

Disjointed Incremental and Logical Incremental Policy Formulation in Managing the Pandemic

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Abstract

This research aims to analyze and describing the policy formulation process with ultimate aim to compile recommendation of policy formulation models. Disjointed incremental and logical incremental are the two main models studied in Covid-19 crisis situation. The mainstream between these models are identified, trying to integrate between these models in situations full of uncertainty, crises that bring complexity to social problems. The implications and typology of two models are presented as a review of policy learning in future policy formulation process.

Keywords: Policy Formulation, Disjointed Incremental, Logical Incremental, Pandemic

INTRODUCTION

Long-lasting crises and rapid changes require effective responses. The organizations should to adapt to problems that develop almost in real-time, causing policy actors to need to formulate appropriate policies quickly. The previous researchers examined government responses to crises (Boin & 'T Hart, 2010; Crow et al., 2023; Yulianti et al., 2020; Zaki, 2023) , but only a few lead to formulation stage at regional government level with limited technical ability to formulate policies and central government pressure are differentiating variables. Actors do not have freedom in formulating policies. They must refer to higher policies. This is different in context of country, which has better resources.

Existing policy research provides important insights into dynamics of learning after disasters in six states (Crow et al., 2023) , learning across disciplines, learning across space, and learning across time (Zaki, 2023) . However, only a few lead to a policy formulation process that is driven by crises and time constraints as well as leadership pressure (Rajagopalan & Rasheed, 1995) in local government context. This limitation becomes a research gap for this article in filling the study of policy formulation (Roman, 2017) , learning from the Covid-19 pandemic, the impetus for rapid and long-lasting crises, including various climate-related disasters and new disease outbreaks (Crow et al., 2023) .

This article focuses on policy formulation stage based on experience in dealing with Covid-19 pandemic at regional level in Indonesia. The COVID-19 pandemic, which has lasted more than 2 years and resulted in more than 1 million deaths in United States, providing a useful context to assess the government learning and policy changes during the evolving crisis (Boin & 'T Hart, 2010). The crisis has forced countries to grapple with changes in public health guidelines, ranging from mask use to social distancing protocols while managing the emergence of new disease variants. The impact of this virus is not only limited to public health sector. In contrast, COVID-19 is a unique problem that impacts almost all sectors of society and economy. The more complicating matters is a void in pandemic response leadership rooted in federal government's inaction during the early phases of COVID-19 crisis in providing responsibility and opportunity for policy change and learning at state level).

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The COVID-19 pandemic provides an opportunity to assess the government learning and policy change during a crisis in near real-time and to respond to a rapidly change of social, economic, political, and public health environment (Satispi & Murod, 2023). This research aims to examine fast policies, political demands and time constraints. These condition forces public administrators to formulate policies by adopting old policies, adapting them to needs (incremental), then doing it technically by copying other regional policies and modifying based on the field need, so the formulation of incremental policies becomes the focus of this research.

THEORETICAL REVIEW

Incremental Theory

The concept of incrementalism in policy formulation can be traced back to 1959 publication of Lindblom's controversial and widely cited article, *The Science of "Muddling Through"*. Muddling Through was formalized by Braybrooke and Lindblom (1963) as the theory of disjointed incrementalism and further developed by Lindblom (1965) in his book, *The Intelligence of Democracy: Decision Making through Mutual Adjustment*. Hirschman and Lindblom (1962) contributed to generalization of incrementalism theory by identifying similarities between policy research, economic development policy, and government policy making in general. Even as the theoretical basis of incrementalism continues to develop, several empirical studies have found that the model usage was quite valid in certain situations and policy processes (Rajagopalan & Rasheed, 1995).

This incremental model is basically a criticism to reality of idealism in rational model. The first criticism was made by Lindblom who said that policy makers basically do not want to carry out a regular review of all the policies they make, according to incremental model view, that policy makers never carry out the process as required by the rational approach (Nugroho, 2014; Wibawa, 1994; Winarno, 2012). There are several reasons below to use this incremental approach.

Policy makers do not have much time, intellectuality, and only doing research on social values as the basis to formulate policy objectives.

There are concerns about the emergence of undesirable impacts resulting from policies that have never been made before.

There are previous policy results that must be maintained for sake of an interest.

