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Отчет по лабораторной работе №2  
по дисциплине  
"Автоматизация научных исследований"

**Перевод аннотаций на английский язык**

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## Задание

В рамках лабораторной работы необходимо:

1. Найти любые две аннотации к научным статьям с достаточным количеством научных терминов, написанные на русском языке (тематика должна быть связана с вашей НИР и ВКР).  
2. Перевести выбранные аннотации на английский язык с помощью ИИ, используя предложенные промпты (5 промптов из презентации). Необходимо использовать не менее двух разных ИИ-моделей (использовать упомянутые в презентации, также можно дополнить своими).  
3. Для пятого промпта необходимо провести оба этапа. В третьем и пятом промптах необходимо сделать выбор среди выделенного жирным шрифтом (в третьем – контекста и стиля, а в пятом – слов и их значений).  
4. Если итоговый вариант кажется неудовлетворительным, можно использовать дополнительные уточнения. В случае использования дополнительных уточнений необходимо указать в выводах текст промптов и общее количество использованных уточнений.  
5. Провести сравнительный анализ полученных результатов. Критерии оценивания ответа ИИ:
  - Грамматическая корректность
  - Точность терминологии
  - Естественность и беглость
  - Сохранение стиля и тона
  - Учет контекста и передача смысла+
  - Работа с идиомами и культурными особенностями  
6. Написать собственный промпт (Промпт 6) для создания аналогичной аннотации на английском языке с сохранением целостности смысла.  
7. В качестве выводов предоставить следующие результаты:
  - Вариант, который вы могли бы порекомендовать в качестве перевода для выбранной аннотации.
  - Модель, текст промпта, цепочка уточняющих промптов для выбранного варианта (вместе с дополнительными уточнениями, если таковые есть).
  - Обоснование выбора.

## **Часть 1: Перевод аннотации №1**

Исходный текст (Аннотация 1):

Постановка проблемы. Человеку в своей психофизической деятельности свойственно допускать ошибки и отклонения в мышлении и поведении. Некоторые из них подчиняются определенным закономерностям и могут иметь прогнозируемый и систематический характер. Типичные представители таких ошибок и отклонений - когнитивные искажения, которые наиболее критически проявляются в деятельности человека (оператора), когда он является активным элементом системы управления и его неверные действия могут иметь опасный для функционирования системы характер. Многообразие когнитивных искажений и учет особенностей их влияния в различных сферах деятельности определяют актуальность их исследования и разработки методов и программного инструментария для их автоматизированного детектирования особенно с использованием технологий, моделей и средств искусственного интеллекта. Решение задач изучения и детектирования когнитивных искажений направлено на создание методов и средств предотвращения бессознательной активизации человеческим мозгом таких искажений и ошибок в поведении и принятии решений.

Цель. Провести систематизацию и обобщение влияния когнитивных искажений на функционирование человеко-машинных систем, а также представить концепцию автоматизированной интеллектуальной системы детектирования когнитивных искажений человека-оператора.

Результаты. Рассмотрена модель деятельности человека-оператора, в соответствие с которой приведена классификация инструментария для детектирования когнитивных искажений. Приведена классификация когнитивных искажений по Бастеру Бенсу, а также в каждой группе искажений представлены методы детектирования, которые в последующем могут быть использованы для разработки программного обеспечения. Предложена концепция автоматизированной интеллектуальной системы детектирования когнитивных искажений и определены ключевые характеристики для создания демонстрационного прототипа.

Практическая значимость. Представленная концепция автоматизированной интеллектуальной системы детектирования когнитивных искажений может найти применение в самых разных видах деятельности и, в первую очередь, в сферах, в которых человек в рамках своей профессиональной деятельности выполняет обязанности, связанные с регулярным процессом принятия решений в условиях высоких рисков и ответственности (например, экипажи летательных аппаратов; операторы оборудования, используемого в опасных производственных и технологических процессах; несущие боевое дежурство военнослужащие; врачи, ставящие диагноз в условиях ограниченного времени и недостатка информации о состоянии организма пациента; авиаиспетчеры и т.п.). Кроме того, возможно ее применение при проведении медицинских консультаций, онлайн-собеседований, оптимизации кадрового потенциала организаций, что позволит существенно увеличить эффективность работы систем, управляемых человеком.

## Промпт 1. Базовый

### Модель А (Gemini Pro):

Problem statement. It is characteristic of a person in his psychophysical activity to make mistakes and deviations in thinking and behavior. Some of them obey certain patterns and can be predictable and systematic. Typical representatives of such errors and deviations are cognitive biases, which are most critically manifested in the activities of a person (operator) when he is an active element of a control system and his incorrect actions can be dangerous for the functioning of the system. The diversity of cognitive biases and taking into account the peculiarities of their influence in various fields of activity determine the relevance of their research and the development of methods and software tools for their automated detection, especially with the use of artificial intelligence technologies, models and tools. Solving the problems of studying and detecting cognitive biases is aimed at creating methods and means of preventing the unconscious activation by the human brain of such distortions and errors in behavior and decision-making.

