

## **DEWEY'S PRAGMATISM AS EXPERIMENTALISM: A CRITIQUE OF TRADITIONAL PHILOSOPHY**

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### **ABSTRACT**

*Pragmatism, as a philosophical doctrine, is so dominant today that James's claim that one can deny it and still be a pragmatist is playing out. Again, natural science is moving so fast that a rational mind may find it difficult to perform its duty of checking its limitations. This paper, therefore, discusses Dewey's pragmatism which has a nexus with the natural sciences through his theory of experimentalism or instrumentalism. The paper discusses Dewey's experimentalism and adopts it as a model for critiquing traditional philosophy which is speculative in nature. The study shows that Dewey's instrumentalism is a five-/six-way scientific procedure for the attainment of knowledge. In Dewey's instrumental pragmatism, "problem gets thinking started." Deweyan experimentalism is an onslaught on traditional philosophy which essentially is speculative, absolutist and foundational. It is both a rejection of the traditional methods of philosophizing and the traditional views of knowledge (spectator and correspondence theories of knowledge). It rejects absolutist and rationalist logic in favor of contextual logic. Adopting the textual-analytic method of investigation, the paper concludes that experimentalism is Dewey's mild way of saying that philosophy should close shop and open one for the natural sciences since Dewey's experimentalism knocks off traditional philosophy and solidifies the foundations of the experimental sciences.*

**KEYWORDS:** *Pragmatism, Experimentalism, Instrumentalism And Traditional Philosophy.*

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### **INTRODUCTION**

Every science and discipline evolves through different ages as well as stages. But in this evolutionary process, what is important is that the essential elements or substance of the discipline are or is retained, even though the existential attributes are discarded. Philosophy itself has gone through this process and has lost some of its existential ingredients and in some cases appears to be losing its essential ingredients. This appears to be the case of philosophy when and if we strictly adopt the experimental philosophy of John Dewey, one of the leading exponents of pragmatism. This philosophy calls to question some of the core ingredients of traditional philosophy. Such ingredients as the speculative method of philosophizing and traditional theories of truth. More worrisome is the fact that it almost completely abandons traditional methods of philosophizing in favor of a mechanical experimental method.

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This paper, therefore, seeks to discuss Dewey's pragmatic philosophy which is experimentalism or instrumentalism. It further attempts to use it as a model for critiquing traditional philosophy. It is our thinking that a good judgment of the Deweyan pragmatic philosophy will be better appreciated when placed side-by-side with traditional philosophy which it seeks to reject; particularly, the modern rationalist philosophies. The paper attempts to argue that Dewey's pragmatic philosophy is a rejection of traditional ways of philosophizing (traditional philosophy) and the problems to which they give rise. The practice of pursuing knowledge by means of experimentation, a mode of directed and controlled action, constitutes a rejection of the spectator conception. Because it is our wish that our position be clearly comprehended, we shall be analytical in our writing.

### **Situating the Concept of Traditional Philosophy**

"Traditional philosophy encompasses the philosophical ideas, methods and systems that have been passed down through history, particularly, in the Western philosophical tradition." It includes any philosophical doctrine or piece of work that emphasizes the rationalistic and/or mental components of knowledge, e.g. the speculative philosophies of Plato, Aristotle, Descartes, Spinoza, and Hegel. Traditional philosophy, in this regard, presupposes any philosophy that expresses or indulges the crude tendencies of philosophy at its origin. This includes the crude speculative tendencies of Ionian philosophies, the idealist-cum-foundational philosophies of Plato and Descartes. It is perhaps for the reason of its rejection of traditional philosophy that Will Durant (1953) wrote that pragmatism "began with a healthy reaction against metaphysics and epistemology and one expected from it a philosophy of nature and society; but it ended as almost an apologetic plea for the intellectual respectability of every dear belief" (p.389). Theoretically, all idealists, realists, and foundational philosophies of the Ancient, Medieval and Modern periods are to be braced in this class of traditional philosophy. But to operationalize the concept within the context of this paper, we refer to traditional philosophy as any piece of philosophical work that emphasizes foundationalism, rather than progressivism or process, idealism rather than ultra-realism, and rationalism rather than experimentalism. Traditional philosophy, on the other hand, admits of experiential realities, does not emphasize experience as much as it emphasizes rationalism. Orthodoxy regards experience primarily as a knowledge-affair. But to eyes not looking through ancient lenses, experience assuredly appears as an affair of the intercourse of a living being with its physical and social environment (Dewey, 1917, in Hickman. and Alexander, 1998, p. 41 Vol. 1). Therefore, our reference to experience in this paper shall be strictly based on Dewey's conception of the term "as the intercourse of a living being with its physical and social conditions." Traditional philosophy is orthodox philosophy. It is implicit in most philosophies except contemporary philosophy