Avoiding various conflicts if carry out a tiring negotiation process for new policies.

Therefore, the incremental model is more appropriate to use in situations where policy actors do not have sufficient time to formulate policies ideally, due to limited human resources, budget resources and there are also concerns about the impacts caused by completely new policies. Apart from that, the previous policy still relevant that needed to be maintained, so only partial changes were needed (Crow et al., 2023; Nugroho, 2014; Parsons, 2017; Zaki, 2023).

Disjointed Incremental and Logical Incremental

There are a various of incremental model developments that can be used as a perspective for policy formulation, the most likely is disjointed incremental (Rajagopalan & Rasheed, 1995) as a model to makes changes intermittently. The conceptual of disjointed incrementalism model (Bray Brooke and Lindblom, 1963) basically described policy making as a "muddling through" process (Lindblom, 1959). This model was developed as an alternative to comprehensive rational model. This model is based on instrumental rationality to analyze and make decisions. Muddling through as an alternative in policy formulation fails to recognize the reality of policy formulation which is inherent in diversity of values, the cost of comprehensive analysis, and limited capacity of actors in solving problems.

Analysis and evaluation in disjointed incremental model is "disjointed" in sense that policy aspects or problem areas are analyzed at various points, without clear coordination and without articulation of parts that characterize the rational division of a problem. Policy making is serial and remedial; the main focus was on existing corrective measures, rather than aiming at a more comprehensive set of alternative goals and policies. Human rationality is limited by various factors. This includes cognitive limitations, social differentiation,

pluralist conflict, and structural distortions. A disjointed incrementalist approach is most appropriate when the main obstacle to organizational rationality comes from pluralist conflict.

The process of disjointed incrementalism produces smart and coordinated decisions through a natural process of “partisan mutual adjustment,” (Lindblom, 1965). Negligence and errors that cannot be avoided by actors in making decisions in certain institutions will be taken into account by actors in other institutions. The reconstructive nature of problem solving contributes to overall quality of decision making, complementing each other, discontinuously in same goal of resolving the problem at hand.

This approach focuses on comparing policies that have only changed slightly in contrast to existing policies which pay less attention to big goals of formulated policies, apart from overcoming problems and improving them. The formulation process is based on available facilities and infrastructure and conducted in a patchwork manner. This approach is disjointed because policies are not implemented in a comprehensive, controlled and with complete coordination.

Logical Incremental can be traced in research (Quinn, 1980) conducted in business sector, in contrast to Linblom whose area of study was in public sector. Quinn stated that managers in large companies tend to develop strategic plans through a process that cannot be adequately explained by formal planning models or behavioral theories of power. Top management cleverly combines formal-analytical, behavioral, and power-political techniques to achieve cohesion and step-by-step movement toward broadly defined goals, which are also continually refined when the new information available. This integration methodology is best described as a process of “logical incrementalism” (Rajagopalan and Rasheed, 1995). In contrast to disjointed incrementalism, the logical incrementalism model views policy making as a conscious and proactive process supported by a strong and centralized vision (top management vision). Disjointed incremental has aim to achieve social agreement through minimizing conflict, while the basic objective of logical incremental is to improve the quality of strategic decisions and maximize the likelihood of their successful implementation. However, both models attempt to overcome problems caused by a lack of information, limited human ability to solve problems, and value conflicts inherent in policy formulation. The logical incrementalism was “chaos in achieving goals” and can be applied to certain government processes and also to business organizations (Rajagopalan & Rasheed, 1995) .

This view put political party platforms from year to year as a logical improvement in a more holistic and strategic framework as represented by the party's long-term goals and service programs. The “messing with objectives” best describes the behavior of strategists who keep the organization's ultimate goals in mind while making gradual adjustments due to following conditions: (a) facts not available to forecast detailed policies and (b) political or social factors in organization preventing a single “master plan” from being implemented from above. Therefore, the process of logical incrementalism emphasizes the coordination of centrally planned and managed incremental decisions, supported by a continuous and conscious reassessment of organization, its capacities, and its needs in light of its surrounding environment. Gladstein and Quinn (1985) clearly distinguished between decision rationality which aims to arrive at “best” decision and action rationality more oriented to involve people in decision-making process to obtain their input and cooperation. Organizations need to move back and forth between decision rationality and action.