Objective. To systematize and generalize the influence of cognitive biases on the functioning of human-machine systems, as well as to present the concept of an automated intelligent system for detecting cognitive biases of a human operator.

Results. A model of the activity of a human operator is considered, in accordance with which a classification of tools for detecting cognitive biases is given. A classification of cognitive biases according to Buster Benson is given, and in each group of biases, detection methods are presented that can subsequently be used for software development. The concept of an automated intelligent system for detecting cognitive biases is proposed and the key characteristics for creating a demonstration prototype are defined.

Practical significance. The presented concept of an automated intelligent system for detecting cognitive искажений can be applied in a wide variety of activities and, first of all, in areas in which a person, as part of his professional activity, performs duties related to the regular process of decision-making in conditions of high risks and responsibility (for example, aircraft crews; operators of equipment used in hazardous production and technological processes; military personnel on combat duty; doctors making a diagnosis in conditions of limited time and lack of information about the patient's body state; air traffic controllers, etc.). In addition, it can be used in medical consultations, online interviews, optimization of the personnel potential of organizations, which will significantly increase the efficiency of systems controlled by humans.

### Модель В (GhatGPT 5):

Problem statement. It is inherent for a person in his psychophysical activity to allow mistakes and deviations in thinking and behavior. Some of them follow certain regularities and can have a predictable and systematic character. Typical representatives of such mistakes and deviations are cognitive biases, which are most critically manifested in the activity of a person (operator) when he is an active element of the control system and his wrong actions can be dangerous for the functioning of the system. The variety of cognitive biases and accounting for the features of their influence in various spheres of activity determine the urgency of their study and the development of methods and software tools for their automated detection, especially with the use of technologies, models and means of artificial intelligence. The solution of tasks of studying and detecting cognitive biases is aimed at the creation of methods and means for preventing the unconscious activation by the human brain of such biases and errors in behavior and decision making.

Goal. To carry out a systematization and generalization of the influence of cognitive biases on the functioning of man-machine systems, and also to present the concept of an automated intelligent system for detecting cognitive biases of a human-operator.

Results. The model of a human-operator's activity is considered, in accordance with which a classification of tools for detecting cognitive biases is provided. A classification of cognitive biases according to Buster Bens is given, and in each group of biases, detection methods are presented, which can later be used for software development. The concept of an automated intelligent system for detecting cognitive biases is proposed and the key characteristics for creating a demonstration prototype are defined.

Practical significance. The presented concept of an automated intelligent system for detecting cognitive biases can find application in a wide variety of activities and, first of all, in spheres in which a person within the framework of his professional activity performs duties related to the regular process of decision-making in conditions of high risks and responsibility (for example, crews of aircraft; operators of equipment used in dangerous production and

technological processes; military personnel on combat duty; doctors diagnosing in conditions of limited time and lack of information about the patient's body; air traffic controllers, etc.). In addition, its application is possible when conducting medical consultations, online interviews, optimizing the human resources of organizations, which will significantly increase the efficiency of systems controlled by a person.

## Промпт 2. С фокусом на качество

### Модель А (Gemini Pro):

**Problem Statement.** Humans are prone to making errors and deviations in their thinking and behavior during their psychophysical activities. Some of these follow specific patterns and can be predictable and systematic. Typical examples of such errors and deviations are cognitive biases, which manifest most critically in the actions of a person (operator) who is an active element of a control system, where their incorrect actions can endanger the system's functioning. The wide variety of cognitive biases and the need to account for their specific impacts in different fields make the research and development of methods and software tools for their automated detection highly relevant, particularly using artificial intelligence technologies, models, and tools. The objective of studying and detecting cognitive biases is to create methods and means to prevent the human brain from unconsciously activating such biases and errors in behavior and decision-making.

**Objective.** To systematize and summarize the influence of cognitive biases on the functioning of human-machine systems, and to present a concept for an automated intelligent system to detect the cognitive biases of a human operator.

**Results.** A model of human-operator activity is examined, which serves as a basis for classifying the tools used to detect cognitive biases. A classification of cognitive biases by Buster Benson is provided, along with detection methods for each group of biases that can be subsequently used for software development. A concept for an automated intelligent system for detecting cognitive biases is proposed, and key characteristics for creating a demonstration prototype are defined.

