innovator, of a policy entrepreneur that acts to overcome inactivity or incremental changes.

The starting point is the assumption of the pluralistic scenario depicted firstly by the works of Lindblom and Dahl, characterized by the distribution of the power resources among the different actors. The hypothesis is that is impossible to find the same actor/s or the same coalition dominating in every policy sector or, in the same sector, dominating in every decision process along the time. This leaves open the opportunity for a policy entrepreneur – a social activist, a politician, a member of a pressure group, a civil servant, etc. – to mobilize a sufficient sum of resources to organize a coalition able to defeat opposers and to introduce an innovative policy or intervention, overcoming the 'golden rule' of the incrementalism or a stalemate situation that can derive from the conflicts among the involved interests.

This assumption recognizes, of course, that power resources are not equally distributed in the societal sphere and in the political system; and that are strong power concentrations, with parts of the population that live in deprivation. But at the same time, it underlines that in many situations actors could be able to mobilize sufficient power resources to block, at least, an intervention. Moreover, in general the framework is supposed to work at the micro level and does not consider decisional processes at macro-level and that are debating a sort of 'constitutional' (national or supranational) issues.

Coming back to the 'innovative' decisions, and referring the P. Hall's typology, is worth to underline that in the P-Cube framework the term 'innovative' will be used to define more the 'second order' changes than policy paradigm transformation (even if, sometimes, changes of high magnitudes will be considered); in other words, P-Cube will present mainly cases (especially in the case of Urban Innovation cases) in which actors are involved in the introduction of a significative mutation, a non-marginal change, in comparison with the status quo, but not necessary a radical one.

But if the incremental model explains how the decisional process will develop in pluralistic settings, it does not tell what are the decisions that will be made, nor, in specific and general terms, what kind of decisions it is possible to make. Therefore, beyond Charles Lindblom's conceptual framework, the P-Cube framework should specify the variables that contribute to





determine the possibility of an intentional and non-incremental change of a public policy, of the way to deal with a collective problem.

9.2. The element of the framework

The hypothesis that sustains the framework is summarized as follows:

"The outcomes of a public policy decisional process depend on the interaction of different types of actors with different goals and roles who, within a network that can have different characteristics, exchange resources using different patterns of interaction, to obtain a stake, within a given decisional context."

Here the main elements of the framework are presented.

- 1. The actor: any individual or organization acting in the policy process according to non-contradictory preferences and goals. The actors, individual or composite, are people active in a decisional process; active in the sense that they actually act with a purposive intention to influence the result of the decision. People that 'could' or 'should' have an interest in a policy, are not actually actors if they do not act.
- 2. Goals: actors can have a content related goal or a process related goal, or both. Content related goals mean that an actor acts to influence the problem definition or/and the solution of a policy. Process related goals are essentially linked to the relations of the actor with the other actors; in other words, regards the maintenance or development of a status position.
- 3. Resources: whatever good an actor can mobilize and has a positive or negative utility for the other actors. An actor can use and mobilize different power resources to influence the behavior of other actors and reach the outcome of interest. The main resources are: a) political, or the amount of consensus an actor is able to get; b) economic/financial, or the ability to mobilize money or any form of wealth in order to modify other actors' behavior; c) legal, or the advantages or disadvantages, attributed to particular subjects by legal regulations and in general by legislative and administrative authority's decisions; d) knowledge, or the availability of important information or/and conceptual models for the decisional process. One of the main features of action resources is their replaceability: the problem of not having a certain good in a sufficient quantity can be solved by replacing it with something else. What counts is the ability to contribute to the determination of the behavioral change of whoever is, metaphorically, on the other side of the table, and this can be achieved by altering the distribution of various goods. There is another relevant category of resources, the strategic resources, defined as the ability to correctly conceptualize the ways through which it is possible to achieve the modification of a public policy, by identifying the actors who participate in the interaction and their specific characteristics, and in general understanding their dynamics and forecasting the possible outcomes: all these aspects are essential resources for a policy innovator.
- 4. Type of actors: categories in which we can classify policy actors starting from the nature of their claim to intervene in the decisional process. We can have different actors in a decision-making process: political, bureaucratic, economic interests, general interests, and experts. Their activities and their legitimation in the eyes of other player