### **The Origin and General Characterization of Pragmatism**

Traditional philosophy was called to question by Charles Sanders Peirce, William James and John Dewey in the 19th and 20th centuries by their formulation of a philosophical doctrine which became known as pragmatism. This philosophy stresses the relation of theory to praxis and takes the continuity of experience and nature as revealed through the outcome of directed action as the starting point for reflection (Audi, ed. 1999, p. 638). Pragmatism is given various formulations by different authors, but the core is the belief that the meaning of a doctrine is the same as the practical effects of adopting it (Blackburn, 2005:287). The term 'pragmatism' etymologically derives from the Greek term 'pragma' which means 'use'; "thus pragmatism is an ism according to which use is the criteria of reality" (Chandra, and Sharma, 2007, p. 99). Historically, the doctrine was developed by Charles Sanders Peirce in his articles "The fixation

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of Belief" and "How to Make Our Ideas Clear." William James alluded to this view in his work *Pragmatism* when he observed that pragmatism was introduced into philosophy by Mr. Charles Peirce in 1878 (James, 1991, p. 33). John Dewey whose strand of pragmatism is our concern in this paper also acknowledged Peirce as the originator of this doctrine. For Dewey, in his article "The Development of American Pragmatism," the origin of pragmatism goes back to Charles Sanders Peirce, the son of one of the most celebrated mathematicians of the United States (Dewey, 1925, in and Alexander, ed. 1998, p. 3). Peirce developed the pragmatic doctrine from Kant's philosophy. In *The Metaphysics of Morals*, Kant established a distinction between the pragmatic and the practical: "The latter term applies to moral laws which Kant regards as a priori whereas the former term applies to the rules of art and technique which are based on experience and are applicable to experience" (Dewey, 1925, in Hickman, and Alexander, ed. 1998, p. 3). Although Peirce originated pragmatism, he did not popularize it. This doctrine was popularized by William James and John Dewey. For William James, the pragmatic method is primarily a method of settling metaphysical disputes that might be interminable (James, 1991, p. 23). However, James applied the pragmatic method to almost all issues in philosophy. Similarly, for John Dewey, it is a method as well, but more importantly, it is a scientific method called experimentalism. It is also called instrumentalism which literally means that ideas are instruments for problem-solving. This is not because James's pragmatism does not qualify to be called instrumentalism - at least, James believed just as Dewey also did that ideas were instruments of action. Dewey formulated a pragmatic doctrine that sees ideas as instruments of problem-solving. This principle is a scientific procedure that has a mixture of Peircean scientific and logical components, the Darwinian biological and evolutionary components, as well as the Jamesian moral and practical elements all contained in it. This Deweyan five/six-step scientific procedure states as follows:

- a. The learner has a genuine situation of experience – involvement in an activity that interests him or her.
- b. Within this experience, the learner has a genuine problem that stimulates thinking.
- c. The learner possesses the information or does research to acquire the information needed to solve the problem
- d. The learner develops possible and tentative solutions that may solve the problem – hypothesis
- e. The learner tests the solutions by applying them to the problem, if it solves the problem the process is concluded and knowledge is attained but if not, the process continues afresh (Ornstein, and Levine, 1993, p. 137).