Logical Incremental research from Quinn (1980) cannot be applied in crisis situations, which require immediate action from policy actors. Rajagopan & Rasheed combined the two by stating that both the public and business sectors are based on limited information, limited human ability to solve problems, and potential for inherent value conflicts, not taking into account crisis or emergency situations and conditions due to extraordinary events in form of a pandemic. Both disjointed Incremental and logical Incremental are in a controlled situation.

RESEARCH METHODS

This research is located in Malang City as one of most populous cities in East Java with a population of 874.66 thousand people and number of residents who are active during the day reaches more than 1.2 million people with an area of only 111 km². The number of residents and high level of citizen activity were added during the pandemic. Malang City was always in red zone and PPKM (society activities limitation) level 4 as the maximum

indicator of crisis during the pandemic was relevant as a research location. This research uses descriptive qualitative method (Denzin & Lincoln, 2018) with data analysis techniques using an interactive model (Matthew B. Miles et al., 2014) , starting from collecting data through interviews with 17 informants, 9 observation location areas and 9 types of documents. Validity of data was checked by triangulation techniques (Creswell, 2013) .

RESEARCH RESULTS AND DISCUSSION

Disjointed Incremental and Logical Incremental in Policy Formulation

The regulations to deal with pandemic in Malang City only continue the existing policies, changing some in order to respond to situation and increasing spread of virus, in addition to following up the policies from the central and provincial governments. Central and provincial government regulations are available policy options. So the Malang City government just has to continue the policy, namely the policy of central government and provincial government by making necessary adjustments.

Disjointed Incremental model divides the analysis and evaluation in sense that policy aspects or problem areas are analyzed at various points, without clear coordination and without articulation of parts that characterize the rational division of a problem. Problem solving, policy making is serial and remedial, namely the main focus is on existing corrective measures, rather than aiming at a more comprehensive set of alternative goals and policies. Human rationality is limited and (inevitably) restricted due to various factors. This includes cognitive limitations, social differentiation, pluralist conflict, and structural distortions. A disjointed incrementalist approach is most appropriate when the main obstacle to organizational rationality comes from pluralist conflict.

The process of disjointed incrementalism produces smart and coordinated decisions through a natural process of “partisan mutual adjustment,” (Lindblom, 1965). Negligence and errors that cannot be avoided by actors in making decisions in certain institutions will be taken into account by actors in other institutions. Therefore, the reconstructive nature of problem solving contributes to overall quality of decision making, complementing each other, discontinuously in same goal of resolving the problem at hand.

This approach focuses on comparing policies that have only changed slightly in contrast to existing policies which pay less attention to big goals of policies formulated, apart from overcoming problems and improving them. The formulation process is based on available facilities and infrastructure and conducted in a patchwork manner. This approach is disjointed because policies are not implemented in a comprehensive, controlled and complete coordination.

The logical incrementalism stated that political party platforms from year to year are a logical improvement in a more holistic and strategic framework as represented by the party's long-term goals and service programs. The “messing with objectives” best describes the behavior of strategists who keep the organization's ultimate goals in mind while making gradual adjustments due to following conditions: (a) facts not available to forecast detailed policies and (b) political or social factors in organization preventing a single “master plan” being implemented from above. Therefore, the process of logical incrementalism emphasizes the coordination of centrally planned and managed incremental decisions, supported by a continuous and conscious reassessment of organization, its capacities, and its needs in light of its surrounding environment. Gladstein and Quinn (1985) clearly distinguish between decision rationality which aims to arrive at "best" decision and action rationality which is more oriented towards involving people in decision-making process so as to obtain their input and cooperation. Organizations need to constantly move back and forth between decision rationality and action.

Logical Incremental based on research (Quin, 1980) cannot be applied in crisis situations, which require immediate action from policy actors. Rajagopan & Rasheed combine the two by stating that both the public and business sectors are based on limited information, limited human ability to solve problems, and potential for inherent value conflicts, not taking into account crisis or emergency situations and conditions due to extraordinary events in form of a pandemic. Respectively, both disjointed Incremental and logical Incremental are in a controlled situation.

