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BASIC CONCEPTUAL PROVISIONS OF THE THEORY AND PRACTICE OF CREATIVITY IN WESTERN FOREIGN SCIENTIFIC LITERATURE (XX – early XXI centuries)

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A comprehensive analysis of the theoretical and methodological principles of the development of the creative potential in future specialists in foreign literature (XX – early XXI centuries) has been carried out. The content of the basic concepts of "creativity", "creative skills", "creative potential" has been clarified. The positions of foreign scientists on the development of creativity and creative skills in the future specialists have been systematized. The features of divergent thinking developed by the famous scientist J. Guilford as the basis of creative skills according to such parameters as speed, flexibility, originality, elaboration have been presented. The multidimensional model "4P" by Mel Rhodes has been analyzed, which structures the study of creativity in four directions: personality, process, product, environment. In the context of a systemic approach, the position of M. Csikszentmihalyi and R. Sternberg on creativity as a result of the interaction of systems has been considered. J. Kaufman and Ronald Baggett proposed a hierarchy of creativity: Mini-c (subjective learning), Little-c (everyday creativity), Pro-C (professional creativity of a specialist), Big-C (outstanding achievements that change culture or history). T. Amabayl developed a component model of creativity, as well as a model of the creative process, which includes the presentation of the problem, its preparation, generation, validation of ideas and evaluation of the result. The influence of the working environment is characterized, namely the factors that promote or hinder creativity in organizations. The role of the principle of progress in significant work has been substantiated and the contribution to the theory and practice of creativity by Teresa Amabayl has been analyzed. Thus, the analysis of foreign scientific literature indicates a deep differentiation of the concepts of "creativity" (creativity as a process/ability) and "creativity" (as an instrumental characteristic). Thus, Western scientific thought has gone from perceiving creativity as a "divine enlightenment" to developing clear psychometric and cognitive models, which lays the foundation for further promising developments in the mentioned field.

Keywords: *conceptual provisions of the theory of creativity, creativity, creative skills, Western scientific literature, psychometric and cognitive models.*

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ОСНОВНІ КОНЦЕПТУАЛЬНІ ПОЛОЖЕННЯ ТЕОРІЇ І ПРАКТИКИ КРЕАТИВНОСТІ/ТВОРЧОСТІ У ЗАХІДНІЙ ЗАРУБІЖНІЙ НАУКОВІЙ ЛІТЕРАТУРІ (XX – початок XXI ст.)

О. А. Дубасенюк

У дослідженні здійснено комплексний аналіз теоретико-методичних засад розвитку творчого потенціалу майбутніх фахівців у зарубіжній літературі (XX – початок XI ст.). Уточнено зміст базових понять "творчість", "креативність", "творчий потенціал". Систематизовано позиції зарубіжних науковців щодо розвитку творчості та креативності майбутніх фахівців. Представлено розроблене відомим вченим Дж. Гілфордом особливості дивергентного мислення як основу креативності за такими параметрами як швидкість, гнучкість, оригінальність, розробленість. Проаналізовано багатовимірну модель "4p" Мела Роудса, яка структурує дослідження творчості за чотирма напрямами: особистість, процес, продукт, середовище. У контексті системного підходу розглянуто позицію М. Чиксентмігаї та Р. Стернберга щодо креативності як результату взаємодії систем. Дж. Кауфманом та Рональд Беггетто запропоновано ієрархію креативності: Mini-c (суб'єктивне навчання), Little-c (повсякденна креативність), Pro-C (професійна креативність фахівця), Big-C (видатні досягнення, що змінюють культуру чи історію). Т. Амабайл розроблено компонентну модель креативності, а також модель творчого процесу, що включає представлення проблеми, її підготовку, генерацію, валідацію ідей та оцінку результату. Схарактеризовано вплив робочого середовища, а саме фактори, які сприяють або перешкоджають креативності в організаціях. Обґрунтовано роль принципу прогресу у значущій роботі та проаналізовано внесок у теорію та практику творчості Терези Амабайл. Таким чином, аналіз зарубіжної наукової літератури свідчить про глибоку диференціацію понять "творчість" (як процес/здатність) та "креативність" (як інструментальну характеристику). Відтак, західна наукова думка пройшла шлях від сприйняття творчості як "божественного осяяння" до розробки чітких психометричних та когнітивних моделей, що закладає основу для подальших перспективних розробок у визначеній сфері.