It is the whole body of this Deweyan pragmatic argument that is referred to as experimentalism. John Dewey's instrumentalism or experimentalism, as we have stated, is a problem-solving (pragmatic) philosophy. But this Deweyan formulation of an experimental procedure of acquiring knowledge bears grave implications for traditional philosophy. Just as we find in James, pragmatism tends to destroy the tender-minded elements of knowledge, in favor of the tough-minded elements; the elements of concreteness, of facts and result. If Dewey's experimental pragmatism is foolproof, then, it follows that the entire structures of philosophy, of knowledge, of science, and of actions (which are metaphysical) will crumble. Hence, Dewey's conception of thought or ideas within the scientific and mechanical framework of problem-solving reduces philosophy to a pragmatic quest for achieving results and solving human problems. But if we may ask, who creates the problems which the pragmatist of Deweyan orientation may wish to solve? Probably, what Dewey forgot was that he created a form of

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semblance between inquiry and questioning. It is characteristic of traditional philosophy to question and these questions according to traditional philosophy arise out of wonder. We inquire when we inquire, when we seek for whatever will provide an answer to a question asked (Dewey, 1938, in Hickman and Alexander eds. 1998, p. 171). Any attempt to reduce philosophy to a problem-solving venture and neglecting the problem-creating aspect of philosophy is, in itself, a statement of problem that Dewey's experimental method may not address adequately. Again, the attempt by Dewey to reduce philosophy to a scientific method of trial and error still raises the question, can we be sure of anything? Anyway, we shall attempt to rid Deweyan pragmatism of its limitations and focus on its strength in an attempt to pay critical attention to the issues it raises against traditional philosophy. By our foregoing submission, therefore, we shall do a critique of traditional philosophy using a remedied Deweyan pragmatism as theoretical framework, but that will come after a detailed discussion of Dewey's experimental pragmatism.

### **Pragmatism as Experimentalism: Dewey's Heritage**

Deweyan instrumentalism is a general functional account of all concepts (scientific one's included) wherein the epistemic status of concepts and the rational status of actions are seen as a function of their role in integrating, predicting and controlling our concrete interactions with our world (Audi, 1999, p. 379). In addition to the foregoing, we can also see instrumentalism as the view that ideas are instruments for problem-solving. Experimentalism, on the other hand, entails the trial procedure or processes that an idea or hypothesis undergoes before it is validated. In his essay "The Development of American Pragmatism," Dewey wrote: "in alluding to the experiment type of mind, we are brought to the exact meaning given by Peirce to the word 'pragmatic'" (Dewey, 1925, in Hickman, and Alexander, eds. 1998, p. 4). He continues: "in speaking of an experimentalist as a man whose intelligence is formed in the laboratory, he said "whatever assertion you may make to him, he will either understand as meaning that if a given prescription for an experiment ever can be, ever is carried out, an experience of a given description will result, or else he will see no sense at all in what you say" (Dewey, 1925, in Hickman and Alexander, eds. 1998, p. 4). Dewey, in the same work, drew a distinction between Peirce's pragmatism and Jamesian pragmatism: the former attempted to give an experimental not an a priori interpretation of Kant, whereas James tried to develop the point of view of the British thinkers (Dewey, 1925, in Hickman and Alexander, eds. 1998, p. 13). For him, therefore, "instrumentalism stays in opposition to many contrary tendencies in the American environment, that action should be intelligent and reflective, and that thought should occupy a central position in life" (Dewey, 1925, in Hickman, and Alexander, eds. 1998, p. 12 Vol. 1). In his work "The Pragmatic Acquiescence," Dewey wrote:

Words especially epithets, in philosophy are far from self-explaining, But the term "instrumentalism" might suggest a mind not too precommitted, the natural science and technology are conceived as instruments and that the logical intellect of mind which finds its congenial materials in these subjects is also instrument—that is to say, not final, not complete, not the truth or reality of the world alive (Dewey, 1927 in Hickman, and Alexander eds. 1998, p. 36).