are based on different 'claims of intervention'. Political actors base their claim of intervention in decision-making the fact that they represent citizens, having a significant consensus both in general terms and, specifically, referred to the matter that is being discussed. Bureaucratic actors base their claim of intervention on the consideration that legal rules give them a specific responsibility in the decisional procedure, meaning that they have the formal competence to intervene. Special interest actors (firms, unions, etc.) base their claim of intervention on the fact that the choice among the possible alternatives directly influences their interests, meaning they totally or partly bear the costs, and/or draw benefits from it. General interest actors are those actors who, even without any political or legal legitimation, base their claim of intervention in the decisional process on the premise they represent subjects and/or interests that cannot defend themselves, that are not structurally able to act directly. Experts, who base their claim of intervention on the fact they have the necessary knowledge to structure the collective problem and/or to find the most appropriate alternatives to solve it. Moreover, is of worth to underline that the formal label of an actor doesn't mean that in the concrete decisional process the actor will operating performing this specific type; the category assumed should be defined in relation to his/her rationality used (e.g. a politicians could play in a specific process as the representative of a economic sector, i.s. as a special interest actor; etc.).

- 5. Scale of interest. Actors belonging to the same category, who therefore act using the same logic of action, can act at different levels, which influences their interests and goals. The main levels can be categorized as: international/supra-national, national, regional/intermediate, local, sub-local.
- 6. The roles of the actors in the decision-making processes: the functions that the actors fulfil in the course of the decisional process. The main roles are the following: policy entrepreneur, opposer, ally, mediator, gatekeeper. a) Policy entrepreneur: an individual or collective actor who tries to manage the decisional process in order to introduce a policy innovation (in fact it plays the role of promoter and/or director of the process); b) Ally: is the actor that has content or process-related goals consistent with the promoter and/or the director and brings his resources to the innovative coalition by carrying out actions, or even just by declaring his support; c) Opposer: is the actor that is mobilizing and committing his/her resources to avoid changes; d) Gatekeeper: an actor having veto power (able to block the decisional process) but without content-related goals and indifferent to the fact that the policy solution is adopted or not, since it does not cause any costs or benefits for him; e) Mediator: it is a sort of director that only pursues process-related goals and in particular is only interested in favoring an agreement among the actors (it is important to note that the effectiveness of a mediator is connected with the existence of a conflict among interests, even a potential one, that can be mediated.
- 7. Decisional networks: the network is the group of actors involved in a decision-making process. There two relevant characteristics useful to the analysis. The first one reflects a dimension of decisional processes: complexity defined as the existence of a plurality of points of view within processes. In fact, it can be more or less high and it can only be measured by analyzing the actors' network. In order to measure the complexity of a process and therefore of a network, it is useful to use a matrix as the following one:





	TYPES OF ACTORS				
	Politicians	Bureaucrats	Experts	Special	General
DIMENSION OF THE				interests	interests
INTEREST					
International					
National					
Regional					
Local					

(From Dente 2914, p. 62)

It is possible to calculate a complexity index by multiplying the number of rows filled in by the number of columns: using the above matrix, it will vary between 1 (if all the actors are in the same cell) and 20 if there is at least one actor for each territorial level and one actor for each type. This is clearly a conventional measurement, that can have different calculation bases if the levels of interest are classified differently (the categories of actors are fixed in our model), which can be very useful to give a synthetic indicator of the process complexity, to compare with similar cases but also to verify if its increase and its decrease in time makes it easier or more difficult to reach the decisional success. In particular, a complexity measurement can be useful to test the hypothesis according to which decisional success depends on the fact that the process and the network complexity reflect quantity and type of interests influenced by the problem or solution. A further characteristic that is certainly important is its density, meaning the intensity of the relations between the actors of a decision-making process. the network density that can be measured as the proportion of actor actual links between the actors out of the total possible number of links (see the quoted books for in deep analysis of networks density).