The disjointed Incremental and logical Incremental can be used simultaneously to overcome the Covid-19 pandemic in Malang City, this logical incremental model is more appropriate to use in dynamic and less stable environments, but research by (Quinn, 1980) occurs in business sector. The pandemic has an impact on public life, especially the economic sector, but the policy environment is dynamic and clearly unstable. Disjointed incremental make it possible to formulate strategic policies in an unstable environment, but both disjointed incremental and logical incremental are also unstable due to crisis situations.

During the strategic formulation phase, actors can use rationality of action, but in an unstable environment, strategic policy is unstable. The environment may have changed when strategic policies are decided. That is happened in example of newly implemented PSBB policy, it did not make Covid-19 cases subside, but became more widespread with high number of positive patients, so a new policy in form of PPKM was needed. The disjointed incrementalism model is an appropriate description of incremental politics, whereas logical incrementalism is more applicable to patterns of top management behavior (Quinn, 1980) observed in large business companies.

There is distinction between decision rationality which aims to arrive at "best" decision and action rationality which more oriented to involve people in decision-making process to obtain input and cooperation. Government agencies need to constantly move back and forth between decision rationality and action. Logical incrementalism represents a compromise between these two types of rationality by allowing decision rationality to dominate during the strategic formulation phase and action rationality to dominate during the strategic implementation phase. The typology of two models is shown in figure 1.

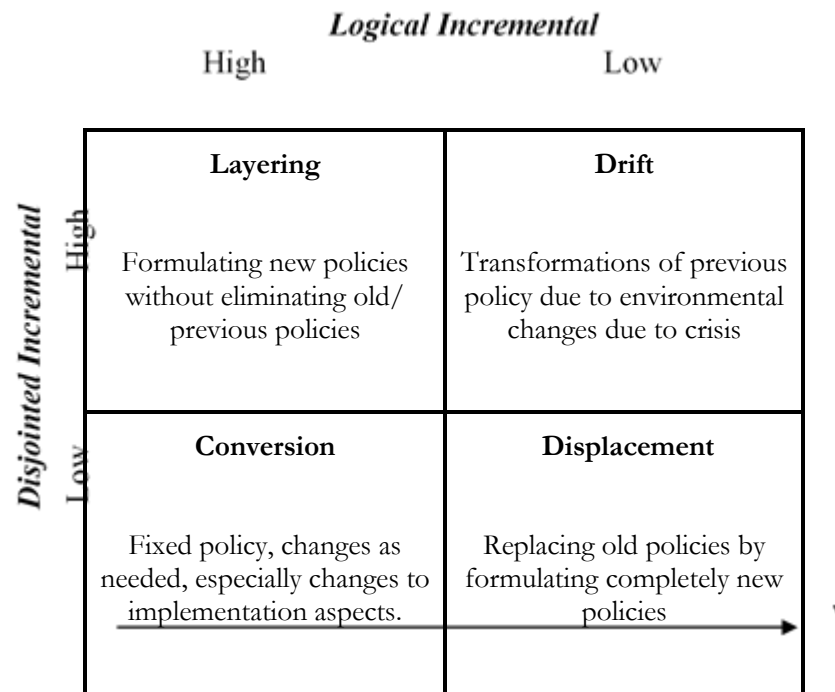


Figure 1: Disjointed and Logical Incremental in Policy Formulation

Source: Results of data analysis and adoption from (Mahoney & Thelen, 2010) .

Based on Rajagopalan & Rasheed (1995), Disjointed Incremental and Logical Incremental for phenomena in Malang City produces changes that can be described in four typologies in policy formulation, namely layering, drift, conversion and displacement. The four typologies are based on question of how disjointed incremental and logical incremental are used in policy formulation process based on most ideal possibility for pandemic case which is not ideal in terms of time, resources, and budget, especially not ideal to make the right policy for future orientation.

Layering is new policies formulation without eliminating previous policies. It has lowest possibility for logical incremental model because actors can maximize rationality in policy formulation process as long as they have sufficient time and resources. It is also possible to consider the pros and cons in their choices. Layering has high possibility for Disjointed Incremental model because the crisis requires speed of decisions and actions by formulating new policies without eliminating previous policies altogether. It is appropriate to pandemic situation to overcome real social problems rather than to overcome future social problems, (Islamy, 2004).

