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Article



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ABOUT THE MAIN TYPES OF EUTHANASIA

Abstract: This article discusses the main types of euthanasia and their distinctive features. The arguments of opponents of the legalization of euthanasia are presented, focused on social, moral and scientific aspects, which emphasize the importance of ethical and legal discussion of the issue of euthanasia. In addition, there is a need to take measures to prevent situations in which patients might consider euthanasia as the only option. It is noted that measures should include improving the quality of medical care, professional training of medical workers and psychological support for patients. The importance of public education and adherence to ethical standards in medical practice is emphasized.

Key words: euthanasia, types of euthanasia, legalization of euthanasia, principles of medical ethics, moral aspects of euthanasia.

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ОБ ОСНОВНЫХ ВИДАХ ЭВТАНАЗИИ

Аннотация: В данной статье рассматриваются основные виды эвтаназии и их отличительные особенности. Приводятся аргументы противников легализации эвтаназии, сфокусированные на социальных, моральных и научных аспектах, которые подчеркивают важность этического и правового обсуждения вопроса эвтаназии. Кроме того, отмечается необходимость принятия мер для предотвращения ситуаций, в которых пациенты могли бы рассматривать эвтаназию как единственный выход. Отмечается, что меры должны включать улучшение качества медицинской помощи, профессиональной подготовки медицинских работников и психологической поддержки пациентов. Подчеркивается важность образования общества и соблюдения этических стандартов в медицинской практике.

Ключевые слова: эвтаназия, виды эвтаназии, легализация эвтаназии, принципы медицинской этики, моральные аспекты эвтаназии.

Введение

Вопрос эвтаназии, как один из самых сложных аспектов медицинской, этической и юридической сфер, продолжает вызывать обширные дискуссии в современном обществе. Одним из ключевых аспектов этой проблемы является разделение эвтаназии на различные виды, каждый из которых несет свои уникальные этические, юридические и социокультурные аспекты[1]. В рамках этих обсуждений часто встает вопрос о разделении эвтаназии на различные виды, в частности, на

принудительную и добровольную формы. Этот аспект темы приобретает ключевое значение, раскрывая не только тонкости практики завершения жизни, но и подчеркивая важность понимания различий в этических и правовых контекстах каждой из этих форм.

Разделение эвтаназии на различные категории, позволяет более глубоко понять их уникальные характеристики, вызовы и влияние на общественные дебаты[2]. Разбор этой сложной темы будет способствовать более глубокому пониманию практики завершения жизни и

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способам, которыми различные виды эвтаназии взаимодействуют с правовыми, этическими и культурными реалиями в современном мире.

Добровольная эвтаназия, основанная на свободной воле пациента, выдвигает вопросы автономии и самоопределения. С другой стороны, принудительная эвтаназия вызывает трудные вопросы о вмешательстве государства и медицинских профессионалов в личные права и свободы человека.

Обсуждение различных видов эвтаназии поможет разяснить уникальные аспекты, выделяя вызовы, с которыми сталкиваются общество, медицина и правовая система[3]. Такой подход представляет собой шаг к пониманию комплексности этой этической дилеммы и поиску сбалансированных решений в рамках законов и норм, соответствующих ценностям и потребностям современного общества.

Добровольная эвтаназия и принудительная эвтаназия различаются именно по критерию наличия добровольного волеизъявления пациента.

1. Добровольная эвтаназия: В этом случае пациент, обычно страдающий от неизлечимого или тяжелого заболевания, выражает желание завершить свою жизнь. Это может быть выражено устно, письменно или другими способами. Добровольная эвтаназия осуществляется на основе ясного и информированного согласия пациента.

- Пациент является субъектом решения о завершении своей жизни.

- Происходит с согласия пациента, выраженного в форме документа, устно или другими способами.

- Лечащий врач осуществляет процедуру завершения жизни с уважением к воле пациента.

2. Принудительная эвтаназия: Это происходит без явного согласия пациента. Принудительная эвтаназия часто считается незаконной и этически недопустимой, поскольку она противоречит принципу уважения к человеческой жизни и индивидуальной автономии.

- Происходит без явного согласия или волеизъявления пациента.

- Решение о завершении жизни принимается другими лицами, например, родственниками, законными представителями или медицинскими работниками, без явного согласия самого пациента.

- Принуждение к эвтаназии может осуществляться по различным мотивам, таким как терминальное состояние пациента, его страдания или другие обстоятельства.

В большинстве стран мира добровольная эвтаназия остается предметом широких

обсуждений и часто является объектом юридических и этических дебатов. Принудительная эвтаназия, считается незаконной и чаще всего рассматривается как нарушение прав пациента[4].

Принудительная эвтаназия, как правило, рассматривается как нравственно и этически неприемлемая и незаконная практика, так как она нарушает основные принципы уважения к человеческой жизни и индивидуальной автономии.

Необходимо отметить, что имеется и такое понятие «криминальная эвтаназия», применяемое для описания случаев эвтаназии, которое не соответствует законам и предписаниям, регулирующим данную практику в конкретной юрисдикции. В большинстве стран легальность эвтаназии определяется законами, и ее осуществление вне рамок этих законов может рассматриваться как незаконное действие, подлежащее уголовному преследованию.

Легальная эвтаназия может быть разрешена в определенных случаях, например, когда пациент находится в терминальном состоянии и выражает ясное добровольное согласие. Однако, если эвтаназия осуществляется без соблюдения установленных законом процедур или в случаях, не предусмотренных законом, это может рассматриваться как криминальное деяние.

Имеется в виду, что легальность эвтаназии может зависеть от различных факторов, включая состояние пациента, наличие его волеизъявления, участие врачей и соблюдение определенных процедур[5]. Поэтому, если эвтаназия происходит вопреки установленным нормам и требованиям закона, она может быть квалифицирована как криминальная эвтаназия, и те, кто участвует в этом процессе, могут подлежать уголовной ответственности.

Понятие «криминальная эвтаназия» может использоваться для описания ситуаций, когда эвтаназия проводится без соблюдения установленных законом норм и процедур, либо когда она совершается в обход согласия пациента или других необходимых юридических формальностей. В таких случаях она рассматривается как противозаконная и подлежит уголовному преследованию[6].

Легальная эвтаназия, наоборот, предполагает строгое соблюдение законодательства и обычно включает в себя ряд условий, таких как добровольное согласие пациента, наличие тяжелой болезни, неизлечимых страданий и т.д. Процедуры легальной эвтаназии в таких случаях оформляются в рамках закона и обеспечивают права и интересы всех сторон.

Термин «криминальная эвтаназия» может также использоваться для обозначения случаев,

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когда эвтаназия совершается вне рамок легальной системы, независимо от того, было ли согласие пациента или нет[7].

В литературе и дискуссиях об эвтаназии также используется деление на «прямую» и «непрямую» (или «косвенную») эвтаназию, которое касается мотивации медицинского специалиста и способов, которыми может быть осуществлена смерть пациента:

1) Прямая эвтаназия:

- В этом случае медицинский работник намеренно предпринимает активные шаги для завершения жизни пациента, например, вводит летальные дозы лекарств или проводит другие медицинские процедуры с целью вызвать смерть.

- Этот вид эвтаназии чаще всего ассоциируется с активными, целенаправленными действиями со стороны медицинского персонала

2) Непрямая (косвенная) эвтаназия:

- Мотивация медицинского специалиста в данном случае связана с облегчением страданий пациента, а не прямым намерением вызвать его смерть[8].

- Смерть пациента может наступить как побочное следствие медицинских вмешательств, направленных на облегчение боли или лечение тяжелых состояний. Примером может служить применение анальгетиков в высоких дозах для облегчения боли, что может привести к подавлению дыхания и, в конечном итоге, к смерти пациента.

Это разделение позволяет учитывать намерения и мотивацию медицинских профессионалов при проведении процедур, которые могут влиять на продолжительность жизни пациента.

Следует рассмотреть описание различных форм эвтаназии, представленное Дж. Ланбергом, подчеркивающий разнообразие ситуаций, в которых могут применяться различные методы[9]:

1.Пассивная эвтаназия: Медицинский специалист воздерживается от действий, направленных на продление жизни умирающего пациента, который сохраняет сознание.

2.Полупассивная эвтаназия: Прекращается искусственное питание пациента, при этом пациент находится в устойчивом вегетативном состоянии.

3.Полуактивная эвтаназия: Отключается аппарат жизнеобеспечения у пациента, который также находится в устойчивом вегетативном состоянии.

4.Непредусмотренная эвтаназия: Наступление смерти приближают препараты, прописанные для купирования боли.

5.Суицидальная эвтаназия: Медицинский специалист предоставляет пациенту смертельную дозу препарата, и пациент

самостоятельно использует ее, когда принимает решение о смерти.

6.Активная эвтаназия: Врач целенаправленно вводит пациенту смертельную дозу препарата.

Эта классификация подчеркивает разнообразие сценариев, в которых эвтаназия может происходить, и выделяет особенности каждой из этих форм в контексте медицинской этики и законодательства. Отношение к разным формам эвтаназии может существенно различаться в различных обществах и юрисдикциях.

Ученые, выступающие против легализации эвтаназии, могут представлять различные области науки и медицины, и их аргументы часто базируются на этических, социальных и моральных соображениях. Вот разъяснение некоторых из приведенных вами аргументов:

- Приоритет человека в обществе: Общество, по их мнению, должно быть ориентировано на поддержку и защиту жизни человека. Легализация эвтаназии может изменить этот приоритет, создавая ситуации, когда жизнь становится менее ценной и может быть прекращена по собственному желанию.

- Потенциальное воздействие на научный прогресс: Некоторые ученые могут считать, что эвтаназия может подрвать моральные и этические основы медицинской практики, что в конечном итоге может замедлить или остановить научный прогресс в области медицины и ухода за больными.

- Негативные социальные последствия: Существует опасение, что легализация эвтаназии может привести к недопустимому давлению на уязвимые группы людей, такие как инвалиды, старики и те, кто сталкивается с тяжелыми заболеваниями. Это может создать обстановку, в которой они могут чувствовать себя обременительными для общества и подвергнутся нежелательному воздействию.

- Трудности в определении неизлечимости: Критики эвтаназии могут высказывать опасения относительно трудности определения неизлечимости. Считается, что современные достижения в науке и медицине могут привести к новым методам лечения, исцеления или смягчения страданий, что делает определение неизлечимости более сложным.

Эти аргументы отражают разнообразные точки зрения на этические, социальные и моральные аспекты[10] эвтаназии. Они подчеркивают сложность и разносторонность дебатов вокруг этой темы в обществе и научных кругах.

Представляется важным создание среды, в которой эвтаназия станет менее вероятной, а вместо этого будет акцентироваться на

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качественной и заботливой медицинской помощи. Создание условий для уважения человеческой жизни, расширение доступа к качественной паллиативной помощи может обеспечить пациентам соответствующую медицинскую и психологическую поддержку в конце жизни, уменьшая страдания и необходимость в эвтаназии. Следует осуществлять проведение образовательных программ, направленных на разъяснение понятий паллиативной и хосписной помощи, а также обсуждение этических аспектов окончания жизни, которые помогут людям лучше понимать альтернативы эвтаназии. При этом, поддержка документирования волеизъявления будет способствовать разработке и распространению систем, необходимые чтобы оказать помощь людям выражать свои волеизъявления в отношении медицинских решений, включая ситуации окончания жизни.