Ключові слова: *концептуальні положення теорії творчості, креативність, творчість, західна наукова література, психометричні та когнітивні моделі.*

Introduction of the issue. Analysis of foreign scientific literature indicates a deep differentiation of the concepts of "creativity" (creativity as a process/ability) and "creativity" (as an instrumental characteristic). Western scientific thought has gone from the perception of creativity as a "divine enlightenment" to the development of clear psychometric and cognitive models. The relevance of the problem of creativity and creative skills in 2026 reached its peak. If creativity was previously considered to be the privilege of artists, today it is a strategic resource that determines the survival of business, the development of the economy, education and personality success of every individyal.

Current state of the issue. Based on the analysis of domestic (S. Goncharenko, I. Zyazyun, G. Kostyuk, V. Kremen, S. Maksymenko, V. Rybalko and others) and foreign scientific literature (T. Amabayl, J. Guilford, M. Rhodes, R. Sternberg, M. Csikszentmihalyi and others), we will highlight the main factors that make the mentioned problem critically important [1; 2; 4; 7; 10; 14; 18].

1. Transition to a "knowledge economy" and a creative economy. Today, the main driving force of the development of countries is intellectual capital, in particular, the innovation, since without creativity it is impossible to create new products that would withstand competition in the global market. Next is the flexibility of business models, given that the world is constantly changing, companies are forced to constantly "reprogram" themselves. The creativity of managers allows them to find a way out of crisis situations.

2. Resolving global challenges. Humanity faces problems that do not have ready-made solutions in textbooks: climate change, energy crisis, social inequality, military threats, social instability, etc. All this requires a search

for alternatives, so a creative approach is necessary for the development of sustainable technologies and new models of social interaction. It is important to emphasize the importance of an adaptive approach, since creativity helps people adapt to unpredictable changes in life and profession.

3. Competition with artificial intelligence (AI). In the context of total automation of routine and intellectual tasks, creativity remains the main competitive advantage of a person. AI effectively processes data, but it is limited by training samples. A person is capable of divergent thinking and creating ideas that go beyond existing patterns and imparting them with emotional content. Creativity today is the ability to be a "pilot" for AI, to set non-standard tasks and synthesize new meanings, to search for progressive and promising ones.

4. Changing the paradigm of education. Modern education shifts the focus from memorizing facts (which are always at hand in a smartphone) to developing 4K skills: creativity, critical thinking, communication, cooperation. Important fact: The World Economic Forum (WEF) consistently includes creativity in the TOP-3 most important skills of the future.

Table 1

Comparison of the role of creativity (made on the basis of a comparative analysis of scientific works on the role of creativity in foreign scientific literature: XX – early XXI centuries)

Characteristics	***Past (20th century)***	***Present (2020s)***
Scope of application	Art, advertising	All areas (IT, medicine, logistics)
Status	A nice bonus to the profession	Basic requirement for a specialist
Source	"Innate talent"	A skill that can and should be trained
Goal	Self-expression	Problem Solving

Therefore, the relevance of creativity lies in the fact that it is a tool for creating the future. In a world where knowledge/information is becoming widely available, the only way to be useful lies in person's ability to create something new, to combine the incompatible, and to see opportunities where others see obstacles.

The purpose of the article is to analyze the main conceptual provisions of the theory and practice of creativity and creative skills in Western foreign scientific literature (XX – early XXI centuries). To achieve the goal, it is important to consider and substantiate the main conceptual principles of the outlined problem and to highlight the most promising conceptual models and principles with the aim of their implementation in the educational process of higher education to modernize the professional training of future specialists.

Research methods: theoretical analysis and synthesis of the specified problem using fundamental methodological scientific approaches, in particular systemic, as well as the introduction of methods of comparison, analogy, abstraction, induction, deduction, modeling in order to identify the features and conceptual provisions of the theory and practice of creativity and creative skills in Western foreign scientific literature; the basic concepts of creativity are substantiated; the important role of psychometrics, in particular statistical methods and tests, are proven; the features of divergent and convergent thinking as the basis of creativity are analyzed and generalized, as well as multidimensional models of creativity and creative skills, the principle of progress.