**Practical Significance.** The proposed concept of an automated intelligent system for detecting cognitive biases can be applied in a wide range of activities, primarily in fields where individuals regularly make decisions under high-risk and high-responsibility conditions as part of their professional duties (e.g., aircraft crews; operators of equipment in hazardous industrial and technological processes; military personnel on combat duty; doctors diagnosing patients with limited time and information; air traffic controllers, etc.). Furthermore, it can be applied in medical consultations, online job interviews, and optimizing organizational human resources, which will significantly enhance the efficiency of human-operated systems.

### Модель В (GhatGPT 5):

**Problem Statement.** In their psychophysical activity, it is natural for humans to make mistakes and exhibit deviations in thought and behavior. Some of these follow certain patterns and can be predictable and systematic in nature. Typical representatives of these errors and deviations are cognitive biases, which are most critically apparent in the activity of a person (operator) when they are an active element of a control system, and their incorrect actions could be dangerous for the system's functioning. The diversity of cognitive biases and considering the specifics of their influence in various domains determine the relevance of their study and the development of methods and software for their automated detection, especially using artificial intelligence technologies, models, and means. The task of studying and detecting cognitive biases is aimed at creating methods and tools to prevent the unconscious activation of such biases and errors in behavior and decision-making by the human brain.

**Objective.** To systematize and generalize the impact of cognitive biases on the functioning of human-machine systems, and to introduce the concept of an automated intelligent system for detecting the cognitive biases of a human operator.

**Results.** A model of a human operator's activity is reviewed, according to which a classification of tools for detecting cognitive biases is presented. A classification of cognitive biases by Buster Benson is given, and for each group of biases, detection methods are presented which can subsequently be used to develop software. The concept of an automated intelligent system for detecting cognitive biases is proposed, and key characteristics for creating a demonstration prototype are identified.

**Practical Significance.** The presented concept of an automated intelligent system for detecting cognitive biases can be applied in many different types of activities, and primarily in areas where a person, as part of their professional duties, performs tasks related to a regular decision-making process under conditions of high risk and responsibility (for example, aircraft crews; operators of equipment used in hazardous production and technological processes; military personnel on combat duty; doctors making a diagnosis with limited time and insufficient information about the patient's condition; air traffic controllers, etc.). Moreover, it can be used for medical consultations, online interviews, and optimizing the personnel potential of organizations, which will significantly increase the

effectiveness of systems managed by humans.

### Промпт 3. Комплексный и структурированный

Выбранные параметры: Контекст - научные исследования в области когнитивистики и человеко-машинного взаимодействия, Стиль - научный.

#### Модель А (Gemini Pro):

**Problem Statement.** In their psychophysical activity, humans are inherently prone to errors and deviations in thought and behavior. Some of these follow distinct patterns and can be predictable and systematic. Cognitive biases are typical examples of such errors, manifesting most critically in the performance of a human operator who acts as an active component of a control system, where their incorrect actions can pose a significant threat to the system's functionality. The multiplicity of cognitive biases and the specific nature of their influence across various domains underscore the relevance of their investigation and the development of methods and software tools for their automated detection, particularly through the application of artificial intelligence technologies, models, and instruments. Addressing the challenges of studying and detecting cognitive biases aims to establish methods and means for preventing the unconscious activation of such biases and subsequent errors in behavior and decision-making.

**Objective.** To systematize and generalize the impact of cognitive biases on the functioning of human-machine systems, and to propose a conceptual framework for an automated intelligent system for detecting cognitive biases in human operators.

**Results.** A model of human-operator activity is examined, which provides a basis for a classification of tools for cognitive bias detection. A classification of cognitive biases by Buster Benson is presented, and for each category of bias, detection methods are outlined that can be subsequently leveraged for software development. A concept for an automated intelligent system for detecting cognitive biases is proposed, and key specifications for the creation of a demonstration prototype are defined.

**Practical Significance.** The proposed concept of an automated intelligent system for cognitive bias detection has potential applications across a diverse range of activities. It is primarily relevant in fields where professionals are required to make regular decisions under conditions of high risk and responsibility (e.g., flight crews; operators of equipment in hazardous industrial and technological processes; military personnel on combat duty; physicians diagnosing under time constraints and with incomplete patient information; air traffic controllers). Furthermore, it could be applied in medical diagnostics, online job interviews, and in the optimization of organizational human resources, thereby significantly enhancing the operational effectiveness of human-managed systems.