All these are fragmentations of the Deweyan concept of instrumentalism, pragmatism or experimentalism, but Dewey's more detailed account of experimentalism is contained in his 1938 work, *Logic: The Theory of Inquiry*. In this work, Dewey outlined a five/six-step scientific procedure for the actualization of knowledge. This procedure begins with an indeterminate situation which evokes inquiry to be questionable. "An indeterminate situation arises objectively when the relation between people and their environment is undergoing change that disturbs the relation in some way" (Harris, N.Y, p. 1). "For Dewey, scientists were members of a community

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of inquiry who were motivated by shared norms pertaining to a commitment to value .... In seeking to solve problems, scientists drew on the shared conceptual resources of the community of inquiry and subjected these to the experimental method" (Cruickshank, 2014, p. 28). For Dewey, ideas are instruments of problem-solving: "Problem gets thinking started". Pragmatism commits to linking meaning criteria with present and future experiences (Malachowski, 2011, p. 1). Dewey replaces the spectator theory of knowledge with an experimentalist theory of knowledge, in which the consequences of a hypothesis are checked against experience providing warranted accessibility when consequences experienced correspond to consequence hypothesized (Webb, 2002, p. 7). Stumpf and Fieser (2003) states Dewey's rejection of the spectator theory of knowledge thus: Dewey's chief quarrel with earlier philosophy (traditional philosophy) was that it confused the true nature and function of knowledge. He argues that the empiricist assumed that thinking referred to fixed things in nature that for each idea, there is a corresponding something in reality, thus to see something is to have an idea of it. "This he called the spectator theory of knowledge" (p. 403). Dewey's pragmatism is almost the same with that of James in the sense that nothing is ever settled once and for all and any truth we might establish through a pragmatist science or the experimental procedure cannot be associated with an absolute nature of truth (Cochran, 2002, p. 527). Do not forget that James believes that "truth happens to an idea". That is to say that truth cannot be absolute. Deweyan scientific procedure may be stated as follows:

**Step 1:** This is an indeterminate situation which evokes inquiry to be questionable. Dewey says we can find these traits in this first step. It is a personal state of doubt that is not evoked by and not relative to some existential situation (Dewey, 1930 in Hickman, and Alexander eds., 1998, p. 172 Vol.1). For Dewey, it is a mistake to suppose that something is only doubtful in the subjective sense. Something can also be doubtful in the objective sense. This step or stage is the stage of wonder, do not forget that Dewey adopted the Darwinian biological naturalism and added the social-cultural perspective. Indeed, Dewey's theory is a contextual logic. That is, a system of reasoning understood from the point of view of man's interaction with his biological, cultural and social experiences. What this stage entails, therefore, is that human beings often have natural reasons to doubt some of their cultural, social and biological experiences. In the interaction between cultures, human beings tend to contend with some natural questions. These questions are often based on cultural contexts, inner feelings, personal experiences and biological ties. This is tantamount to the wonder out of which philosophy originated. It is the state of perplexity and wonder. Let us assume it to be a state of wonder about a fire outbreak in a building. The fire has not yet materialized at this stage, but the human consciousness already contemplates it a possible fire outbreak.

**Step 2:** Dewey's second step is the step or stage where the problem sets in "it is but an initial step in institution of a problem" (Dewey, 1938, in Hickman, and Alexander, eds. 1998, p. 173. Vol. 1). The example given by Dewey may be necessary here. The problem of fire in an assembly hall sets in. This problem triggers off thought. Dewey argues that this is the stage where the actual fire breaks out. Thus there is a problem to confront or solve. This problem may not necessarily be about fire outbreak. It may be any other kind of problem that human beings contend with in the course of their cultural and social experiences.

**Step 3:** The third step is the determination of a problem's solution. Following the problem occasioned by the fire in the assembly hall, the mind begins to contemplate or proffer possible solutions such as exiting the hall or putting out the fire. Considerations based on

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one's experiences begin to play out. The mind quickly starts its work by thinking of the possible solutions to solving the problem of the fire in the assembly. Dewey argues that every idea originates as a suggestion but every suggestion is not an idea. "These suggestions become ideas when examined with reference to its functional fitness; its capacity as a means of solving the given situation" (Dewey, 1938, in and Alexander, eds. 1998, p. 174. Vol. 1). What this means is that all the solutions offered are not automatic answers to the problem. They are further processed by the mind in the next stage. At this stage, therefore, what is generated is merely a hypothesis which must be put to further test and validated before it becomes theory.

**Step 4:** This stage is where reasoning takes place; at this stage, the mind begins to reason and compare all the suggestions presented to it in the previous stage through reasoning which is a logical process. The mind begins to examine the pros and cons of the suggestions presented to us in the third stage for a possible consideration of one of the solutions.