Results and discussion. We will highlight the main conceptual positions that widely spread in the research in a specific field.

Divergent and Convergent Thinking (Joy Paul Guilford). Joy Paul Guilford was one of the most influential American

psychologists of the 20th century [11; 12]. In the field of creativity research, J. Guilford is considered the father of the modern study of this problem. His works fundamentally changed the idea of human intelligence, creativity, and methods of psychological measurement. The main scientific achievements are presented in the J. Guilford's *Structure of Intellect* (SI) *Model* (1955-1980s). J. Guilford's greatest contribution is the rejection of the idea of "general intelligence". He proposed a three-dimensional model, where intelligence is considered as a combination of three components: *operations* (what a person does): cognition, memory, divergent thinking, convergent thinking, evaluation; *content* (nature of information): figurative, symbolic, semantic, behavioral; *results* (form of processing): elements, classes, relations, systems, transformations, implications. Initially, the model contained 120 factors (5 × 4 × 6), but later J. Guilford expanded it to 150 and even to 180 individual abilities.

He was the first to clearly distinguish between two types of thinking: convergent thinking as the search for a single correct answer (typical for IQ tests) and divergent thinking – the ability to generate many different solutions to a single problem (the basis of creativity) [13].

The scientist identified four key characteristics of creativity: speed (number of ideas), flexibility (variety of ideas), originality, accuracy (refinement of details).

Development of psychometrics. J. Guilford developed numerous statistical methods and tests for measuring intelligence and personality components. His approach was based on rigorous mathematical analysis (factor analysis), which made psychology a more precise science. The scientist identified divergent thinking as the basis of creativity, which means the ability to generate multiple solutions to a single problem. His parameters became the standard for measuring creativity: speed: number of ideas per unit of time; flexibility: ability to switch between different categories of ideas; originality: non-standard approaches; elaboration: details of the development of the idea [14].

The 4P's Model of Creativity developed by Mel Rhodes in 1961 is one of the fundamental concepts that structures the study of creativity in four directions: *person*: the study of character traits, intelligence, temperament, and self-perception of a creative person; *process*, which includes the analysis of the stages of creative thinking (motivation, perception, incubation, enlightenment, verification); *product*: the assessment of the results of creativity according to the criteria of novelty, usefulness, and adequacy of the context; *press (environment)*: the study of the influence of external conditions, culture, and microclimate on creative activity [10].

Systemic approach (M. Csikszentmihalyi and R. Sternberg). Modern foreign literature considers creativity not as an isolated act, but as the result of the interaction of systems: The "Flow" theory (Mihaly Csikszentmihalyi) means a state of complete immersion in an activity, where the level of challenge corresponds to the level of skill. Here is a detailed consideration of the concepts of both researchers. *The system model of Mihaly Csikszentmihalyi.* The scientist claims that creativity does not occur "in the head" of a person. This is a phenomenon that occurs at the intersection of three components: *the individual* – a person who makes changes in a certain area (generates new ideas or products); *the domain/ sphere* – represents the cultural aspect as a set of rules, knowledge and symbols in a certain field (for example, mathematics, music or business); to be creative, one must first master the knowledge of the domain; *the field* means the social aspect including experts, critics, teachers who decide whether a new idea is truly valuable and whether it should be included in the domain. Thus, the essence of the system model of Migaly Csikszentmihalyi is that creativity is a process by which a change in culture (domain) becomes accepted by a social group (field) [7].

Robert Sternberg's investment theory. Robert Sternberg (together with Todd Lubart) proposed an investment theory of creativity. The main metaphor here is the financial market: creative people "buy low

and sell high". "Buying low" means focusing on ideas that are currently unpopular, incomprehensible, or ignored by society. "Selling high" presupposes developing these ideas until they become generally recognized and valuable. The outlined theory includes six resources of creativity.

To implement this approach, a person needs a combination of six resources: 1) intellectual abilities mean the ability to see problems in a new way and convince others; 2) knowledge appears as a necessary basis for understanding what has already been done, but not becoming a hostage to old patterns; 3) thinking style implies a conscious decision to think legislatively (create one's own rules); 4) personality traits are manifested in the willingness to take risks, overcome obstacles and tolerate uncertainty; 5) motivation is a focus on the process, and not only on external rewards; 6) environment is the support that allows ideas to "germinate" [4; 5].