#### Модель В (GhatGPT 5):

**Problem Statement.** It is characteristic of humans in their psychophysical activities to make errors and have deviations in thinking and behavior. A number of these are subject to specific patterns and can be predictable and systematic in nature. Typical examples of such errors and deviations are cognitive biases, which manifest most critically in the activity of a person (operator) when they are an active element of a control system, and their incorrect actions can be dangerous to the system's functioning. The variety of cognitive biases and consideration of their influence in different spheres of activity determine the relevance of their study and the development of methods and software for their automated detection, especially with the use of artificial intelligence technologies, models, and tools. The task of studying and detecting cognitive biases is directed at creating methods and tools to prevent the brain's unconscious activation of such biases and errors in behavior and decision-making.

**Objective.** To conduct a systematization and generalization of the influence of cognitive biases on the functioning of human-machine systems, as well as to present a concept of an automated intelligent system for detecting cognitive biases in a human operator.

**Results.** A model of a human operator's activity is considered, according to which a classification of instruments for detecting cognitive biases is provided. A classification of cognitive biases according to Buster Benson is given, and within each group of biases, detection methods are presented that can be used for subsequent software development. The concept of an automated intelligent system for detecting cognitive biases is proposed, and the key characteristics for creating a demonstration prototype are defined.

**Practical Significance.** The presented concept for an automated intelligent system for detecting cognitive biases can be used in various types of activities, primarily in spheres where a person, as part of their professional activity,

carries out duties related to the regular process of decision-making under high-risk and high-responsibility conditions (for example, aircraft crews; operators of equipment used in hazardous manufacturing and technological processes; military personnel on combat duty; doctors making a diagnosis under time limits and with a lack of information about the patient's condition; air traffic controllers). Additionally, it can be applied during medical consultations, online interviews, and the optimization of an organization's personnel potential, which will significantly increase the efficiency of systems operated by humans.

#### Промпт 4. Анализирующий и автономный

Модель А (Gemini Pro):

Анализ текста:

1. Тематическая область: Научная статья в области когнитивной психологии, инженерии систем управления, человеко-машинного взаимодействия и искусственного интеллекта.
2. Стиль и тон: Официальный, научный, академический.
3. Ключевая терминология: Когнитивные искажения, психофизическая деятельность, система управления, человек-оператор, человеко-машинные системы, автоматизированное детектирование, интеллектуальная система.
4. Ключевые слова: когнитивные искажения, детектирование, человек-оператор, система управления, искусственный интеллект, принятие решений.

Перевод:

**Problem Statement.** Human psychophysical activity is inherently susceptible to errors and deviations in thought and behavior, some of which follow predictable, systematic patterns. Cognitive biases are prominent examples of such phenomena, becoming most critical in the performance of a human operator within a control system, where their erroneous actions can jeopardize system functionality. The diversity of cognitive biases and their varied impacts across different domains highlight the urgency of investigating them and developing methods and software tools for their automated detection, particularly leveraging artificial intelligence technologies. The study and detection of cognitive biases are aimed at creating methodologies to prevent their unconscious activation by the human brain, thus mitigating errors in behavior and decision-making.

**Objective.** This study aims to systematize and generalize the influence of cognitive biases on the functioning of human-machine systems and to introduce a conceptual framework for an automated intelligent system designed to detect these biases in human operators.

**Results.** A model of human-operator activity is analyzed, forming the basis for a classification of cognitive bias detection tools. A classification of cognitive biases, as proposed by Buster Benson, is provided, along with corresponding detection methods for each category that can inform future software development. A concept for an automated intelligent system for cognitive bias detection is proposed, defining the key characteristics required for a demonstration prototype.

**Practical Significance.** The proposed concept for an automated intelligent system for detecting cognitive biases is applicable across a wide array of activities, especially in professions requiring regular decision-making under high-risk, high-responsibility conditions. Examples include flight crews, operators of hazardous industrial equipment, military personnel on combat duty, physicians making diagnoses under time and information constraints, and air traffic controllers. Further applications include medical consultations, online interviews, and human resource optimization, all of which could significantly enhance the efficiency of human-operated systems.

Модель В (GhatGPT 5):

Анализ текста:

1. Тематическая область: ИТ, психология, системный анализ.
2. Стиль и тон: Научный, формальный.
3. Ключевая терминология: когнитивные искажения, человек-оператор, система управления, человеко-машинные системы, программный инструментарий, прототип.
4. Ключевые слова: когнитивные искажения, ошибки, система, человек, детектирование, искусственный интеллект.

Перевод:

**Problem Statement.** In their psychophysical activity, humans are prone to making errors and deviations in thinking and behavior. Some of these follow certain laws and can be predictable and systematic. Typical examples of such errors are cognitive biases, which appear most critically in the activity of a human operator who is an active element of a control system, where their wrong actions can be dangerous for the system's operation. The great variety of cognitive biases and the consideration of their influence in different spheres makes it relevant to research them and develop methods and software for their automated detection, especially using artificial intelligence. The task of studying and detecting cognitive biases is aimed at creating methods to prevent the unconscious activation of such distortions and errors in behavior and decision-making by the brain.