Продвижение образования в области медицинской этики и прав пациентов поможет как медицинским работникам, так и пациентам лучше понимать моральные и правовые аспекты окончания жизни. Введение четких стандартов и нормативов, а также строгое регулирование вопросов окончания жизни и эвтаназии, может обеспечить соблюдение этических и юридических принципов[11]. Требуется улучшение финансирования исследований в области паллиативной медицины, борьбы с болями и разработки новых методов лечения тяжелых заболеваний, чтобы предложить пациентам реальные шансы на выздоровление или улучшение состояния. Обеспечение пациентов и их семей психологической поддержкой в трудные периоды может помочь справляться с эмоциональными трудностями и принимать обдуманные решения. Своевременным будет создание этических комитетов и их внедрение в медицинские учреждения для обсуждения сложных этических

вопросов, связанных с окончанием жизни, и предоставление рекомендаций.

Общая цель заключается в создании общества, где люди могут получить качественную медицинскую помощь в конце жизни и чувствовать поддержку, несмотря на трудные обстоятельства, тем самым уменьшая потребность в экстренных мерах, таких как эвтаназия.

Таким образом, описанные виды эвтаназии предоставляют контекст для анализа различных сценариев и последствий, связанных с принятием решений об окончании жизни. Критики эвтаназии подчеркивают важность предоставления качественной медицинской помощи, психологической поддержки пациентов и профессиональной подготовки медицинских специалистов. Укрепление этических стандартов и законодательства, регулирующего практику эвтаназии, является ключевым шагом для предотвращения злоупотреблений и обеспечения уважения к жизни. Тем не менее, защитники эвтаназии могут подчеркнуть неотъемлемое право индивида на самоопределение в конце жизни и необходимость предоставления вариантов для тех, кто сталкивается с неизлечимыми страданиями. В зависимости от контекста и культурных особенностей, мнения об эвтаназии будут различными, и важно продолжать открытый диалог и исследования, чтобы развить эффективные стратегии обеспечения достойной конечной стадии жизни для всех. Можно отметить, что эвтаназия остается сложной и многогранным вопросом, который требует баланса между правами индивида и общественными интересами, этикой и законами. Дебаты вокруг эвтаназии будут иметь место и в дальнейшем, поэтому важно продолжать исследования этих аспектов с целью разработки наилучших подходов к обеспечению качественной медицинской помощи и уважения к жизни каждого человека.

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Article



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IDENTIFICATION OF COTTON SEEDLING DISEASES

Abstract: Canola plants are susceptible to various diseases caused by *Rhizoctonia solani*, *Fusarium* species, and *Pythium* species. To combat these illnesses, canola should be managed using licensed seed treatments with active ingredients. Early seeding and good soil contact can help develop the crop rapidly, with a waxy coating called suberin on the root aiding in resistance to infections. Field scouting should be conducted ten to fourteen days after sowing to check for seeds and dead or dying plants. The main soil-borne pathogens responsible for the seedling disease complex are *Rhizoctonia solani*, *Fusarium* species, and *Pythium* species. These diseases typically affect canola seeding emergence and growth when the seedbed is not tightly packed in dry, cool conditions or cold, wet weather. Poor emergence can be caused by heat, wind, excessive seed depth, desiccation of budding hypocotyls, and insect damage.

Key words: seedling, cotton, diseases, excessive, desiccation, emerging, preventative.

Language: English

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Introduction

Numerous diseases of seeds and seedlings, such as those brought on by *Rhizoctonia solani*, *Fusarium* species, and *Pythium* species, can affect canola. To combat these illnesses, there are a few management and preventative strategies in addition to timely and efficient scouting.

Crucial advice for effective management. Canola is susceptible to a number of seed and seedling diseases, however these can be reduced with the use of a licensed seed treatment containing various fungicide active ingredients.

Shallow sowing and good seed to soil contact allow the crop to develop as rapidly as possible, even if early seeding often yields the best results. Rapidly emerging and growing seeds have a lower chance of dying from illnesses that affect seedlings. At the two-to four-leaf stage, a waxy coating known as suberin forms on the hypocotyl section of the root, which aids in the seedlings' ability to resist more infections.

Ten to fourteen days after sowing, begin field scouting. Check for seeds and dead or dying plants in non-emerged regions.

The main soil-borne pathogens responsible for the seedling disease complex are *Rhizoctonia solani*, *Fusarium* species, and *Pythium* species. The symptoms of this disease complex include seed rot, pre- and post-emergence damping-off (wirestem), seedling blight, and seedling decay. Tighter canola rotations do appear to exacerbate these illnesses, however in situations where these pathogens are prevalent, seed treatments will promote canola seeding emergence and growth.

When the seedbed is not tightly packed in dry, cool circumstances, or when the weather is cold and wet, seed and seedling losses from these diseases typically reach their peak. Because of the extended low soil temperatures in the northwest prairies, the disease complex is most frequently an issue there.

More precisely, *Pythium* species like damp, chilly soils. *Rhizoctonia solani* prefers loose, cold,

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dry, and well-worked soils. Heavy, wet soils are ideal for *Fusarium* species.

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More precisely, *Pythium* species like damp, chilly soils. *Rhizoctonia solani* prefers loose, cold, dry, and well-worked soils. Heavy, wet soils are ideal for *Fusarium* species.

Poor emergence can be caused by a variety of causes that could be misinterpreted for seedling disease. These include heat, wind, excessive seed depth, desiccation of budding hypocotyls in dry soil, and insect damage from pests like wireworms and cutworms.

Each of the three pathogens that cause seedling disease complex has a distinct disease cycle; the broad course of each is outlined here. Every pathogen is covered in great detail.

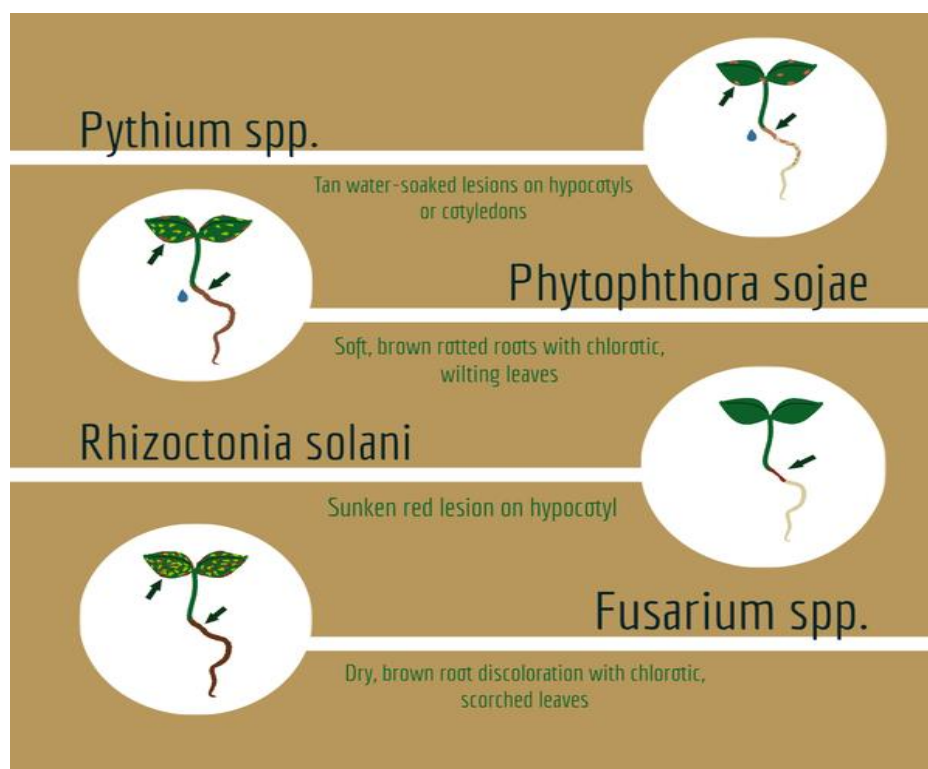


Figure 1. General symptoms of soybean seedling disease caused by different fungal pathogens. Symptoms may not always be typical, and diagnosis should be confirmed to select appropriate control. (Image created by Ashley Joyce)

An organism that causes disease (such as a bacterium or fungus). Read more about root rot here.

When dry seeds absorb water before germination, they become susceptible to attack by various pathogens. When the right circumstances arise or when secretions from germination-seed or host plant roots promote them, these pathogens develop in the soil. Young succulent roots and young stem (hypocotyl) tissue are particularly vulnerable to infection, and these diseases prey on them. Damaged root systems can cause a plant to become temporarily

dormant before continuing to develop and mature normally.

Once a seedling is inside the plant, these diseases grow and cause degradation that either kills or harms it. After the cells die, they can form minute resting bodies inside or on the surface of the infected tissue. The infections might persist in their inactive or resting forms until a new vulnerable host becomes available. The subterranean portions of the plants can regenerate more root tissue than they lose and become sufficiently woody to tolerate additional infections in the two- to four-leaf stage.

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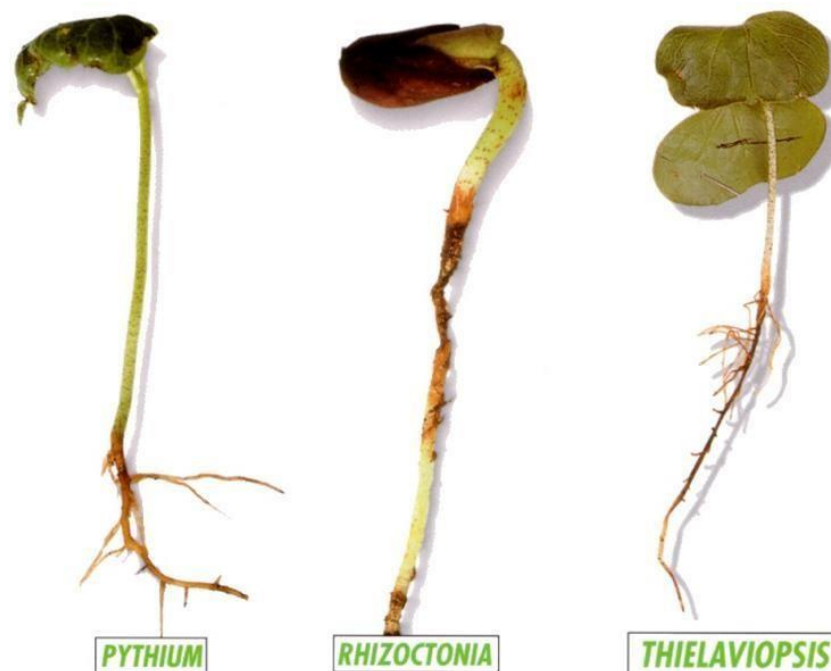


Figure 2. Effects of seedling diseases from varying pathogens (Pythium, Rhizoctonia, and Thielaviopsis) shown in young cotton. Root rot associated with Pythium is shown on the far left, post emergence damping off in the middle (most commonly caused by Rhizoctonia), and on the far right the hypocotyl has turned black and began rotting (Thielaviopsis). Photograph taken by Bobbe Baker

These diseases may remain on infected root tissue for the whole of the plant's life, decreasing the root system's capacity to absorb nutrients and moisture and decreasing its resistance to moisture stress during the midsummer heat.