Table 2

Comparative table of systemic approaches of M. Csikszentmihalyi and R. Sternberg (based on the analysis of scientific works of mentioned scientists)

Criterion	***M. Csikszentmihalyi***	***R. Sternberg***
Focus	The interaction of culture, society and the individual.	Psychological resources and the "investment" strategy.
The role of society	Deterministic factor (the field decides what is creative).	The environment as a resource or obstacle to an idea.
Main idea	Creativity is a systemic outcome.	Creativity is a conscious decision and investment.

The importance of the outlined approaches lies in the fact that both authors agree on one thing: creativity is not only a high IQ. It is the result of how a person uses his/her resources and how he/she interacts with the requirements of his/her profession and the assessment of other people. Therefore, the introduction of a systemic approach to understanding creativity, developed by Míchai Csikszentmihalyi and Robert Sternberg, radically changed the view on creativity. They proposed to consider creativity not only as an internal trait of the personality, but also to recognize it as the result of interaction between the individual and the environment.

The concept of "Big-C" and "Small-C". James Kaufman and Ronald Beghetto proposed their hierarchy of creativity: mini-c as subjective learning, new understanding for oneself; small-c is everyday creativity (hobby, solving everyday problems); pro-c appears as professional creativity of a specialist. Big-C means outstanding achievements that change culture or history. Let us present a comparative table of creativity and creative skills [15-17].

Table 3.

Comparative table of the basic concepts of "creativity" and "creative skills" (based on the scientific works of James Kaufman and Ronald Beghetto)

Parameter	***Creativity/Creation***	***Creativity/Skill***
The essence	The process of creating something new is often spontaneous.	Technology, the ability to generate ideas.
Directionality	Self-actualization, art, science.	Pragmatics, business, problem solving.
Rating	Aesthetic, spiritual, historical aspects	Economic efficiency, utility.

J. Kaufman's key ideas on creativity. In addition to his model, J. Kaufman emphasizes several important aspects. Creativity and intelligence – he argues that

high IQ does not guarantee high creativity. After a certain threshold (usually IQ around 120), the connection between creativity and intelligence becomes weaker. Creativity as a skill – J. Kaufman is convinced that creativity can and should be developed. It is not a "gift from gods", but a muscle that is trained through practice (the transition from mini-c to pro-c). Evaluative fairness – J. Kaufman actively studies how ethnic background and socio-cultural environment affect how we evaluate the "creativity" of others, thus warning against bias. J. Kaufman notes that creativity is not only about the result, it is about how one sees the world and how one chooses to act in it [17-19].

Contribution to the theory and practice of creativity by Teresa Amabile. A significant contribution to the understanding of the socio-psychological factors of creativity was made by T. Amabile, the author of the component theory of creativity. According to this theory, creativity is formed as a result of the interaction of three main components: domain-relevant skills (expertise/technical knowledge), creativity-relevant processes (cognitive styles/personality), and intrinsic task motivation (passion/interest). For the training of future specialists, the provision on the determining role of intrinsic motivation, which is activated in conditions of support, trust and freedom of scientific experimentation, is especially important. Let us consider in more detail the scientific achievements of Teresa Amabile, a professor at Harvard Business School, who has devoted more than 40 years to the study of how the environment and intrinsic motivation affect the creative process. Her theory is considered one of the most practical and recognized in modern management psychology. The scientist made a significant contribution to the development of psychological concepts of creativity. Her research has shown that creativity depends not only on individual abilities, but also on the environment in which people work. She also showed that creativity is not a linear, but rather a cyclical process, fueled by small victories. Let's highlight the main points of her concept [1-3].

1. Component model of creativity (1983). According to T. Amabayl's conceptual ideas, creativity arises at the intersection of *three main components*. If at least one of them is missing, the creative result will be minimal. 1. Domain-relevant skills: this is the basis – knowledge, technical skills, talent and intelligence in a specific field (for example, knowledge of programming languages for a developer). 2. Creativity-relevant processes. These include the ability to think outside the box, use heuristic methods (search for new ways), cognitive style (the ability to see a problem from a different angle) and perseverance. 3. Intrinsic task motivation – is a kind of "secret ingredient". This is the desire to work on a task simply because it is interesting, exciting or challenging, and not for the sake of money or fame. This is Amabayl's central idea. She argues that intrinsic motivation is a much stronger driver of creativity than extrinsic. Namely: intrinsic motivation represents the individual's satisfaction with the process itself, the interest as it is. Extrinsic motivation is reward, deadlines, assessments, supervision [1].