8. The content of the decision (the stake): in relation with the concentration of costs and benefits imposed on certain actors, attention for the content of the decision becomes a crucial element in the analysis of the decisional process. The stake is the content of the decision at every moment, therefore even before it is adopted and after it has been adopted (in game theory terms: the concept of stake is equivalent to the sum of the payoffs of the single actors). Every actor will adapt his/her behavior evaluating whether the decision-making process is a zero-sum game or a non-zero-sum game in the perception of the main actors, thus identifying if and how the adoption of the final decision was (or will be) considered a victory, a partial victory or a defeat for the actor; it is certainly possible that these perceptions are mistaken, but what is also sure, is that actors' behavior and their interactions are determined by their own representations of the possible consequences the decision might have on their interests and goals. Another way to analyze the stake is the evaluation each participant's level of





concentration of costs and benefits, by assessing the perception of the individual actor against some 'objective' benchmark. It is likely in fact that even a rather rational actor does not have, and probably is not interested in acquiring, all the necessary information regarding the concentration on other participants of the costs and benefits. What he cares about is that the outcome of the decision does not burden him too much and/or that it brings him the expected benefits.

- 9. Patterns of interaction: the model considers three interaction ways among actors: confrontation, bargaining and problem solving. Confrontation: when the resources are weighted in a zero-sum game and the actor who wins is the one with more resources. Bargaining: when resources are exchanged among actors in the interest of all participants. Problem solving: when resources are pooled together to achieve a common goal.
- 10. The context: The decisional context or environment is the set of structural or contingent factors and conditions that influence decisional processes and contribute to the determination of their outcomes, but cannot be modified by actors, in particular by those interested in the policy decision. The context could be analyzed considering the cognitive, economic and institutional conditions. The stability or transformation of the decisional context, especially when it is mediated by the behavior of some actors, is an important element in the interpretation of policy processes. The context can favor or hinder the match between the problem and the solution.

10. The strategies for policy entrepreneurs

A successful decisional process consists in the ability to adopt and implement a non-incremental transformation of the status quo (regardless of the ability of the decision to achieve its goals: here the focus is on how to reach a decision). In fact, any attempt to make a non-marginal change will clash with:

- the presence of explicit or latent opposition of actors who are against the solution or even against the problem definition;
- and/or with the indifference of other actors, who have the resources required to adopt the solution and would even be potentially interested, but due to cognitive limits or any other reason, are not able to picture the advantages they would have by supporting the innovation.

As underlined by the previous decision-making models, and in particular by the contribution of J. Kingdon, decisions need the activity of an innovators or the so-called policy entrepreneur. He/she will user resources to reach the needed coordination among the actors involved, meaning the generation of all the necessary behaviors, and impeding the negative behaviors, in order to reach the goal (the expected decision). This goal could be reached through the use of decisional strategies, defined as the innovator's intentional attempt to generate the necessary coordination by changing the different elements of the decisional process (and by adapting to the constraints resulting from the goals and interests of other actors).

In other words, "A strategy is the intentional transformation of one or more elements of the decisional process, aimed at determining the most favourable setting in order to make a non-incremental decision." (Dente 2014: 102).

The framework considers six main categories of decisional strategies:





- Altering the distribution of resources
- Modifying the pattern of interaction
- Changing the content of the decision
- Transforming the decisional network
- Institutionalization
- Timing

The contents of every category are summarized in the following table (synthesis of the quoted books):

Type of manipulation	Type of strategy	Definition, examples and actions
1. Resources Manipulation (Altering the distribution)		
	Increasing innovator's resources	The main tool is the research of allies able to increase the resources the innovating coalition has at its disposal. These allies must be actors who, at the very least, do not have goals that contrast with the transformation.
	Reduce the opposing coalition's resources	Breaking up the enemy, weakening its credibility, neutralizing its main weapons are all options that have been taken into consideration and implemented since ever, even if sometimes they were regarded as not morally acceptable, given their rather destructive character, the use of these tactics is more common among those who want to maintain the status quo, rather than among those who promote innovation. There are however circumstances in which the devaluation of Opposers' resources has proved to be effective in generating the conditions for the decisional success. A first example is the rather frequent use of opposing experts. Another rather frequent way to try and destroy the resources of actors with different interests is to resort to courts. By putting oneself on the part on the innovator, this strategy should probably be considered especially during the preliminary phase, before the proposal becomes public and the conflict is open, accumulating an higher amount of resources compared to the ones that can actually be mobilised by the presumable counter-interested parties. The second general consideration refers to the fact that the manipulation of resources