The complex of seedling diseases is influenced by crop rotation and meteorological factors. Deep seeding and planting early into chilly soils result in the worst losses. Temperature and soil moisture both affect how severe a disease is. Pythium species thrive in environments that encourage slow growth and cold, moist soils. Rhizoctonia solani prefers loose, cold, dry, and well-worked soils. Heavy, wet soils are ideal for Fusarium species. These broad generalizations about environmental factors are not exclusive, and

infections do occur for everyone under a variety of circumstances.

Distinguishing between harm from insects and illness. It can be difficult to determine whether an insect or a disease caused the harm. A spade, a water bottle to wipe soil off roots, and a magnifying lens to look for symptoms are essential components of a good scouting equipment. In contrast to regions with significant emergence, examine areas where plants are overturned or where seedlings failed to emerge. Damage from cutworms and/or flea beetles may coexist with the illness complex. Examine the damage up close. The hypocotyl does not rot off or constrict at or below the soil level as a result of flea beetles. They do, however, consume parts of the hypocotyl that are at or above the soil line when the weather is chilly.

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Article



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THE ROLE OF DIGITALIZATION IN THE FIGHT AGAINST THE SHADOW ECONOMY (IN CONDITIONS UZBEKISTAN)

Abstract: The article provides an overview of the ongoing work to combat the shadow economy in Uzbekistan. Politics, economics and technological solutions are the basis of the issues considered. The reasons for the need to combat the shadow economy through the digitalization of the country's economy are analyzed. The main directions of digitalization of the economy are highlighted. Particular attention is paid to subjective reasons that had a negative impact on the development of the economy of Uzbekistan. In conclusion, it is concluded that there is a need for further development of the industry in a given direction.

Key words: Uzbekistan, shadow economy, industry, IT technologies, digitalization, "digital energy control."

Language: Russian

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РОЛЬ ЦИФРОВИЗАЦИИ В БОРЬБЕ С ТЕНЕВОЙ ЭКОНОМИКОЙ (В УСЛОВИЯХ УЗБЕКИСТАНА)

Аннотация: В статье предоставлен обзор о проводимых работ по борьбе с теневой экономикой в Узбекистане. Политика, экономика и технологические решения-основа рассмотренных вопросов. Анализируются причины, вызывающие необходимость борьбы с теневой экономикой с помощью цифровизации экономики страны. Выделены основные направления цифровизации экономики. Особое место уделено субъективным причинам, оказавшим негативное влияние на развитие экономики Узбекистана. В заключении делается вывод о необходимости дальнейшего развития отрасли в заданном направлении.

Ключевые слова: Узбекистан, теневая экономика, промышленность, IT-технологии, цифровизация, «цифровой энергоконтроль».

Введение

Если экономическая деятельность субъектов хозяйствования скрывается от государственного (статистического, лицензионного и налогового

«Руководитель, отказывающийся от цифровизации,
— это руководитель, не стремящийся покончить
с коррупцией»,

«Теневая экономика препятствие для честно
работающего бизнеса»
Ш. Мирзиёев

учёта) и общественного контроля, то, — это
теневая экономика.

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Термин «теневая экономика» (англ. shadow economy, underground economy, black economy) появился в начале 1970-х гг. для обозначения сокрытия доходов и антиобщественных способов их извлечения.

Общеизвестно что, в современных условиях теневая экономика распространена во многих сферах жизнедеятельности общества. Ежегодно данная область экономики растет, состыковывается с правовым сектором, и со временем становится сложнее различать теневую и правовую экономические системы.

Теневая экономика может проявляться через серые зарплаты, которые выдаются в конвертах, чтобы не платить с них подоходный налог. Предприниматели могут умалчивать о размерах прибыли, скрывая её от налоговых служб, для уплаты более низких налогов. Также во время внешнеторговых операций прибегают к серым схемам импорта, неверно заполняя таможенные декларации, что позволяет «сэкономить» на пошлинах.

Недооценка и игнорирование теневых процессов в различных секторах экономики из-за отсутствия регулярного мониторинга приводит к значительным просчетам при определении макроэкономических показателей, используемых при реализации многих областей экономической политики.

Наиболее влиятельными причинами, способствующими возникновению теневой экономики, являются: высокие налоги, избыток государственного регулирования, коррупция, ограниченный доступ к официальному трудоустройству, недоверие к финансовым и государственным институтам, глобализация и т. д.

Существование теневой экономики негативным образом сказывается на экономике страны через уменьшение налоговых поступлений, роста преступность, нездоровая конкуренция, ухудшение условий труда, сокращение экономического роста и многое другое.

Теневой сектор существует в экономиках всех стран мира, но в некоторых, таких как Узбекистан, его доля стремится к половине совокупного ВВП.

Подсчитать ущерб от теневой экономики очень сложно, но приблизительную цифру можно назвать.

По данным в Министерстве экономического развития и сокращения бедности ([здесь](#)), ситуация в Узбекистане слабо отличается от других стран Центральной Азии и СНГ. Согласно статистике МВФ, наиболее высокая доля теневой экономике на пространстве СНГ [фиксировалась](#) в Украине — почти 45%. На втором месте шла Беларусь с 44,5%, а на третьем расположился Таджикистан —

43%. Доля теневом секторе в Казахстане, России и Кыргызстане находилась в районе 38%.

Проведённое в 2019 году исследование по инициативе ПРООН в Узбекистане [оценило](#) размер теневой экономики в стране в промежутке от 40% до 50% по отношению к ВВП. К схожей оценке — 50% к ВВП — пришла международная НКО Buyuk Kelajak. По их данным, в 2019 году Узбекистан потерял \$16–17 млрд из-за теневом сектора.

Отчёт Всемирного банка от 2019 года выявил, что в Узбекистане до 60% от общего количества занятых в экономике составляют неформально занятые. В абсолютных числах количество, работающих в теневой экономике достигает почти 8 млн человек. Таким образом, более половины рабочей силы в Узбекистане становится уязвимой к нарушениям трудовых прав со стороны работодателей. К тому же, государственный бюджет недополучает налоговые поступления с их заработных плат.

Кроме того, расцвету теневой экономики способствует высокий уровень коррупции в Узбекистане. Согласно отчёту международной организации Transparency International от 2023 года, Узбекистан в рейтинге восприятия коррупции [расположился](#) на 126 месте из 180, набрав 31 балл. Однако стоит отметить, что с 2016 года Узбекистан поднялся на 30 строчек, последовательно улучшая свои позиции.

Президент Шавкат Мирзиёев на совещании 16 января 2024г. [назвал](#) проблему теневой экономики самой актуальной на сегодняшний день в Узбекистане.

По официальным данным объем теневой экономики в республике Узбекистане составляет около 40% ВВП, (ущерб ВВП оценен в размере 135 трлн сумов, а госбюджет не дополучил 30 трлн сумов). Наиболее высокие показатели зафиксированы в строительстве, торговле и сфере услуг.

На сегодняшний день в стране около 5 миллионов человек работают в неформальных секторах (около 24% трудоспособного население страны), а предприниматели, которые выплачивают им зарплаты, не платят налоги, отметил президент.

Тем не менее, в последние годы государство предпринимает меры для уменьшения доли теневой экономики в Узбекистане. Основная ставка была сделана на цифровизацию.

К примеру, в стране были инициированы «Комплексная программа развития Национальной информационно-коммуникационной системы Республики Узбекистан на период 2013 – 2020 годы», Национальная Стратегия действий по пяти приоритетным направлениям развития Республики Узбекистан в 2017 – 2021 годах, Стратегия «Цифровой Узбекистан – 2030» и

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«Стратегия развития Нового Узбекистана на 2022-2026 годы», направленные на осуществление цифровой трансформации в национальной экономике, промышленности и обществе в целом.

При сохранении стабильных темпов роста к 2030 году, планируется достичь ВВП на душу населения равному 4000 долларов США и войти в группу стран с «доходом выше среднего». В связи с этим в качестве основного «драйвера» также определено развитие цифровой экономики с увеличением ее доли не менее чем в 2,5 раза к концу 2026 года. При этом планируется увеличить объемы производства программных продуктов в 5 раз, а их экспорта – в 10 раз, до 500 млн долларов США, а также довести уровень цифровизации производственных и операционных процессов в реальном секторе экономики – в финансовом и банковском секторах – до 70%. Кроме того, уделяется приоритет цифровизации городского планирования и строительства, развитие их в рамках концепции «Умный город».

К тому же, предпринимались меры по укреплению государственного регулирования. Президент Шавкат Мирзиёев 2 марта 2020 года [подписал](#) указ (ПФ-5953), направленный на борьбу с теневым сектором. Согласно ему, была введена маркировка, изменилась система учёта и возврата суммы НДС, создана система получения точками розничной торговли сферы услуг индивидуального QR-кода и многое другое.

На пример 24 мая 2023 года Президент Республики Узбекистан подписал Указ «О совершенствовании механизмов государственного контроля и внедрении системы «цифровой энергоконтроль» в топливно-энергетической отрасли». Это важный документ, направленный на предотвращение в стране незаконного использования топливно-энергетических ресурсов и случаев их хищения и разбазаривания. Кстати, полное внедрение системы «цифровой энергоконтроль» в процесс производства (добычи), переработки, передачи (транспортировки), хранения, распределения и потребления топливно-энергетических ресурсов, а также их количественного сохранения является актуальным.

Рост численности населения в мире, развитие экономики становятся причиной повышения спроса на топливно-энергетические ресурсы. Данная ситуация наблюдается и в нашей стране, что диктует принятие мер по рачительному использованию природных ресурсов.

Если плохо поставлена работа с учетом, изобилия не будет. Потому что нет контроля за

тем, куда и что расходуется, имеют место расточительство и разбазаривание.

Безусловно внедрение платформы «энергоконтроль» прежде всего даст возможность проанализировать сведения о незаконном подключении к сети и использовании ресурсов.

Вместе с тем сохраняется ряд системных проблем в обеспечении государственного контроля в топливно-энергетической отрасли. В частности, ослабление вертикального управления и строгого ведомственного контроля в системе топливно-энергетического обеспечения является причиной увеличения случаев хищения энергоресурсов.

Неполное применение современных информационно-коммуникационных средств в контроле процессов от производства до поставки потребителю топливно-энергетических ресурсов приводит к сохранению на высоком уровне влияния человеческого фактора.

К примеру в АО «Узбекнефтегаз» завершается внедрение проекта «E-kon», целью которого является установка соответствующих измерительных приборов продукции, начиная с процесса добычи и кончая объектом потребления. Для этого проводится цифровизация наземных систем, которые интегрируются с подземными системами скважины. С привлечением современных технологий предусматривается полная автоматизация процессов добычи природного газа из углеводородных скважин.