2. The Component Theory of Creativity (1988, 2013) as a comprehensive model of social and psychological components. In 1988, T. Amabayl published an improved theory that encompasses both creativity and innovation in organizations. The theory is based on the definition of creativity as the production of ideas or results that are both novel and suitable for achieving a specific goal. Due to this approach creativity is the production of a new and relevant response, product, or solution to an open-ended problem. According to this theory, any creative action and result requires the already defined components, to which a fourth component is added: a) skills related to the field of activity; b) processes related to creativity; c) intrinsic motivation to perform the task; d) the social environment in which the person works. This version of the theory coves the organizational creativity and innovations, which has implications

for the work environment created by managers [3].

3. Dynamic Component Model of Creativity (2016), (&Michael G. Pratt). This model retains the component structure of the original model and adds four new dynamic elements in the form of feedback loops: a) a sense of progress in the development of a creative idea; b) the meaning of the work for its performers; c) emotions; d) synergistic extrinsic motivation. All psychological factors are interconnected, so changes in one of them are likely to cause changes in the others. An interesting fact is given: T. Amabile found that *excessive financial reward or strict control often "kills" the creative approach, as a person begins to think about the bonus, rather than solving the problem.* However, extrinsic motivation can help if it reinforces the feeling of one's own competence (for example, constructive feedback).

4. A model of the creative process, which includes 5 stages. T. Amabayl considers creativity not as an instant insight, but as a sequential process, which includes: 1) presentation/definition of the problem in the form of awareness of the creative task; 2) preparation, which includes the collection of information and updating of knowledge; 3) generation of ideas being the search for options (critically important creative skills); 4) validation of ideas or checking the viability of the idea; 5) evaluation of the result, which is a conclusion about success, failure or the need to repeat the cycle. Each of these types of activity is stimulated by a certain combination of motivation, skills related to a specific field, and creative thinking skills. T. Amabayl also laid the foundation for the concept of dynamism in the creative process, revealing its essential iterativeness. In addition, she especially emphasized the social nature of the creative process [9]. 6) Motivation and the creative "I". T. Amabayl studied various aspects of motivation, investigating how intrinsic and extrinsic motivation affect creativity and innovation in the workplace, and how goal achievement and feedback can affect motivation and performance.

Let's examine the various aspects of this issue. *1. The importance of intrinsic motivation.* The scientist has found that *intrinsic motivation, or the desire to engage in an activity for its own sake, is a key driver of creativity and innovation.* Her research shows that people are most creative when they are motivated by joy and interest in the work itself, and they are more likely to succeed than people who are extrinsically motivated. *2. The role of mood and emotion.* T. Amabayl has also studied the influence of mood and emotion on creative thinking and problem solving. It has been found that positive mood can promote creativity, while negative mood can hinder it. She believes that positive affect can cause changes in cognitive processing that facilitate creative activity. In addition, when people and groups experience more positive affect, they are more friendly and sociable and are more likely to gather the cognitive fuel necessary for creative thought. Thus, the idea that creativity only flourishes under pressure or misfortune is a myth.

However, periodic moderate stress can make us feel excited and accordingly motivate us to take action. *3. The importance of internal attribution.* People who attribute their successes to their own efforts are more likely to be more creative than those who attribute them to external factors. *4. The importance of the creative self.* Research by T. Amabail has shown that people who have a strong sense of creative self-identification are more likely to demonstrate creative abilities than those who do not have a strong sense of creative self-identification.

7. Creativity in organizations. The principle of progress. Gradually, Teresa Amabile's research, which initially focused on individual creativity, expanded to include *team creativity and organizational innovation.* T. Amabile is known for her research on creativity and innovation, especially in the workplace and in organizations. Her research has shown that organizations that promote creativity are more likely to be innovative, competitive, and successful. She has

found that a favorable and stimulating work environment can lead to increased levels of creativity and innovation. T. Amabile analyzed the influence of the work environment (the *"Creativity Killer" concept*) and described in detail the factors that promote or hinder creativity in organizations.