**Objective.** To systematize and generalize the effect of cognitive biases on the functioning of human-machine systems, and to present the concept of an automated intelligent system for detecting cognitive biases of a human operator.

**Results.** A model of a human operator's activity is considered, according to which a classification of tools for detecting cognitive biases is given. A classification of cognitive biases by Buster Benson is presented, and in each group of biases, detection methods are shown that can be used later for software development. The concept of an automated intelligent system for detecting cognitive biases is proposed and key characteristics for creating a demonstration prototype are determined.

**Practical Significance.** The presented concept of an automated intelligent system for detecting cognitive biases can be applied in very different activities, primarily in spheres where a person, as part of their professional work, performs duties related to a regular decision-making process in high-risk and high-responsibility situations (e.g., aircraft crews; operators of equipment in dangerous production processes; military on combat duty; doctors diagnosing with limited time and information; air traffic controllers). Also, it can be used in medical consultations, online interviews, and optimizing the personnel potential of organizations, which will significantly improve the efficiency of systems managed by a human.

## Промпт 5. Двухэтапный

Модель А (Gemini Pro):

Этап 1. Анализ неоднозначных слов:

Исходное слово	Возможные варианты перевода	Рекомендуемый вариант
деятельность	activity, performance, operation	performance (в контексте оператора), activity (в общем)
отклонения	deviations, abnormalities, variances	deviations
система	system, framework, structure	system
средства	means, tools, instruments	means (в общем), tools (для ПО)
прототип	prototype, demonstrator	prototype

Этап 2. Уточненный перевод (выбраны рекомендуемые варианты):

Problem Statement. In their psychophysical activity, humans are prone to making errors and deviations in thought and behavior. Some of these follow certain patterns and can be predictable and systematic. Cognitive biases are typical examples of such errors and deviations, manifesting most critically in the performance of a human (operator) who is an active element of a control system, where their incorrect actions can be dangerous for the system's functioning. The diversity of cognitive biases and the consideration of their specific influences in various fields determine the relevance of their study and the development of methods and software tools for their automated detection, especially using artificial intelligence technologies, models, and means. Solving the problems of studying and detecting cognitive biases is aimed at creating methods and means to prevent the unconscious activation by the human brain of such biases and errors in behavior and decision-making.

Objective. To systematize and generalize the influence of cognitive biases on the functioning of human-machine systems, and to present the concept of an automated intelligent system for detecting cognitive biases of a human operator.

Results. A model of human-operator performance is considered, in accordance with which a classification of tools for detecting cognitive biases is given. A classification of cognitive biases according to Buster Benson is provided, and in each group of biases, detection methods are presented that can subsequently be used for software development. The concept of an automated intelligent system for detecting cognitive biases is proposed and the key characteristics for creating a demonstration prototype are defined.

Practical Significance. The presented concept of an automated intelligent system for detecting cognitive biases can be applied in a wide variety of activities and, first of all, in spheres in which a person, as part of their professional duties, performs tasks related to the regular process of decision-making in conditions of high risks and responsibility (for example, aircraft crews; operators of equipment used in hazardous production and technological processes; military personnel on combat duty; doctors making a diagnosis in conditions of limited time and lack of information about the patient's body state; air traffic controllers, etc.). In addition, it can be used in medical consultations, online interviews, optimization of the personnel potential of organizations, which will significantly increase the efficiency of systems controlled by humans.

Модель В (GhatGPT 5):

Этап 1. Анализ неоднозначных слов:

Исходное слово	Возможные варианты перевода	Рекомендуемый вариант
деятельность	activity, work, operation	activity
ошибки	mistakes, errors, faults	errors
система	system, scheme	system
средства	means, funds, assets	means
значение	significance, meaning, value	significance

## Этап 2. Уточненный перевод (выбраны рекомендуемые варианты):

Problem statement. It is inherent for a person in his psychophysical activity to allow mistakes and deviations in thinking and behavior. Some of them follow certain regularities and can have a predictable and systematic character. Typical representatives of such mistakes and errors are cognitive biases, which are most critically manifested in the activity of a person (operator) when he is an active element of the control system and his wrong actions can be dangerous for the functioning of the system. The variety of cognitive biases and accounting for the features of their influence in various spheres of activity determine the urgency of their study and the development of methods and software tools for their automated detection, especially with the use of technologies, models and means of artificial intelligence. The solution of tasks of studying and detecting cognitive biases is aimed at the creation of methods and means for preventing the unconscious activation by the human brain of such biases and errors in behavior and decision making.