Одним словом, цифровизация **должна охватит вес спектр деятельности экономики и общественности включая сельскую хозяйству, здравоохранению и махаллинской системы самоуправления**, ибо снижение издержек в отраслях экономики может быть достигнуто «только и только за счёт цифровизации». Однако, в такие отрасли как, сельское хозяйства и **здравоохранение отстает в этом плане.**

Эти и другие принимаемые меры со стороны государства, безусловно будет способствовать снижению объема теневой экономики и коррупции, однако, для эффективности этих мер, требуется их ускоренного решение.

Думается что, работу по борьбу с теневой экономикой необходимо усилит параллельно и с усилением мер ответственности, воспитанием поколения и подготовкой специалистов добросовестно служащих против теневой экономикой и коррупцией в целом.

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Article



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AUTOMATION SYSTEM FOR GENERATING UNIVERSITY COURSES

Abstract: A system is described that allows us to create, using curriculum and class schedules, a set of courses in LMS Moodle and commands for webinars, and synchronizes them with each other. Students and teachers can go to the corresponding Moodle course from the scheduling web form, and from there to the desired webinar.

Key words: IT infrastructure of SPbPU, integration, PHP, Python, Celery, Django, Moodle, MS Teams, MTS Link, Webinar.ru.

Language: English

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Scopus ASCC: 1700.

Introduction

This work continues the series of articles [1-4], describing the latest development of the IT infrastructure of SPbPU.

SPbPU is one of the largest universities in Russia - currently about 30,000 students study there and about 2,000 teachers work there [5], it is among the top 5 universities in Russia in terms of the number of budget places [6]. Although training sessions are conducted in classrooms in person, for each training course a course is created in the LMS Moodle system, where teachers must post training materials for their classes. Every semester you need to create about 10,000 courses on a dozen distance learning portals of all SPbPU institutes. Next, for each training course you need to be able to create a video conference (for each lesson). Until recently, SPbPU used MS Teams for its classes, currently also used MTS Link (ex Webinar.ru). Therefore, a class team is created in MS Teams for each teacher and group. In addition, each such course and team must have a link in the online schedule so that teachers and students can access it. In addition, the corresponding LMS Moodle system course and team from MS Teams must have users

corresponding to this group and this teacher - i.e. user synchronization is also needed. The presence of such courses and teams is also necessary to be able to transfer any discipline to a distance learning format. And it is clear that without automating the process it is completely impossible to do all this. In this article we will look at the system for creating such courses and teams.

Formulation of the problem

SPbPU has a scheduling system based on the Galaktika system [7], which has a web interface for searching the schedule of groups and teachers. Fig. 1 shows an example of displaying part of a teacher's schedule, where each cell of the schedule for a given teacher indicates the time of the lesson, subject, type of lesson (lecture, practical lesson or laboratory lesson), group (or group learning stream for lectures), audience and link to the corresponding course in the LMS Moodle system for this pair (the link is designated as "CДO"). How is such a link created?

For this purpose, we created an API consisting of 7 scripts (web applications), combined into 3 logical groups. First of all, it should be noted that there

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are 3 forms of generating courses - subject (special subjects for the corresponding educational institute of SPbPU), general education (lectures, practical lessons or laboratory lessons), foreign language (there is a feature with subgroups). Fig. 2 shows the generation of courses with the choice of one of the three types of disciplines described above, Fig. 3 shows the choice of the form of training for which the course is generated. The required courses are taken from educational plans, information from which is entered into the Galaktika database. One of our scripts accesses the Galaktika and collects data in JSON format [8], which it transfers to the database of the API we created. Therefore, we know which courses need to be generated – Fig. 4 shows a button for obtaining a list of courses required for generation (for a given course type) and part of the resulting list of courses. Next, we can receive JSON for generating the course (by clicking the appropriate button – Fig. 5), it can be edited if desired (Fig. 6) and then sent for generation (by clicking the appropriate button – Fig. 7). The course is created in accordance with a given structure, its content is specified programmatically. The result of the generation (successfully) is also shown in Figure 7, and we can see the generated course in the list of created courses (Fig. 8). Fig. 9 shows the classes that should be conducted with students within the course for which this course was generated (information about this in the form of corresponding timeslots was taken by our script from the Galaktika database). After our scripts have collected all the necessary data for the created course, it can be created in Moodle (Fig. 10). As a result, the course appears in the corresponding Moodle section (Fig. 11). After the course is generated, the necessary link is created in the schedule web form for the created course. Next, you need to create an appropriate room for webinars in MS Teams [9] and MTS Link (ex Webinar.ru) [10] (these are 2 video conferencing platforms currently used in SPbPU). This is done by our two scripts (API-teams and API-webinar, respectively) written in Python using Celery [11] (Fig.

12). After this, the script adds a link to the created MS Teams / MTS Link team to the corresponding Moodle course (the link is highlighted in Figure 13). A separate script synchronizes the Moodle course and teams in MS Teams / MTS Link - for this, a list of all the necessary students is taken from the corresponding timeslots, and they are added both to the Moodle course and to the teams in MS Teams / MTS Link.

Conclusion

As a result, we created a system for automating the generation of courses in Moodle, as well as webinar rooms, which are synchronized with each other and also synchronized with the web interface of the class schedule. When creating this system, we used PHP, Python, Celery, Django [12]. Adding a new video conferencing platform to our system if necessary is not difficult - currently, the Teams API is used to work with MS Teams, and our system also works with MTS Link (Webinar.ru). This system centralizes the creation of courses and streamlines work in webinars. You can find out whether the teacher taught classes online, and if he independently edits the webinars, then whether they are available to students.

This system is also easily scalable if desired. Thanks to this already working system, we create about 10,000 courses every semester that our students and teachers use. Moreover, the system allows you to create courses not only for the administrator, but also for those responsible at the institutes for the electronic educational system. The system allows you to place courses not on one specific distance learning site, but in accordance with the rules of the institute or the type of course on different sites. Modifications to the modules allow synchronization to be carried out in accordance with the internal rules of SPbPU, and not to use the system according to Microsoft logic.

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Поиск

по группе по преподавателю

Кожевников Вадим Андреевич

Расписание с 16 октября по 22 октября (чётная неделя)

Печать iCal Сетка

Предыдущая неделя 16 10 - 22 10 Следующая неделя

16 окт., пн

10:00-11:40 Физика
Лекции
Поток показать группы
Кожевников Вадим Андреевич
СДО
Главное здание, ауд_283

12:00-13:40 Физика
Лабораторные
5030103/20001 п/г 1 показать группы
Кожевников Вадим Андреевич
СДО
Главное здание, ауд_285

ps://lms.spbstu.ru/course/view.php?id=16567 5:40 Физика

Fig 1. Class schedule cell

ПОЛИТЕХ

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Банк контента
Мои курсы
Администрирование

Генерация курсов и Teams

Получить дисциплину из расписания Получить все дисциплины без ссылок Создать курсы + Teams Созданные курсы

Генератор не созданных курсов

Введите институт
ФизМех

Форма обучения
Очная

Тип дисциплин
Курсы института
Курсы института
Общеобразовательные
Иностранный язык
доп.сессия, зачет
Доп.сессия. Зачет с оценкой
Доп.сессия. Курсовая работа
Доп.сессия. Курсовой проект
Зачет

Fig 2. Course generation taking into account the type of disciplines

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Fig 3. Course generation taking into account the choice of form of training

Название	Преподаватель	Институт	Тип занятия
<input checked="" type="checkbox"/> Безопасность жизнедеятельности	Доронин Александр Сергеевич	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Житникова Татьяна Сергеевна	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Каченкова Валерия Дмитриевна	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Логвинова Юлия Валерьевна	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Полохович Максим Алексеевич	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Салкуцан Владимир Иванович	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Ульянов Алексей Игоревич	ФизМех	Лабораторные
<input type="checkbox"/> Безопасность жизнедеятельности	Шавуров Сергей Алексеевич	ФизМех	Лабораторные
<input type="checkbox"/> Образовательный форсайт	!Вакансия	ФизМех	Лекции
<input type="checkbox"/> Образовательный форсайт	Матвиенко Александра Николаевна	ФизМех	Лекции
<input type="checkbox"/> Теоретическая механика	Дрепин Михаил Александрович	ФизМех	Практика
<input type="checkbox"/> Теоретическая механика	Кривцов Антон-Иржи Мирославович	ФизМех	Практика
<input type="checkbox"/> Факультатив по математике	Бортковская Мария Романовна	ФизМех	Практика
<input type="checkbox"/> Факультатив по математике	Никулин Алексей Михайлович	ФизМех	Практика
<input type="checkbox"/> Факультатив по математике	Преображенский Сергей Павлович	ФизМех	Практика

Fig 4. List of lessons received

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JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