Table 4

Comparison of factors that promote or hinder creativity in organizations (based on the concept of T. Amabayl)

Stimulating factors	*Suppressing factors*
Freedom to choose ways to achieve the goal.	Excessive control and micromanagement.
Resources (time, space, funding).	Lack of time (constant deadlines "for yesterday").
Team support and diversity of opinion.	Criticism of new ideas in the early stages.
Challenge (task that matches abilities).	Political games and intrigues within the company.

Her work devoted to environment research has the analysis of how factors such as time constraints, resources, and social support can influence creativity and innovation in organizations. She has examined the internal and external factors that influence creativity, including the role of intrinsic motivation, social context, leadership, and organizational culture. She has also studied how creativity can be enhanced through such tools as skill development and goal setting. *The Progress Principle*. In her later work, *The Progress Principle* T. Amabile has demonstrated that the most important factor in maintaining high motivation and creativity is a sense of progress in meaningful work. Even small daily wins have a huge positive impact on an employee's psychological well-being. The book *The Progress Principle*, which she co-wrote with her husband, S.J. Kramer, was the result of a multi-year research program. Researchers have identified two key interrelated factors that influence productivity: the intrinsic work-life effect and the progress principle.

The concept of inner work life involves the study of inner work life, a term that refers to the constant flow of emotions, perceptions, and motivations that people experience as they respond to and make sense of events that occur during the workday [3]. T. Amabail has identified *six factors of inner work life* that are crucial for creativity: *progress, autonomy, psychological responsibility, meaning, social connection, and fairness*. Her research suggests that *emotions, perceptions, motivation*, and their combinations can increase people's creativity and productivity. The progress principle suggests that even small victories can significantly influence people's motivation and stimulate the development of their creative potential. When people make progress towards their goals, they are more likely to experience the positive mood and intrinsic motivation that are necessary for creativity.

She and S.J. Kramer argue that the most effective managers are those who can create a positive work environment for their employees. This includes consistently positive emotions, strong motivation, and favorable perceptions of the organization, their work, and their colleagues [3]. Thus, seemingly ordinary events of the workday can enhance or disrupt employees' inner work lives, but it is the forward movement in meaningful work – progress – that creates a better inner work life.

Conclusions and research perspectives. Thus, the problem of creativity and the development of the creative potential of the individual has a long history in Western foreign psychology and pedagogy. One of the first scientists who drew attention to the need for scientific study of creativity was the American psychologist J. Guilford. In his concept of the structure of intelligence, he singled out divergent thinking as the basis of creative activity and identified such indicators as fluidity, flexibility,

originality and elaboration. The works of J. Guilford became the theoretical basis for further empirical research in the field of the development of creative abilities. Mel Rhodes's multidimensional model "4P" is one of the fundamental concepts that structures the study of creativity and creative activity in the personal, procedural, productive and environmental spheres.

The investment theory of creativity proposed by R. Sternberg and T. Lubart is of great importance. In this context, creativity appears as the ability of an individual to support new, non-standard ideas that have not yet received public recognition. This theory emphasizes the need to form in specialists a readiness for innovation, risk and responsibility for the implementation of new professional solutions. Also important is the systemic approach developed by M. Csikszentmihalyi, which treats creativity as the result of the interaction of the personality, the cultural domain and the social environment. Accordingly, the development of the creative potential in specialists is impossible without involving them in real practical activities, professional communities and the culture of innovation.

Teresa Amabile is best known for her groundbreaking research and work in the field of creativity, especially in organizational settings. She developed the component theory of creativity (the component and enhanced dynamic component model of creativity), the concept of "inner work life". She has shown that everyday life within organizations can influence people and their productivity, especially in terms of creativity and innovation. Therefore, scientists believe in the power of creativity, creating an environment that is conducive to the development of creativity that can change the world. It is important to take a consistent, systematic approach to the study of creativity, hard work, dedication, and a desire to teach and mentor the next generation of scientists and practitioners. One of the strongest traits of scientists is the ability to translate research findings into practice and combine academic research with practical implications for education and business.

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