		obstacle is the lack of interest of actors whose resources are necessary, but who are not able to entirely understand the advantages they could have from a transformation of the status quo.
2. Pattern of Interaction Manipulation		
	Show down – final confrontation through exclusive strategies	If the innovator believes that the resources available or those easier to mobilise are sufficient to achieve the objectives foreseen, then it will be his interest to make the decision go in direction of a show down in which all parties have to show their resources in a logic of confrontation. Examples of exclusive strategies: - confidence vote in Parliament - referendum
	Inclusive strategies	Strategies based on participation and transparency. The activation of inclusive strategies can be a lot more difficult since they must reach out to all actors to be effective, but at the same time this has turned them into an object of particular interest in literature
		Participatory decision-making: consists of the attempt to make the policy decisions shift towards a rational decisional model by manipulating the interaction patterns. Its logical preconditions are the following: • the participants have a common problem • there is a limited number of alternatives • there is a limited number of decisional criteria • there are accepted ways of measuring these criteria. If the conditions are roughly respected, it is possible to proceed as follows: 1. during the first phase, all stakeholders and actors who can influence the decision are summoned and unanimously agree which are the alternatives to be taken into consideration, which are the decisional criteria, their relative importance and which evaluation methods and techniques have to be used; 2. during the second phase, the criteria to evaluate the alternatives are applied as neutrally as possible, a ranking of the best solutions is made and compensation for participants who are penalized by the final solution is discussed. Difficulties: First of all, we must point out the difficulty of involving all stakeholders since there are actors who have no interest





		in taking part because oppose the very definition of the problem. Secondly, process-related goals can interfere. Finally, in a long process it is almost impossible to avoid exogenous shocks that modify the initial conditions.
		Mediation: it consists in using the first phase, in which the rules of the game are decided, to find a mediator, namely of a person to which entrust the management of the process in order to reach a solution accepted by all interested parties. It has only process-related goals, that in this case consists of maintaining good relations among all actors involved, regardless of the outcome of the process itself. Tools: the so-called "boot camps", in which the negotiation process to reach a final agreement takes place in an isolated place and within a limited time span. We must also say that a negotiation process inevitably tends to change the content of the decision (the stake), as well as the characteristics of the network of actors.
		Public debate: it does not explicitly aim to find a solution, more or less agreed on, but simply limits itself to anticipate the decisional phase with an actual preparatory phase strongly open to the participation of whoever is interested. it consists of the practice (that is compulsory in France and in some Italian regions) for promoters of major public works to submit their projects to a preliminary public discussion in order to gather objections and adapt the projects accordingly. Usually, an external subject is appointed as facilitator of the process, then all preparatory material is collected in order to provide the basic information needed for the development of the debate. At the end of the process, the promoter must decide if and to what extent he wants to consider the results of the debate in the design of a new project.
3. Manipulating the content of the decision (transformation of the stake)	It basically consists in the attempt of the promoter to change the content of the decision in order to develop the interest and/or overcome the oppositions of other actors	In analytical terms, the transformation of the stake means the alteration of the distribution of the costs and benefits of the decision among participants, trying to transform the process in a non-zero-sum game
	Enlarging the content of the decision to take care of the goals (and interests) of the other actors. The only	The so-called package deals practice, for instance, is part of this category and gives the chance to include a varied group of decisions into a single legal text, to