This point made can be most readily appreciated in connection with scientific reasoning. An hypothesis, once suggested and entertained is developed in relation to other conceptual structures until it receives a form in which it can instigate and direct an experiment that will disclose precisely those conditions which have maximum possible force in determining whether the hypothesis should be accepted or rejected or it may be that the experiment will indicate what modifications are required in hypothesis so that it may be applicable (Dewey, 1938, in Hickman, and Alexander eds. 1998, p. 175. Vol. 1)

The simple point here is that this stage is a step where the hypothesis or suggestion advanced in the third stage is further subjected to a rational process of reasoning to further refine the hypothesis.

**Step 5:** Dewey calls this step "The Operational Character of fact-meaning". This is the practical application of the hypothesis to the problem. What do we mean by calling facts operational? They are selected and described, as we have seen, for a purpose, namely; statement of the problem involved in such a way that its material indicates a meaning relevant to resolution of the difficulty and serves to test its worth and validity (Dewey, 1938, in Hickman, and Alexander, eds. 1998, p. 175. Vol.1). He maintains that they are not merely results of operations of observation which are executed with the aid of bodily organs and auxiliary instrument of arts, but they are rather particular facts and kinds of facts that will link up with one another in the definite ways that are required to produce a definite end (Dewey, 1938 in Hickman, and Alexander, eds., 1998, p. 175. Vol.1) This stage is an application of the hypothesis in the laboratory of experience.

**Step 6:** If the result of the last laboratory test above is positive, then the hypothesis becomes a theory and knowledge is gained, but if the result of the test proves negative, in which case, it did not solve the problem, the process starts all over again from the first step which is asking the question, why did it fail? Or wondering why it failed. Radu (2011) summarizes Dewey's experimental method in five steps. Discussing Dewey's educational theory Radu assert:

1. In a first instance, an empirical situation is created to reproduce a familiar situation, so that for the child everything seems to be known.
2. As soon as he/she has started to work, obstacles that need to be overcome appear. A problem which stimulates thinking is created.
3. Data provided by past experience will be used in such situations.
4. Based on these elements, the student formulates hypothesis for solving the problem.
5. The hypothesis considered to be the most adequate is chosen, and it will be verified after wards. (pp. 85-90)

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**A Critique of Traditional Philosophy**

Dewey's experimentalism, which we discussed above, harbors great implications for traditional philosophy. Recall our conceptual domestication of traditional philosophy first as those philosophical doctrines or works of philosophers that emphasize the mental elements of reality (idealism), or any philosophical doctrine that seeks to know reality from the point of view of its substance. Second and most importantly, as any piece of philosophical work that emphasizes foundationalism, (fixation) rather than progressivism or process, idealism rather than workability, and rationalism rather than experimentalism. Our critical cursor points first at Dewey's experimental or instrumental pragmatism. It questions Dewey's experimental logic for claiming to eliminate or attack traditional metaphysics and epistemology. Dewey's experimental pragmatism cannot claim to be totally against traditional philosophy neither should it claim to be foolproof; for as we saw in Dewey's first step, experimental pragmatism began with wonder, the same way traditional philosophy began with wonder. Again, pragmatism is a metaphysical-cum-epistemological theory and, hence, it cannot claim to reject metaphysics nor epistemology. Having made the foregoing observations and objections to the claims of Deweyan pragmatism, we argue that pragmatism can be a model for critiquing traditional philosophy. First, Deweyan experimental pragmatism critiques traditional philosophy for its speculative methodology. This is because the application of the speculative method of traditional philosophy can only guarantee little or next-to-no knowledge certainty when compared with Dewey's pragmatic experimental method. Although Dewey's own method is not foolproof, it has a better coefficient (probability ratio) of truth when compared to the speculative method adopted by traditional philosophy. This does not mean that traditional philosophy is not methodical. After all, we placed Cartesian philosophy within the cluster class of traditional philosophy. The speculative method adopted by traditional philosophers was directly called to question by Dewey's experimental method. Rather than philosophy thriving on the rationalist and empiricist controversies of fixed principles and thought, philosophy should rather adopt a procedure that leads us to its gain, that is, knowledge. Rather than adopt the positions of the rationalists or those of the empiricists, Dewey adopted immediate empiricism, he criticizes traditional philosophy for adopting a theory of knowledge where experience refers to fixed principles in the mind or in the world. Orthodoxy views experience as primarily a knowledge affair, but to eyes not looking through traditional ancient philosophical lenses, it assuredly appears as an affair of the intercourse between a living being and its physical and social environment. The notion of fixed principles graspable through the intuitive method is given away. It implies, therefore, that philosophy has moved away from absolutism to experientialism. No wonder, this was the title of one of Dewey's articles "From Absolutism to Experimentalism". Indeed, Dewey showed how he moved away from neo-Hegelian absolutism to experimentalism. The two points we have mentioned so far, namely that of a movement from the speculative method to the experimental method and that of moving from absolutism to experimentalism (universalism to contextual logic) could be deduced from his words:

It is often said that pragmatism, unless it is content to be a contribution to more methodology, must develop a theory of reality. But the chief characteristic trait of the pragmatic notion of reality is precisely that no theory of reality in general überhaupt, is possible or needed (Dewey, 1917 in Hickman, and Alexander, eds. 1998, p. 64).

Good James A. (James Allan) in his article "John Dewey's 'Permanent Hegelian Deposit' and the Exigencies of War" exploring the Hegelian footprint in Dewey and pragmatism wrote "...Dewey also rejected the view that Hegel's dictum reduces empirical reality to the thought

process of a rational transcendent mind, rather it elevates thought to the same degree of reality as the world of ordinary experience" (Good, 2006, pp. 292-313). Frankly and logically speaking, the implication of Dewey's experimentalism for traditional philosophy is that traditional philosophy may not be found in the future. That is to say, Dewey has destroyed the magnum opus or quiddity of traditional philosophy; the speculative indicators of philosophy, the prescriptive future of moral laws and human habits contained in traditional speculative philosophies have all been destroyed and replaced with a predictive moral science that needs to be tested in the laboratory. Suffice it for us to say, therefore, that if the Deweyan pragmatic experimentalism is adopted in philosophy, then philosophy should close shop and open one for empirical science. We imply that the implication of Dewey's experimentalism for traditional philosophy is that it criticizes traditional philosophy to the extent that any attempt at adopting its solution "silva varitate" philosophy might close shop. Mildly put, Dewey's recommendations indirectly seeks the demise of traditional philosophy and the birth of natural science. This, in our view, is because traditional metaphysics and epistemology are the oil with which the engine of philosophy lubricates reality and produces knowledge. It is only advisable that philosophy adopt the Deweyan experimental procedure since it seems more robust than the speculative method of traditional philosophy.

### **CONCLUSION**

We had set out to discuss pragmatism as experimentalism which, to us, is Dewey's heritage. We discussed it in relation to traditional philosophy, using it as a model for critiquing traditional philosophy. This discussion became necessary following the much emphasis on the natural science and the neglect of ontology. Our study revealed that pragmatism is a philosophical doctrine that emphasizes results over and above process. Pragmatism of the Deweyan strand is experimentalism and, as such, could suffice to be called scientific pragmatism. Dewey proposed a five/six-step practical, scientific, and natural procedure for the discovery of truth and rejected the spectator theory of knowledge inherent in traditional philosophy. The implication of Deweyan experimentalism for traditional philosophy is so great that it amounts to closing a shop for philosophy and opening another for natural science. To conclude with Margolis's words, "these is admirably clear, and helps to explain why, in Rorty's opinion, 'the holistic, anti-foundationalists, pragmatist treatment of knowledge and meaning which we find in Dewey, Wittgenstein, Quine, Sellars and Davison are almost equally offensive to many philosophers, precisely because they abandoned the quest for commensuration and thus are relativist'" (Margolis, 2007: 138). Truly, no experiment may be expected to settle an ontological issue. Thus, Dewey's attempt to reject the ontological basis for assessment of reality and his onslaught on traditional epistemology are here not sustained and admitted even though we admit his five/six-step experimental procedure as an epistemic progression.

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