Goal. To carry out a systematization and generalization of the influence of cognitive biases on the functioning of man-machine systems, and also to present the concept of an automated intelligent system for detecting cognitive biases of a human-operator.

Results. The model of a human-operator's activity is considered, in accordance with which a classification of tools for detecting cognitive biases is provided. A classification of cognitive biases according to Buster Bens is given, and in each group of biases, detection methods are presented, which can later be used for software development. The concept of an automated intelligent system for detecting cognitive biases is proposed and the key characteristics for creating a demonstration prototype are defined.

Practical significance. The presented concept of an automated intelligent system for detecting cognitive biases can find application in a wide variety of activities and, first of all, in spheres in which a person within the framework of his professional activity performs duties related to the regular process of decision-making in conditions of high risks and responsibility. In addition, its application is possible when conducting medical consultations, online interviews, optimizing the human resources of organizations, which will significantly increase the efficiency of systems controlled by a person.

## **Часть 2: Перевод аннотации №2**

Исходный текст (Аннотация 2):

В статье предложены критерии классификации эффектов, оказывающих влияние на поведение индивидов, на основе допущений модели *homo economicus*. Авторами поставлена цель определить влияние когнитивных искажений на эффективность принимаемых индивидом решений в различных экономических ситуациях. В ходе проведенного исследования было выявлено, что когнитивные искажения оказывают влияние на поведение индивида в ситуации выбора. Психологические эффекты, ограничивающие рациональное поведение индивида, соотнесены с экономическими категориями (риск, рациональность, информация, время, нормы и правила) с целью их конвергенции с моделью экономического человека и более точного описания поведения индивидов, совершающих выбор в ситуации с ограниченными ресурсами.

## Промпт 1. Базовый

### Модель А (Gemini Pro):

The article proposes criteria for classifying the effects that influence the behavior of individuals, based on the assumptions of the homo economicus model. The authors set the goal to determine the influence of cognitive biases on the effectiveness of decisions made by an individual in various economic situations. In the course of the study, it was revealed that cognitive biases influence the behavior of an individual in a choice situation. Psychological effects that limit the rational behavior of an individual are correlated with economic categories (risk, rationality, information, time, norms and rules) in order to converge them with the model of the economic man and to more accurately describe the behavior of individuals making choices in a situation with limited resources.

### Модель В (GhatGPT 5):

The article suggests criteria for the classification of effects that have an impact on the behavior of individuals, based on the assumptions of the homo economicus model. The authors have set a goal to determine the influence of cognitive biases on the effectiveness of decisions made by an individual in various economic situations. During the conducted research, it was found that cognitive biases have an impact on the behavior of an individual in a situation of choice. Psychological effects that limit the rational behavior of an individual are correlated with economic categories (risk, rationality, information, time, norms and rules) with the aim of their convergence with the model of the economic man and a more precise description of the behavior of individuals who make a choice in a situation with limited resources.

## Промпт 2. С фокусом на качество

### Модель А (Gemini Pro):

This article proposes criteria for classifying effects that influence the behavior of individuals, based on the assumptions of the homo economicus model. The authors aim to determine the impact of cognitive biases on the effectiveness of decisions made by individuals in various economic situations. The study revealed that cognitive biases affect an individual's behavior in choice situations. Psychological effects that constrain rational behavior are correlated with economic categories – such as risk, rationality, information, time, and norms – to achieve convergence with the economic man model and to more accurately describe the behavior of individuals making choices under resource constraints.

### Модель В (GhatGPT 5):

The article proposes criteria for classifying the effects influencing individual behavior, based on the assumptions of the homo economicus model. The authors' goal is to determine the impact of cognitive biases on the efficiency of decisions made by an individual in various economic scenarios. The study revealed that cognitive biases do influence an individual's behavior in a choice situation. Psychological effects that limit an individual's rational behavior are matched with economic categories (risk, rationality, information, time, norms and rules) for the purpose of their convergence with the economic man model and for a more accurate description of the behavior of individuals making a choice in a resource-limited situation.

### Промпт 3. Комплексный и структурированный

Выбранные параметры: Контекст - поведенческая экономика, Стиль - научный.

#### Модель А (Gemini Pro):

This article puts forward classification criteria for effects influencing individual behavior, grounded in the assumptions of the homo economicus model. The authors aim to ascertain the influence of cognitive biases on the efficacy of decisions made by individuals in diverse economic contexts. The research has established that cognitive biases impact an individual's behavior in choice scenarios. Psychological effects that curtail rational behavior are juxtaposed with economic categories (risk, rationality, information, time, norms, and rules) to facilitate their convergence with the 'economic man' model, thereby enabling a more precise depiction of the behavior of individuals making choices under conditions of resource scarcity.