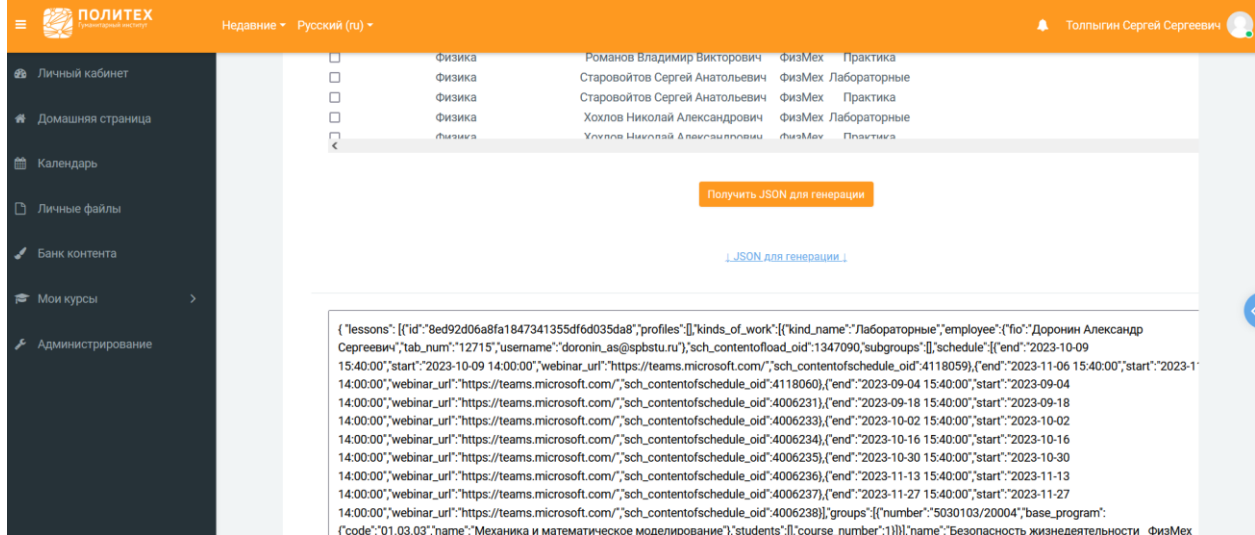


Fig 5. Getting JSON to generate

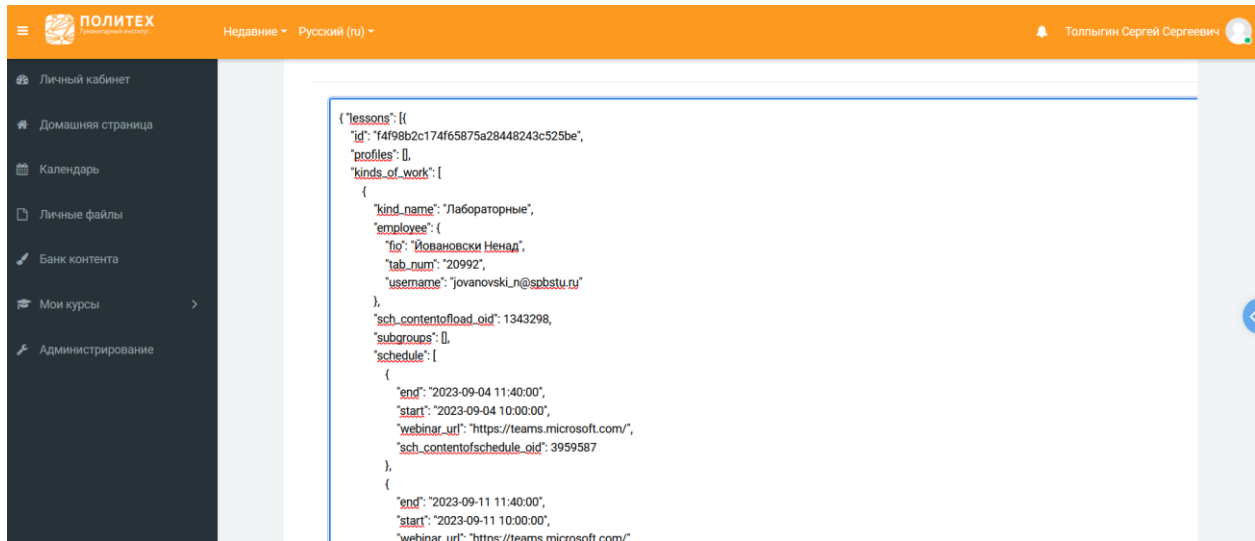


Fig 6. Ability to edit JSON if desired

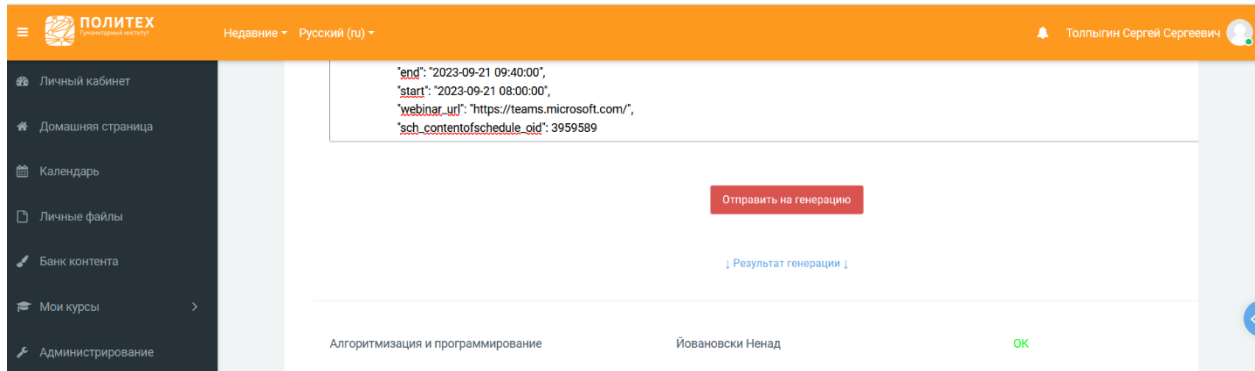


Fig 7. Sending JSON to generate a course

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GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

Django administration

Home · Courses · Disciplines

Select discipline to change

Action: [dropdown] Go 0 of 100 selected

- DISCIPLINE
- Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR
- Математические методы управления перевозками (а) Попова Ольга Валентиновна in 33 for MASTER
- Научный дискурс (а) Ефанов Дмитрий Викторович in 33 for MASTER
- Логистика (а) Плотников Дмитрий Георгиевич in 33 for MASTER
- История и методология науки (а) Ефанов Дмитрий Викторович in 33 for MASTER
- Иностранный язык в профессиональной коммуникации, Английский (а) Дмитриева Наталья Владимировна in 33 for MASTER
- Документационное сопровождение логистической деятельности (а) Баните Аушра Владовна in 33 for MASTER
- Учебная практика (а) Синявина Мария Павловна in 37 for MASTER
- Производственная практика (а) Темиргалиев Егор Рианович in 37 for MASTER
- Преддипломная практика (а) Синявина Мария Павловна in 37 for BACHELOR
- Научно-исследовательская работа (а) Танина Анна Валерьевна in 37 for MASTER
- Научно-исследовательская практика (а) Леонтьев Дмитрий Николаевич in 37 for MASTER
- Карьерная адаптивность (а) Надежина Ольга Сергеевна in 37 for MASTER

Fig 8. List of generated courses

Django administration

Home · Courses · Timeslots

Select timeslot to change

Action: [dropdown] Go 0 of 100 selected

- TIMESLOT
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-27 08:00:00+00:00 to 2023-11-27 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-13 08:00:00+00:00 to 2023-11-13 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-10-30 08:00:00+00:00 to 2023-10-30 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-10-16 08:00:00+00:00 to 2023-10-16 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-10-02 08:00:00+00:00 to 2023-10-02 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-09-18 08:00:00+00:00 to 2023-09-18 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-09-04 08:00:00+00:00 to 2023-09-04 09:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-12-11 12:00:00+00:00 to 2023-12-11 13:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-12-04 12:00:00+00:00 to 2023-12-04 13:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-27 12:00:00+00:00 to 2023-11-27 13:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-20 12:00:00+00:00 to 2023-11-20 13:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-13 12:00:00+00:00 to 2023-11-13 13:40:00+00:00
- Lesson Лабораторные of Алгоритмизация и программирование Йовановски Ненад in 51 for BACHELOR with Йовановски Ненад (20992 / jovanovski_n@spbstu.ru) from 2023-11-06 12:00:00+00:00 to 2023-11-06 13:40:00+00:00

Fig 9. Timeslots for the created course

ПОЛИТЕХ

Недавние · Русский (ru)

Толпыгин Сергей Сергеевич

Личный кабинет

Домашняя страница

Календарь

Личные файлы

Банк контента

Мои курсы

Администрирование

Генерация курсов и Teams

Получить дисциплину из расписания

Получить все дисциплины без ссылок

Создать курсы + Teams

Созданные курсы

Список дисциплин без курсов на moodle

Всего: 1

- Алгоритмизация и программирование Йовановски Ненад

Сгенерировать выбранные курсы на moodle

Fig 10. Generating a course in Moodle

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The screenshot shows a Moodle course page. At the top, it displays the course title '02.03.03 Математическое обеспечение и администрирование информационных систем' and the user 'Толпыгин Сергей Сергеевич'. Below the title, there are navigation links for 'Личный кабинет', 'Курсы', and 'Учебный год 2023/24, осенний семестр'. A search bar and filters are visible. The main content area shows four course cards, each with an icon and a title: 'Алгоритмизация и программирование' by Иовановски Ненад, 'Программирование баз данных' by Сабинин Олег Юрьевич, 'Системы реального времени' by Вербова Наталья Михайловна, and 'Методы кодирования данных' by Пак Вадим Геннадьевич.

Fig 11. The created course in the corresponding section of Moodle

The screenshot shows a Django REST framework API endpoint. The browser address bar displays 'api.open.spbstu.ru/api/intermediate_courses/73811/provide/'. The page title is 'Discipline Course'. The response is a JSON object with the following structure:

```
HTTP 200 OK
Allow: GET, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

{
  "discipline": {
    "id": 73811,
    "education_level": "Бакалавриат",
    "external_id": "f4f98b2c174f65875a28448243c525be",
    "name": "Алгоритмизация и программирование Иовановски Ненад",
    "institute_code": 51
  },
  "portal": {
    "id": 8,
    "name": "ИЖК",
    "url": "https://dl.spbstu.ru/",
    "institute_code": 51,
    "ignore_ssl_errors": false,
    "root_category": 1,
    "full_name": "ИЖК"
  },
  "course_link": "https://dl.spbstu.ru/course/view.php?id=5435",
  "internal_id": 5435,
  "internal_category_id": 305,
  "created_at": "2023-10-19T13:51:23.855347Z"
}
```

Fig 12. Creating a team using API-teams

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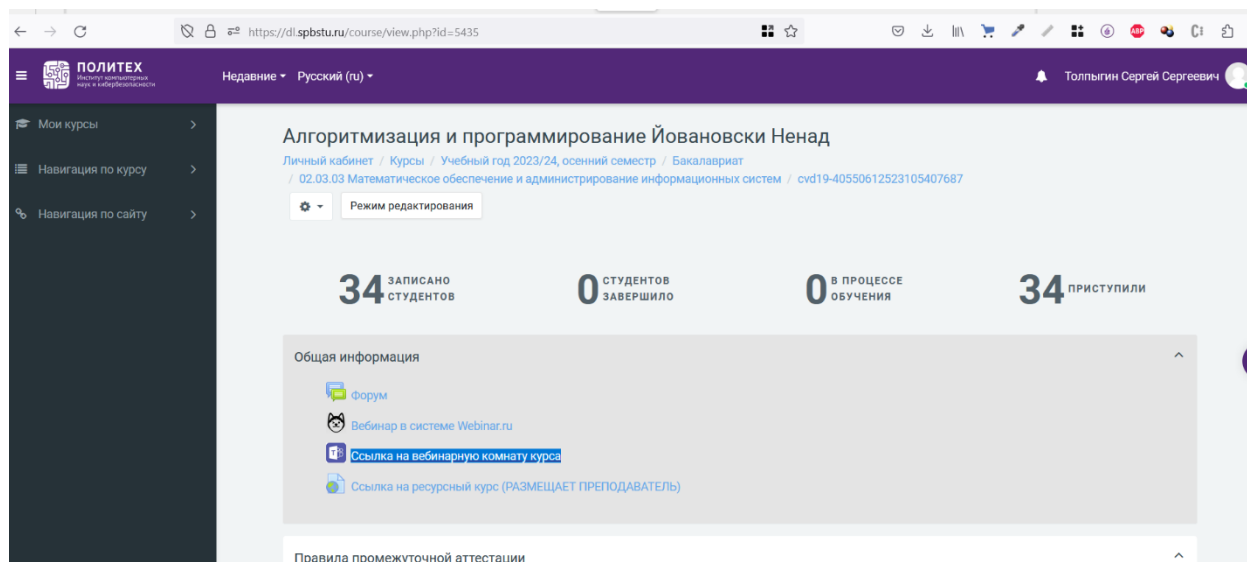


Fig 13. Link to MS Teams in the corresponding Moodle course

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Issue



Article



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MODELING AND ANALYSIS OF THE ALUMINUM PLATE DRAWING PROCESS

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Abstract: The analysis of the calculation of the deformed state of a sheet metal blank during its drawing into the die with a rigid punch was performed in the article. It is determined that for the formation of a thin-walled plate, the punch force increases in proportion to the depth of pressing the blank into the die. Constant force indicates the achievement of full contact between the surfaces of the punch and the blank. At the bending points of the blank, maximum deformations are observed, causing a decrease or increase in the part thickness and an increase in the hardening of the material.