	condition that must really be satisfied to use this strategy successfully is the conceptual flexibility of the initial project	facilitate the parliamentary process.
		Compensation is at the centre of a specific version of the enlargement of the stake strategy. The basic idea is that since many projects give benefits to a vast population by concentrating costs on a small part of it, it seems fair, and in any case useful to overcome the conflict inevitably generated, to imagine "side payments", namely compensations, that change the costs/benefits ratio for the affected population.
	Segmentation of the stake: breaking down the innovation in a series of more limited decisions that are less demanding and therefore more acceptable	The effectiveness of such approaches is strongly influenced by the stability of the decisional context (absence of exogenous shocks), by the chance to extend the solution in time and most of all, by the ability to assure the continuity of the strategic direction
4. Manipulating the decisional network	It regards the quantity and characteristics of the actors involved and their connections.	
	Increasing Density	It is obvious that an increase of the interrelations of the actors is implicit in all-inclusive strategies based on participation. The direct interaction of the interested actors can trigger a learning process regarding which proposals are acceptable and which aren't in the eyes of participants. It is also possible to create a process of deferred exchanges, facilitated by the increase of mutual trust. A "densification" strategy of the network works better when the set of actors is stable and when we are sure that their constant interaction can bring a series of incremental decisions able to cause a real policy innovation
	Decreasing density	In presence of very bitter conflicts, it is reasonable to imagine that the one of the main roles of the director, especially if he is also a mediator, is to keep apart the opposing parties in order to avoid emotional and sometimes irrational elements (that are not always unknown in policy making processes) interfering with the possible solution of the conflict itself
	Increasing Complexity	The plurality of the points of view in the process can be an important added value, especially to generate innovative results when the interests





	of the actors involved do not necessarily diverge. Sometimes the uncertainty about the solution of a problem is so big that the search of a viable alternative cannot disregard the contribution of everyone involved. An increase in complexity can increase the chances of finding new equilibriums, because it increases the number of possible transactions and changes the preferences of the different actors. Finally, a higher number of actors involved, with different characteristics, also has the advantage of reducing the political responsibility in case of possible failures, since the choice was made by a plurality of people (it is the well-known mechanism of blame avoidance).
(Increasing Complexity)	 Types of actors: the involvement of experts is an obvious way to enlarge the field of available solutions, as well as the legitimacy of the decision in the eyes of the public opinion; the intervention of bureaucracies, besides giving stability to the process and facilitating the implementation of the decision, allows to exploit the memory of institutions to see how similar problems were dealt with in the past; special interests, e.g. firms, can bring a more pragmatic approach to the policymaking process, making it possible to experiment innovative solutions, especially if they promise economic benefits; similarly, the politicization of the issue, that inevitably generates an increase in visibility, provides incentives for the participation of political actors, always in search of new consensus.
(Increasing Complexity)	 Territorial dimension: To increase the number of the territorial levels involved (the second dimension of complexity) can also have positive effects on decisional effectiveness whenever the policy innovation involves localized territorial transformations, the non-involvement of the representatives of the population is often a major obstacle for the implementation of the proposal because it strengthens the opposition the attempt to globalize the problem, involving international organizations. is





	Durania ang kuitu	 a strategic decision that often turned out to be winning it was noticed that in many policy areas the opportunity to develop the so-called multilevel governance, that is to say, the involvement of institutional entities who have different geographical constituencies, is crucial to avoid the collusive phenomena typical of processes often taking place within the same territorial community
	Decreasing complexity	those who are directly involved (repress any attempt of free-riding)
	Centrality of the network	 Without an effective direction, complex decisional processes are destined to fall through. a) we cannot have innovation without innovators and the existence of someone (the facilitator) who guarantees they are respected by "directing traffic". b) the efficiency of the process
5. Institutionalization	It consists of the creation of an ad hoc organization, whose mission coincides with the desired transformation.	 In more analytical terms, according to the circumstances, and not necessarily in an alternative manner, the creation of a new organizational entity destined to deal with a specific problem can be situated among two different families of strategies introduced in the previous paragraphs, i.e. a) the manipulation of the stake (because it is a matter of changing the policy problem), and the b) manipulation of the network, because it refers to the creation of a new actor with automatic consequences on the complexity and centrality of the network and possible consequences on its density.
6. Timing	A further element that creates complexity in the solution of (complex) decisional problems is that it is not enough to choose the most appropriate strategy, but it is necessary to use it at the right moment	 a) It is only possible to make important decisions when the problem is "mature"; b) At a different level the "right moment" is influenced by the fact that there are formal deadlines that marks the opening of the decisional problem.





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Website

For further and updated information about this project please see: <u>www.p-cube-project.eu</u>

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The goal of P-CUBE is to build an educational strategy game (the Policy Game) aimed at teaching to different types of pupils the theory and the practice of public policy making.

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