#### Модель В (GhatGPT 5):

The article proposes criteria for the classification of effects that influence the behavior of individuals, based on the assumptions of the homo economicus model. The authors set the goal of determining the influence of cognitive biases on the effectiveness of decisions made by an individual in various economic situations. During the study, it was found that cognitive biases affect the behavior of an individual in a choice situation. Psychological effects that limit the rational behavior of an individual are correlated with economic categories (risk, rationality, information, time, norms, and rules) with the objective of their convergence with the model of the economic man and a more accurate description of the behavior of individuals making a choice in a situation with limited resources.

#### Промпт 4. Анализирующий и автономный

Модель А (Gemini Pro):

Анализ текста:

1. Тематическая область: Поведенческая экономика, теория принятия решений.
2. Стиль и тон: Академический, научный, формальный.
3. Ключевая терминология: homo economicus, когнитивные искажения, рациональное поведение, ситуация выбора, ограниченные ресурсы, конвергенция.
4. Ключевые слова: когнитивные искажения, homo economicus, рациональность, выбор, экономика.

Перевод:

This paper introduces criteria for classifying effects that influence individual behavior, based on the theoretical assumptions of the homo economicus model. The authors aim to determine the impact of cognitive biases on the effectiveness of individual decision-making in various economic situations. The study reveals that cognitive biases indeed affect an individual's behavior in choice scenarios. To better describe the behavior of individuals making choices under resource constraints, psychological effects that limit rational behavior are correlated with economic categories such as risk, rationality, information, time, and norms and rules, aiming for their convergence with the economic man model.

Модель В (GhatGPT 5):

Анализ текста:

1. Тематическая область: Экономика, психология.
2. Стиль и тон: Научный.
3. Ключевая терминология: homo economicus, когнитивные искажения, рациональное поведение, экономические категории.
4. Ключевые слова: эффекты, поведение, когнитивные искажения, решения, выбор.

Перевод:

The article proposes criteria to classify effects that influence the behavior of individuals, based on the assumptions of the homo economicus model. The authors' goal is to determine the influence of cognitive biases on the effectiveness of decisions an individual makes in different economic situations. The research has shown that cognitive biases influence an individual's behavior in a situation of choice. Psychological effects that constrain rational behavior are related to economic categories (risk, rationality, information, time, norms and rules) in order to converge them with the economic man model and more accurately describe the behavior of individuals making a choice in a situation with limited resources.

## Промпт 5. Двухэтапный

Модель А (Gemini Pro):

Этап 1. Анализ неоднозначных слов:

Исходное слово	Возможные варианты перевода	Рекомендуемый вариант
эффекты	effects, impacts, phenomena	effects
индивидов	individuals, agents	individuals
допущений	assumptions, premises	assumptions
соотнесены	correlated, related, juxtaposed	correlated
выбор	choice, selection, option	choice

Этап 2. Уточненный перевод (выбраны рекомендуемые варианты):

The article proposes criteria for classifying the effects that influence the behavior of individuals, based on the assumptions of the homo economicus model. The authors set the goal to determine the influence of cognitive biases on the effectiveness of decisions made by an individual in various economic situations. In the course of the study, it was revealed that cognitive biases influence the behavior of an individual in a choice situation. Psychological effects that limit the rational behavior of an individual are correlated with economic categories (risk, rationality, information, time, norms and rules) in order to converge them with the model of the economic man and to more accurately describe the behavior of individuals making a choice in a situation with limited resources.

Модель В (GhatGPT 5):

Этап 1. Анализ неоднозначных слов:

Исходное слово	Возможные варианты перевода	Рекомендуемый вариант
предложены	proposed, suggested, offered	proposed
влияние	influence, impact, effect	influence
цель	goal, aim, objective	goal
выявлено	revealed, identified, found	found
поведение	behavior, conduct	behavior

Этап 2. Уточненный перевод (выбраны рекомендуемые варианты):

In the article are proposed criteria for classification of effects, that have an influence on the behavior of individuals, on the basis of assumptions of the homo economicus model. The authors have set the goal to determine the influence of cognitive biases on the effectiveness of decisions made by an individual in various economic situations. In the course of the conducted study it was found that cognitive biases have an influence on the behavior of an individual in a situation of choice. Psychological effects that limit rational behavior of an individual are correlated with economic categories (risk, rationality, information, time, norms and rules) with the purpose of their convergence with the model of the economic man and a more accurate description of the behavior of individuals who make a choice in a situation with limited resources.

### Часть 3: Сравнительный анализ результатов

Для оценки качества перевода используем предоставленные критерии с оценкой по 10-балльной шкале.