Key words: deep drawing, blank, thickness, strain, stress, material.

Language: English

Citation: Chemezov, D., et al. (2024). Modeling and analysis of the aluminum plate drawing process. *ISJ Theoretical & Applied Science*, 02 (130), 232-235.

Soi: <http://s-o-i.org/1.1/TAS-02-130-20> **Doi:**  <https://dx.doi.org/10.15863/TAS.2024.02.130.20>

Scopus ASCC: 2210.

Introduction

It is cost-effective to manufacture simple body parts of small dimensions with a small wall thickness using the method of deep drawing of a sheet metal blank [1-2]. In production conditions, deep drawing can be accompanied by various defects, for example, a significant thinning of the wall thickness of the part, wrinkles on the surfaces, the formation of cracks in the material, partial rupture of the material, etc. The causes of these defects are incorrectly selected process modes, small or large thickness of the sheet blank, lack of a blank holder, etc. Therefore, in order to reduce production costs, process engineers optimize the deep drawing process depending on the material of the blank and the complexity of the contour of the part. The deep drawing process is often optimized using special computer programs [3-5]. Computer calculations were carried out to determine the stress and strain state of the material of the parts, depending on the change in the thickness of the sheet blank, the applied load, and the punch force [6-10]. These calculations make it possible to optimize the plastic deformation operations of thin-walled parts before their introduction into real production.

For a qualitative assessment of the plastic deformation of thin-walled aluminum blanks, a computer simulation of the deep drawing process was performed, followed by an analysis of the results of the stress and strain state of the part.

Materials and methods

To form a plate by deep drawing, two-dimensional models of a circular disk (blank), a die, a punch and a blank holder were created. The model of the blank on the plane was a strip with a thickness of 2 mm and a length of 350 mm. Tool steel with the properties of an absolutely solid body was chosen as the material of all the elements of the drawing die. Aluminum with the following properties was adopted as the material of the blank: density – 2700 kg/m³; Young's modulus – 70×10^9 Pa; Poisson's ratio – 0.33; Murnaghan third-order elastic moduli – -2.5×10^{11} Pa, -3.3×10^{11} Pa, -3.5×10^{11} Pa; Lamé parameter λ – 5.1×10^{10} Pa and Lamé parameter μ – 2.6×10^{10} Pa. The blank was drawn into the die to a depth of 40 mm. The

loading parameter for the implementation of the deep drawing process was adopted in the range from 0 to 1.0 with a step of 0.1. The state of the blank material during the drawing process was tracked along the flat surface of the disk.

Results and discussion

The results of calculating the stress and strain state of the blank material during plate drawing were shown in the Fig. 1. The changes in the punch force, the thickness of the blank and its displacement into the die, the hardening of the deformed material of the blank and the contact pressure on the surface of the blank, shear and equivalent stresses of the material were subject to consideration. The degree of plastic strain of the blank material during deep drawing was also presented.

The punch force of 460 kN is required to perform the aluminum plate drawing process. At the same time, a gradual increase in force was created when the punch was vertically moved to a distance of 25 mm. Further, the drawing process took place at a constant value of force. At the time of the final plate profiling, the punch force increased by another 150 kN.

It is noted that the bottom of the plate does not change in thickness. At the bending points, both an increase and a decrease in the initial thickness of the sheet blank is observed, depending on the value of the loading parameter. On average, the change in the thickness of the blank is up to 5% of the initial thickness. Significant thinning of the blank (up to 50% of the initial thickness) occurs on the flange. This is due to the clamping of the blank with the blank holder mounted on the right side.

The profile and dimensions of the drawn blank were shown in the Fig. 1, C. The finished plate profile is shown by the dependence of the displacement of the blank on the length of the blank with a loading parameter of 1.0.

The hardening function determines the hardening of the material after exposure to variable loads. It is noted that the material of the blank is subjected to significant hardening from the side of the blank holder. In the bending zone, the degree of hardening of the material is maximum.

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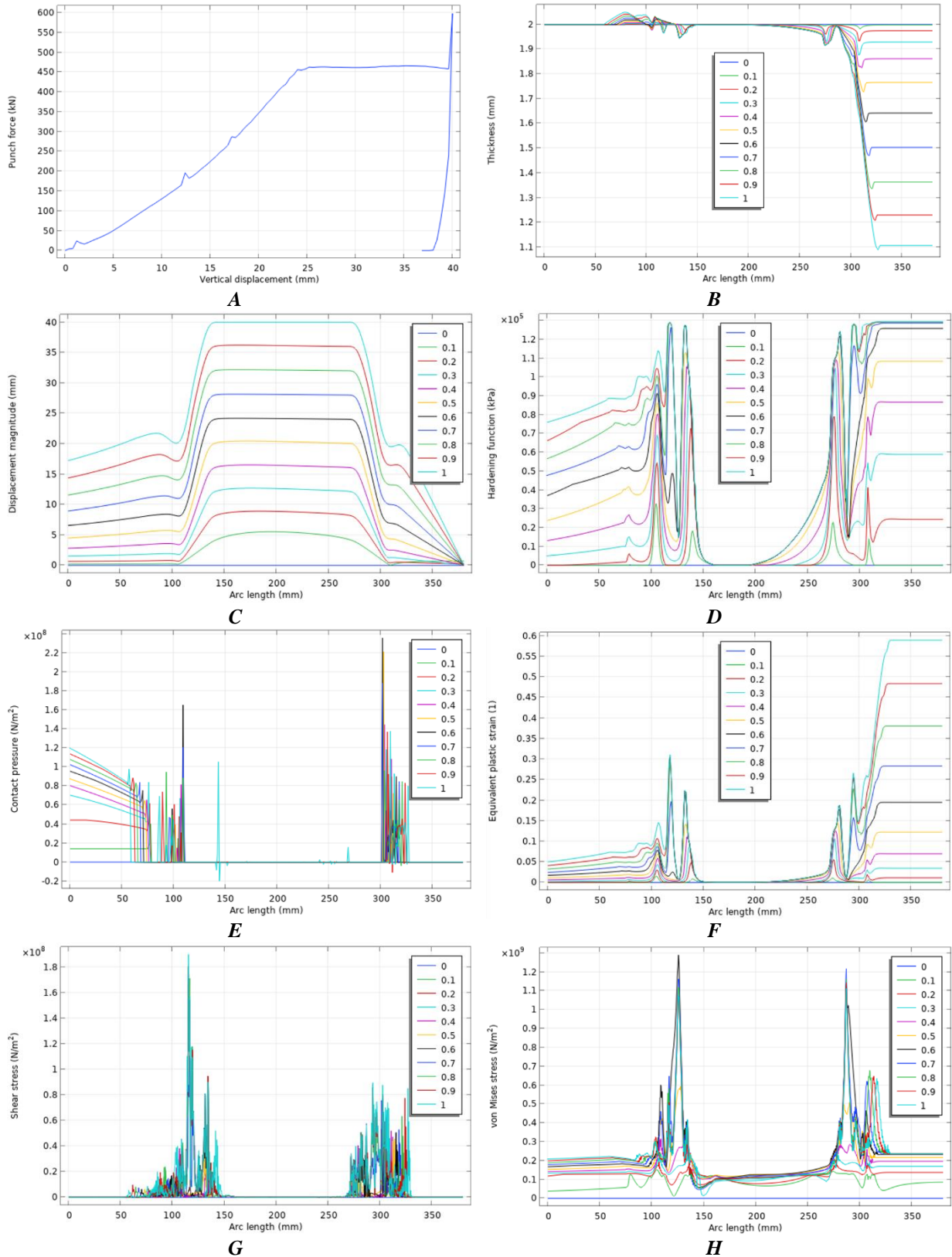


Figure 1. Calculation results: A – the dependence of punch force on vertical displacement; B – the dependence of thickness on length of blank; C – the dependence of displacement on length of blank; D – the dependence of hardening function on length of blank; E – the dependence of contact pressure on length of blank; F – the dependence of equivalent plastic strain on length of blank; G – the dependence of shear stress on length of blank; H – the dependence of von Mises stress on length of blank.

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The contact pressure of the punch on the sheet blank prevails from the side of the blank holder and can reach $2.28 \times 10^8 \text{ N/m}^2$. This pressure occurs at the bends of the sheet blank during the contour formation of the plate. The side walls and bends of the plate are subjected to plastic strain of up to 0.3 (a plastic strain coefficient of 1.0 corresponds to the material destruction). However, clamping the blank flange with the blank holder plastically deforms the material to 0.6 at a loading parameter of 1.0. The nature of shear and equivalent stresses of the material is almost the same. The largest values of these stresses are determined in the bend zone on the side of the blank holder.

Conclusion

Thus, based on the analysis of the state of the plate material during deep drawing of the sheet blank, the following conclusions can be drawn:

1. Due to the small thickness of the blank and the use of the blank holder, the value of the punch force during deep drawing varies in proportion to the volume of material pulled into the die. The completion of the part formation is characterized by the constant value of the punch force from almost the middle of the drawing depth of the blank and a sharp jump in force to the maximum value before the effect of a rigid spring of the material.

2. The change in the thickness of the finished part from the initial thickness of the blank is no more than 5% in the bend area. The thinning of the material can reach up to 50% of the initial thickness of the blank on the side of the blank holder.

3. The greatest values of stresses and strains are also observed in the bend area of the sheet blank material. At the same time, the maximum stresses are calculated on the left side, where the blank holder was not used. The coefficient of plastic strain can reach 0.6 from the side of using the blank holder.

References:

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**PRESSURE DISTRIBUTION CURVES ON THE SURFACES OF THE
IMPELLER BLADES AND THE PERFORMANCE OF THE
CENTRIFUGAL PUMP**

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Abstract: The results of computer calculation of the pressure distribution of the fluid flow on the surfaces of the impeller blades at different rotational speeds of the rotor shaft of a centrifugal pump were presented in the article. It is noted that on the suction face of the impeller blade, the pressure increases at a distance from the inlet to the diffuser. At the back face of the impeller blade, the pressure increases to the middle of the chord length of the element and decreases to the diffuser. At the same time, this effect is not observed at low rotational speeds of the rotor shaft of the centrifugal pump. Also, recommendations are given on the performance of the centrifugal pump in terms of mass flow rates at different rotational speeds of the rotor shaft.

Key words: centrifugal pump, pressure, blade, surface, rotation, mass flow rates.

Language: English

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Introduction

A centrifugal pump is a dynamic vane pump that provides movement of fluid or gas due to a rotating impeller and fixed body blades [1]. One of the main characteristics of the centrifugal pump is its performance, i.e. a certain flow rate of fluid passing through the pump per unit of time [2]. However, various factors, such as local hydraulic resistances, can reduce the performance of the centrifugal pump. This problematic issue is corrected through verification calculations and optimization of the configuration of the centrifugal pump parts [3-10].

Since the rotating impeller is a dynamic element, it is rational to consider the effect of the blade configuration on the performance losses of the centrifugal pump. The impeller consists of several blades of various configurations. The blades may have some curvature, thus these surfaces create local resistances.