Drift is a transformation of public policy due to change. It has high possibility for logical incremental model approach. Actors have the widest opportunity to transform previous policies in next policy formulation process because there is a change in crisis situation in same phenomenon, namely the pandemic. Drift also has high possibility for Disjointed Incremental model. Actor has role to make initiative and final decision remains in hands of internal government actors.

Conversion is used to retain the previous policy with minor change when needed, especially for implementation aspect. A policy change is occurred at interpretation and implementation levels, while at same time the policy has not formally changed. Both the logical incremental and disjointed incremental models have a low probability to use conversion. The policy environment with a crisis situation needs policy changes, not only in technical aspects of implementation but also openness in formulation process.

Displacement is replacement of old policies by formulating new policies. It gives large space for logical incremental model because actor rationality is more suitable with new policies, especially actors who have political interests and considered as an "achievement" if they make new policies. The possibility is low for disjointed incremental model, even with main characteristic of disjointed actors being faced with various limitations, there is very small space to create new policies. The logical incremental and disjointed incremental are "normal" things as legal efforts to make changes, especially at policy formulation stage. The opportunities depend on actor preferences by considering the internal government actors domination in dealing with pandemic.

Recommendations for Pandemic Policy Formulation

The concept of "incrementalism" in policy formulation can be traced back to publication in 1959 of Lindblom's controversial and widely cited article, *The Science of Muddling Through*. *Muddling Through* was later formalized by Braybrooke and Lindblom (1963) as the theory of "disjointed incrementalism" and further developed by Lindblom (1965).

The generalization of incrementalism theory was done by identifying similarities between policy and development research in military, economic development policy, and government policy making. The theoretical basis of incrementalism continued to develop. The empirical studies found that model's predictions were quite valid in certain government processes.

Several studies attacked the descriptive and normative validity of the theory (Etzioni, 1967). Alternative models that depart from the perspective of incrementalism to overcome the weaknesses of incrementalism were developed by critics of disjointed incrementalism (Etzioni, 1967). In addition, new models were developed based on incrementalist perspective. The prominent model is the "logical incrementalism" (Quinn, 1980).

A critical review for theory of incrementalism development leads to several interesting observations. The concept of incrementalism since 1959 has continued to become a source of intellectual debate among scholars interested in achieving a better understanding of policy formulation process. The basic assumptions and limitations identified by early proponents of these theories were often not fully understood or applied, creating semantic and substantive confusion in the development. Several writers in fields of strategic planning and policy have treated "disjointed incrementalism" and "logical incrementalism" as almost identical theories. Related to covid-19 pandemic in Malang, the relationship between research result and previous research is shown in table 1.