Таблица 1. Оценка переводов Аннотации №1

Критерий	Промпт 1 (A/ B)	Промпт 2 (A/ B)	Промпт 3 (A/ B)	Промпт 4 (A/ B)	Промпт 5 (A/ B)
Грамматика	8 / 7	10 / 9	10 / 9	10 / 9	10 / 8
Точность терминологии	7 / 6	9 / 8	10 / 8	10 / 8	9 / 7
Естественность	6 / 5	9 / 7	10 / 7	10 / 7	8 / 6
Сохранение стиля	6 / 5	8 / 7	10 / 8	10 / 8	8 / 7
Передача смысла	9 / 8	10 / 9	10 / 9	10 / 9	10 / 9
Работа с идиомами	7 / 7	8 / 7	9 / 8	9 / 8	8 / 7
Итоговый балл	43 / 38	54 / 47	59 / 49	59 / 49	53 / 44

Таблица 2. Оценка переводов Аннотации №2

Критерий	Промпт 1 (A/ B)	Промпт 2 (A/ B)	Промпт 3 (A/ B)	Промпт 4 (A/ B)	Промпт 5 (A/ B)
Грамматика	8 / 8	10 / 9	10 / 9	10 / 9	10 / 9
Точность терминологии	8 / 7	9 / 8	10 / 8	10 / 8	9 / 8
Естественность	7 / 6	9 / 7	10 / 8	10 / 8	8 / 7
Сохранение стиля	7 / 6	9 / 8	10 / 9	10 / 9	8 / 8
Передача смысла	9 / 9	10 / 10	10 / 10	10 / 10	10 / 10
Работа с идиомами	8 / 7	9 / 8	9 / 8	9 / 8	8 / 7
Итоговый балл	47 / 43	56 / 50	59 / 52	59 / 52	53 / 49

Анализ:

- Влияние промпта: Усложнение промпта от 1 до 4 стабильно повышает качество перевода у обеих моделей. Промпты 3 (комплексный) и 4 (анализирующий) показывают наилучшие результаты, так как они предоставляют модели максимальный контекст (область, стиль, терминология), что критически важно для научных текстов.
- Сравнение моделей: Модель А (Gemini Pro) стабильно показывает более высокие результаты, особенно в категориях "Естественность и беглость" и "Точность терминологии". Переводы Модели В часто более дословны и требуют дополнительной редактуры.
- Эффективность промпта 5: Двухэтапный промпт интересен, но не всегда приводит к лучшему результату. Выбор конкретных слов может нарушить естественное течение фразы, которое модель могла бы построить самостоятельно. Его полезность возрастает, когда в тексте действительно много ключевых, крайне неоднозначных терминов, требующих авторского контроля. В данных аннотациях его преимущество было не так очевидно.
- Лучшие результаты: Для обеих аннотаций наивысшие баллы получили переводы, сгенерированные

Моделью А с использованием Промптов 3 и 4. Они практически идентичны по качеству и готовы к использованию в научной публикации с минимальной вычиткой.

## Часть 4: Собственный промпт (Промпт 6)

На основе проведенного анализа можно создать гибридный промпт, который сочетает лучшие черты Промптов 3, 4 и 5. Он должен заставить модель сначала проанализировать текст, а затем использовать этот анализ для максимально точного перевода с учетом заданных пользователем параметров.

Промпт 6. Интерактивный экспертный перевод:

Ты — эксперт-переводчик в области [указать узкую область, например, "поведенческая экономика и когнитивистика"], обладающий ученой степенью. Твоя задача — выполнить перевод научного текста с русского на английский для публикации в международном журнале.

Шаг 1: Предварительный анализ

Проанализируй текст и кратко представь результаты в виде списка:

1. Ключевая цель текста: (Сформулируй в одном предложении).
2. Основные термины и их английские эквиваленты: (Приведи 3-5 ключевых терминов и их оптимальный перевод).
3. Стиль и тон: (Определи стиль, например, "академический, формальный").

Шаг 2: Перевод

На основе своего анализа выполни перевод текста. Удели особое внимание:

- Терминологической точности: Используй общепринятые в указанной научной области термины.
- Академическому стилю: Строй сложные, но ясные предложения. Избегай разговорных выражений.
- Логической связности: Сохрани структуру и логические переходы оригинала.

Текст для перевода:

{текст}

## **Часть 5: Выводы**

Рекомендуемый вариант перевода:

Для Аннотации 1 я бы порекомендовала вариант, полученный с помощью Модели A (Gemini Pro) и Промпта 4 (Анализирующий и автономный).

Для Аннотации 2 я бы также порекомендовала вариант от Модели A (Gemini Pro) и Промпта 4 (Анализирующий и автономный), хотя результат с Промптом 3 был практически идентичен по качеству.