The purpose of this study is to analyze the pressure changes on the suction face and back face of some blades and the effect of this change on the loss of performance of the centrifugal pump after computer calculation of the impeller rotation cycle.

Materials and methods

To calculate the pressure distribution on the suction face and back face of the impeller blade and the overall performance of the centrifugal pump, a solid-state model of it was built in a special engineering analysis program. The design of the centrifugal pump model was performed based on the following parameters: blade angle in – 1.5708 rad, blade angle out – 0.17453 rad, angle of the inside blade plate – 0 rad, angle of outside blade plate – 1.3963 rad, difference between angles – 1.3963 rad, maximum angle of the blade plane – 1.3963 rad, segment angle – 0.69813 rad, blade height – 0.02 m, radial chord – 0.05 m, chord – 0.06527 m, inner diameter – 0.04 m, impeller diameter – 0.10597 m, expansion rate of the outlet channel – 1, spiral exponential – 0.045, distance control parameter

between plate and spiral and rotating domain construction – 0.005 m, inlet channel diameter – 0.035 m, number of blades – 7, plate thickness – 0.004 m, construction radius – 0.050771 m, shaft diameter – 0.02 m, distance between volute and plate from the bottom – 0.003 m, blade thickness – 0.002 m, upper clearance – 0.0015 m, volute height – 0.0285 m and reference temperature – 293.15 K. The variable parameter of the centrifugal pump was the rotational speed of the rotor shaft in the values of 500, 1000, 2000 and 3000 rpm. The fluid flow moved in the centrifugal pump body in accordance with the $k-\omega$ turbulence model. The computer simulation was carried out by the PARDISO solver.

Results and discussion

The change in the calculated pressure values on the surfaces of the impeller blades at a rotor shaft rotation speed of 500, 1000, 2000 and 3000 rpm was presented in the Figs. 1-3. The surfaces of the suction and back of some impeller blades of the centrifugal pump were considered. Each figure is divided into two parts by a thin solid vertical line. In each part, the configuration of the centrifugal pump model on a plane is demonstrated and the surfaces of the impeller blades are highlighted, according to which changes in fluid pressure were determined. When the impeller blade is close to the outlet of the centrifugal pump (the Fig. 1) on the suction face of the blade, the pressure increases in the direction from the inlet to the diffuser cavity at speeds of rotation of the rotor shaft of 1000-3000 rpm. From the side of the suction face of the blade, there is a slight increase in pressure at a distance of half the chord length, and towards the diffuser cavity there is a slight decrease in pressure at the same rotational speeds of the rotor shaft of the centrifugal pump. It is noted that in the case of the suction face of the blade, the effective pressure has only negative values, and in the case of the back face of the blade, the effective pressure has both negative and positive values.

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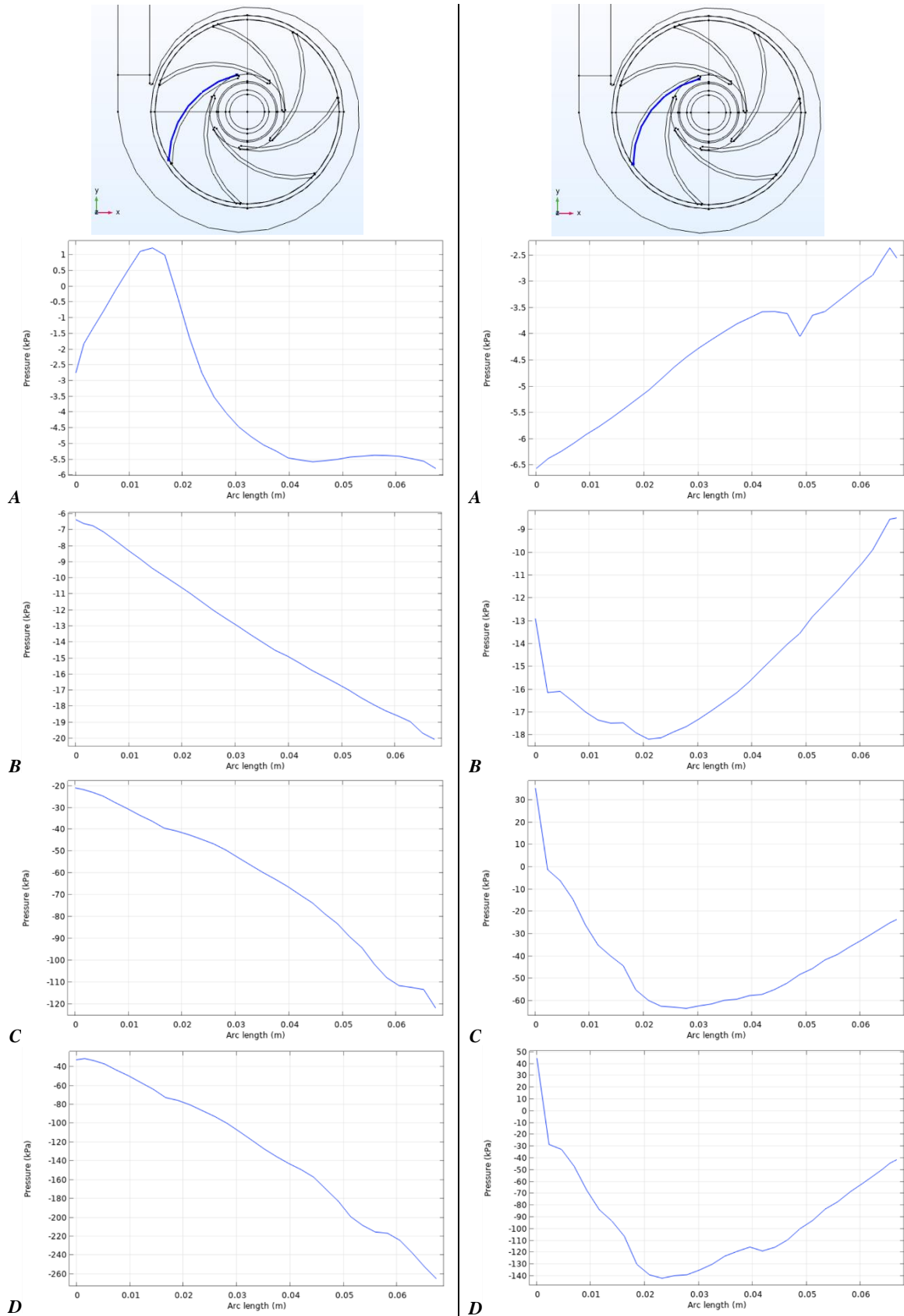


Figure 1. Calculated pressures on the surfaces of the impeller blade of the centrifugal pump: *A* – the shaft rotation speed is 500 rpm; *B* – the shaft rotation speed is 1000 rpm; *C* – the shaft rotation speed is 2000 rpm; *D* – the shaft rotation speed is 3000 rpm.

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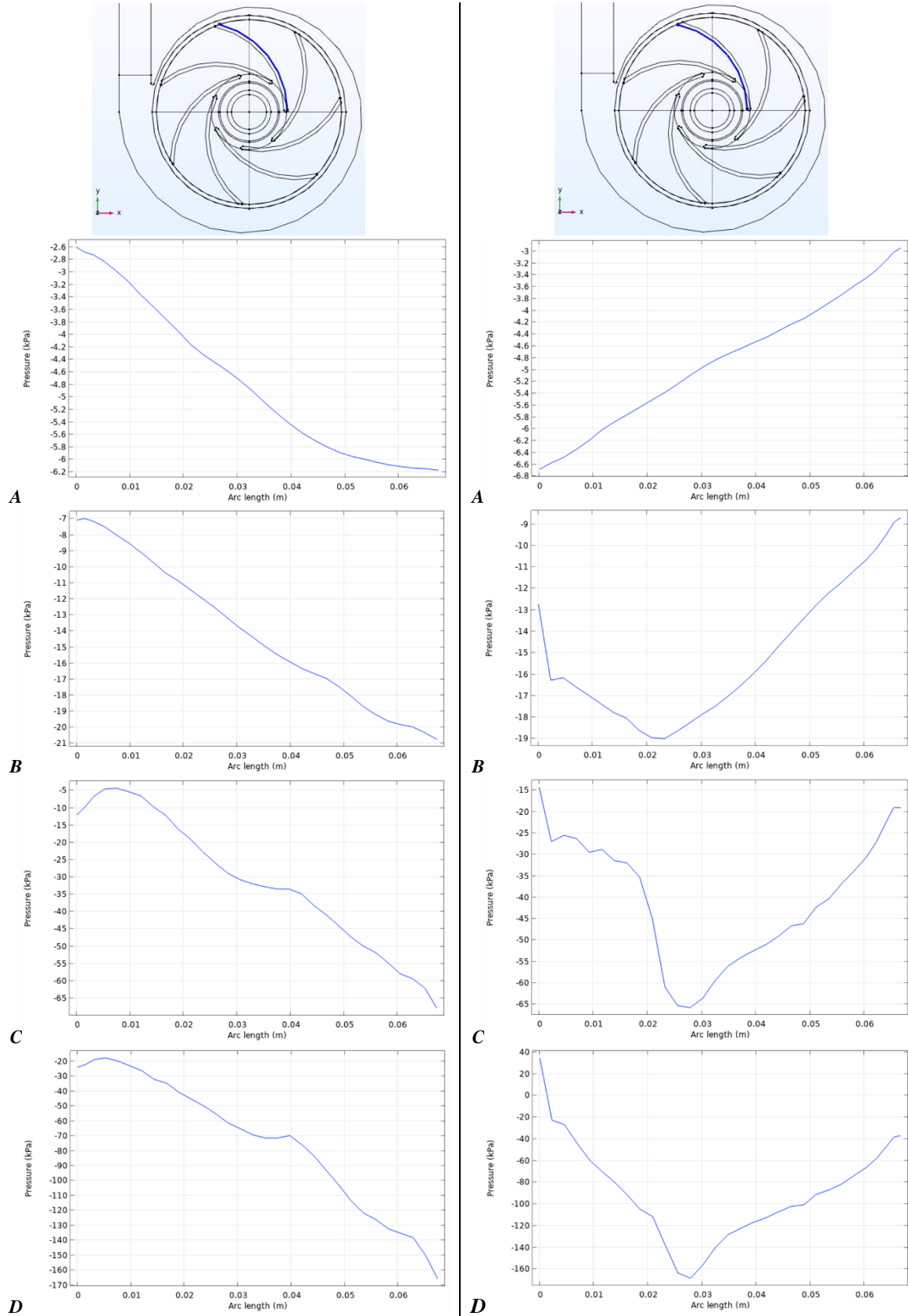


Figure 2. Calculated pressures on the surfaces of the impeller blade of the centrifugal pump: A – the shaft rotation speed is 500 rpm; B – the shaft rotation speed is 1000 rpm; C – the shaft rotation speed is 2000 rpm; D – the shaft rotation speed is 3000 rpm.