Table 1. Relationship of Research Results with Previous Research

| No. | Formulation Stages | Previous Research and Research Results |
|-----|--|---|
| 1 | Problem characterization is conducted by the Regional Secretary and Organization Section | Identifying critical issues that require attention, information governance, ensuring public services continue to run, the determinants need to be considered and ensure the capacity of government institutions, (Sheehan & Fox, 2020) , capacity and competence are needed in achieving policy resilience, (Howlett et al., 2018). |
| | Recommendation | Forming a policy emergency team with representation from various actors to avoid politicization and fear created by the government (Bieber, 2020). |
| | Research findings | The Malang City Government at start of pandemic was unprepared and not well coordinated due to sudden pandemic crisis. The Mayor instructed the Regional Secretary to chair an emergency meeting, forming a Covid-19 Task Force which only included ASN elements, no community elements. |
| 2 | Initial Evaluation of Pandemic Problems Conducted by the task force team and inspectorate, unfortunately only in technical budget terms | Collecting the most up-to-date data and information regarding the problems faced to make policy that more resilient to unexpected changes, (Capano & Woo, 2018) |
| | | Conduct objective evaluations based on established performance indicators and identify risks, impacts and opportunities related to policy formulation. |
| | Research result | The pandemic management policy formulated by the Malang city government is based on central government policy. The existing policies are intended only as a response to short-term oriented problems, evaluation is only limited to budget use. |
| 3 | Specification of Policy Formulation Objectives | The Public Administrator (bureaucracy) becomes the sole actor in policy formulation process to response quickly to crisis situations. The complexity of public issues places the role of bureaucracy in policy process in political-administrative continuum (Roman, 2017) |
| | | Multi stakeholders establish regulations based on evaluation results, for sustainable policies (MacDonald et al., 2019) . |
| | Research result | The dominance of internal government actors in formulation of pandemic management policies aimed at immediately responding to a fast and widespread pandemic, there is no room for participation by the public and external actors in the process. So the goals set are based on preferences of internal actors only. |
| 4 | Policy Formulation Options and Design | Policy options and designs must be future-oriented and resistant to change (Van der Steen & van Twist, 2018) |
| | | Evaluating the formulation process to measure the impact and must provide a variety of policy formulation options and designs. |
| | Research result | Evaluation is limited to handle the pandemic, limited to evaluate the spread and struggling to reduce the "number" of spread due to pressure from the leadership. |
| 5 | Legitimacy of Policy Formulation | The legitimacy of policy formulation is conducted by the Mayor of Malang together with regional secretary, limited to executives or political and bureaucratic officials (Roman, 2017; Van der Steen & van Twist, 2018) . |
| 6 | Reporting and Accountability | Documenting all decisions and reasons behind the formation/change of regulations and provide limited socialization. |
| | | Report regularly to public about the development of pandemic and impact of regulations that have been implemented. |
| | Research result | Technically, in preparation of draft manuscripts, the practice of incremental plagiarism occurs due to lack of public involvement, especially in process of finalizing the manuscript before it is decided (Howlett, 2014; MacDonald et al., 2019) . |
| 7 | Administrator | The formulation process of regulations and writing texts is conducted by administrative staff. So it is done using incremental techniques. We should build multi-stakeholder partnerships to formulate more effective policies. The increasingly complex problems (due to pandemic) faced by the government cannot be handled alone, it is necessary to build multi- stakeholder partnerships (MacDonald et al., 2019) . |
| | Recommendation | The administrator capacity should be strengthened, to anticipate the pandemic crisis in future. |

Source: Results of research data processing, 2023.

The mayor instructed the regional secretary to make initial preparations, characterize the pandemic problem, and identify critical problems that require priority attention, such as the accuracy of patient data, the availability of facilities and infrastructure for positive patients and budget. Forming an emergency policy team with representation from various actors. Therefore, it is important to involve all actors because the pandemic problem is complex. Initial evaluation is done by collecting up-to-date data and information regarding the problems, identifying risks, impacts and opportunities related to regulatory changes. Consider information from experts and interested parties outside the government. So it is hoped that with involvement of non-government actors, policies can run more effectively.

Policy formulation, draft changes to regulations or formation of regulations are based on evaluation results and input from Local information elements and taking into account the public interest. This can ensure that draft regulations reflect clear and urgent objectives, but articulate the public interest. Explain in detail the impact and reasons behind changes or formation of regulations by prioritizing transparency. Communication and public participation. Communicating policy objectives and policy change goals to public transparently and involving public participation in formulation and implementation. It should create synergy in overcoming the pandemic.

Regular monitoring and evaluation are done by establishing an evaluation schedule to measure the impact and effectiveness of new regulations/regulatory changes. The objective evaluations are based on predetermined performance indicators, at least reducing the spread of virus. Reporting and accountability are done by documenting all decisions and reasons behind the formation or changes to regulations so that policy changes can be understood by the public.

CONCLUSIONS AND RECOMMENDATIONS

The model that has been used so far is incremental, namely changing as little as necessary, adopting previously existing policies by making additions and subtractions at certain points, reducing words in articles. The incremental model evolved into Disjointed Incremental and Logical Incremental. The results of document analysis between the Surabaya mayor's regulations compared to Malang mayor's regulations show significant similarities and are supported by reliable information that plagiarism did occur. Consideration of time constraints, crisis situations (crisis-driven) and pressure from leadership has technically encouraged the drafting of policy text to be conducted in an incremental manner. Further exploration shows four typologies in incremental process. First, layering is formulization policies without eliminating previous policies. Second, drift is a transformation of previous policies because there are changes in environment due to crisis. Third, conversion is a fixed policy but there are changes in terms of implementation. Fourth, displacement is replacing old policies by formulating completely new policies.

This research is interesting to follow up as an academic contribution to complement incremental policy by focusing on policy formulation process in normal situations, starting from the preparation of academic texts, public testing in broader policies other than mayoral regulations, such as regional regulations.

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