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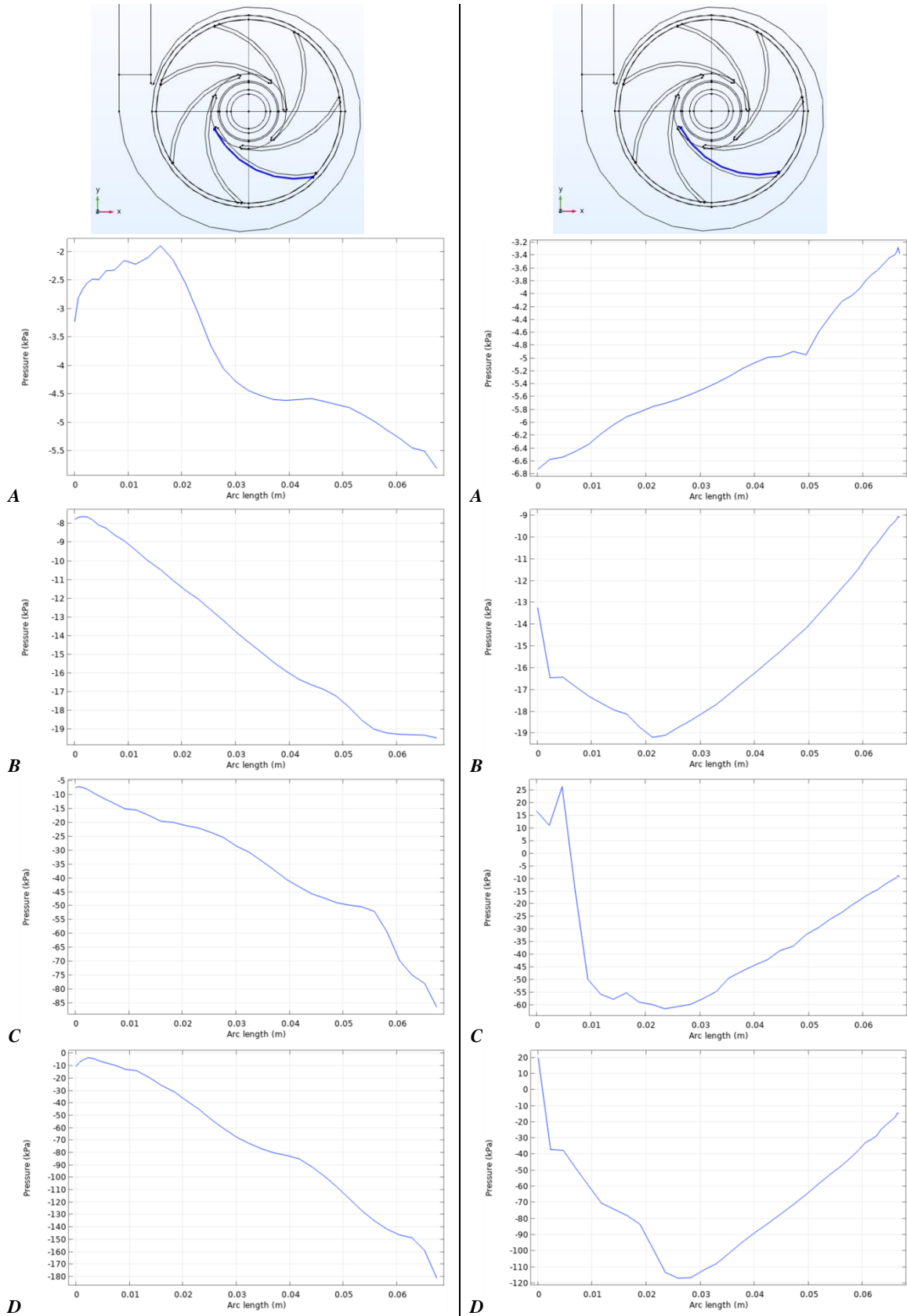


Figure 3. Calculated pressures on the surfaces of the impeller blade of the centrifugal pump: **A** – the shaft rotation speed is 500 rpm; **B** – the shaft rotation speed is 1000 rpm; **C** – the shaft rotation speed is 2000 rpm; **D** – the shaft rotation speed is 3000 rpm.

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At a rotation speed of the rotor shaft of 500 rpm, a positive pressure acts on a certain surface area of the suction of the blade, and on the surface of the back of the blade, the pressure decreases in the direction from the inlet to the diffuser cavity. The greatest pressure acts on the suction face of the impeller blade of the centrifugal pump.

The pressure change on the suction face of the blade, shown in the Fig. 2, is characterized by a constant increase in pressure values for the considered direction. The pressure change on the back face of the blade is almost similar to the dependencies in the Fig. 1. The calculated pressure values are shown in the corresponding dependency graphs.

The pressure changes on the suction and back faces of the impeller blade shown in the Fig. 3 have the same descriptions as for the Fig. 1. The calculated

pressure values are shown in the corresponding dependency graphs.

The performance of the centrifugal pump is represented by a change in the input and output mass flow rates of fluid in the Fig. 4. A decrease in the performance of the centrifugal pump is observed in the case of the rotor shaft rotation speed of 500 and 1000 rpm. This is expressed in a decrease in mass flow rates at the inlet and outlet of the centrifugal pump, depending on the number of iterations of the computer calculation. The values of the input and output mass flow rates are the same. The higher performance of the centrifugal pump is calculated at a rotational speed of the rotor shaft of 2000 and 3000 rpm. However, deviations in the values of the input and output mass flow rates of the centrifugal pump were noted at 210 and 230 iterations of the calculation at a rotational speed of the rotor shaft of 2000 rpm.

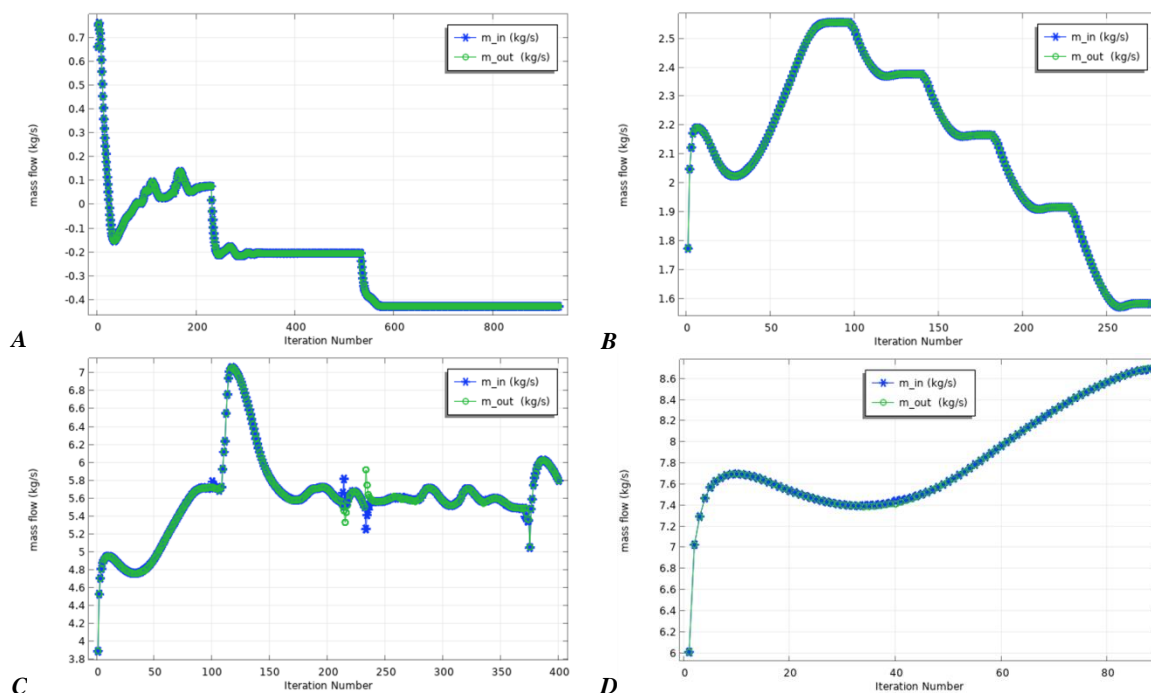


Figure 4. Dependences of input and output mass flow rates on the number of iterations: *A* – the shaft rotation speed is 500 rpm; *B* – the shaft rotation speed is 1000 rpm; *C* – the shaft rotation speed is 2000 rpm; *D* – the shaft rotation speed is 3000 rpm.

Conclusion

Thus, at all considered rotational speeds of the rotor shaft of the centrifugal pump, an increase in the pressure of the fluid flow from the inlet to the diffuser cavity is observed on the suction face of the impeller blade. At the same time, the maximum pressure of -260 kPa acts on the suction face of the blade, which is closest to the outlet, when the impeller rotates at a

frequency of 2000 rpm. However, on the back face of the impeller blades, the pressure increases to the middle of the chord length of the element, and then decreases. When the rotor shaft rotates at 500 rpm, the pressure on the back face decreases in the direction of the diffuser cavity. The centrifugal pump has the highest performance at a rotor shaft rotation speed of over 2000 rpm.

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Article



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RESEARCH ON AWARENESS OF TRADITIONAL GEORGIAN CLOTHING

Abstract: The article reviews the results of the social survey of the population whose goal was to identify the Georgian traditional clothing and its characteristics to use ethno elements in modern costumes. The results of the sociological survey have shown that Traditional Gurian clothing are the most popular moths, and the least recognizable and almost forgotten traditional Rachian clothing.

As a result of the survey, the respondents' opinion about the advantages of specific clothing and use of ethnic elements in their wardrobe. The results of the research will be important for the designer using modern elements in the planning of modern clothing.

Key words: national clothes, tradition, sociological research, respondent, planning.

Language: English

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Introduction

Georgian traditional clothing serves as a priceless reminder of the nation's rich artistic and material legacy. It serves as a sort of mirror of spiritual culture, reflecting the nation's identity, high aesthetic standards, and artistic taste [1, p.11]. The traditional costume has garnered significant attention in the fashion industry and clothing design, reflecting the rich history of clothes. The examination of contemporary fashion trends revealed that designers' resourcefulness peaked with ensembles that incorporated aspects of traditional clothing [2; 3]. The diversity of shapes and styles of traditional Georgian clothing, the peculiarity of structural-compositional solutions, the delicate nature of the décor, and particularly the embroidery is an undeniably impressive material and an endless source of inspiration for creative thought [4, p. 215;5, ; 6, p. 53].

A sociological survey of the population was carried out using ethno-elements to gather crucial information for the design of contemporary clothing. The aim of the survey was to find out how familiar the general public was with traditional costumes and what qualities set them apart. Lastly, based on the results of the analysis, choosing which ethno-element of traditional clothing to revive in order to preserve it, and which feature to emphasize are all important decisions to make because each ethno-complex is a unique source of inspiration for the modeler's creative work [7, p.47; 8, p. 368; 9.].

Six questions plus a graphic appendix made up the questionnaire that was created in order to do a sociological survey of the population as a whole [10.].

It had vibrant photographs depicting traditional ethnic Georgian attire. The survey's goal was to find out how much of the general public was familiar with

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traditional Georgian clothing. Participants in the survey included representatives from a variety of age groups, professions, and geographic areas. The data was simultaneously ranked in multiple dimensions, including career, age, and residential area.

The purpose of the study was to determine the following factors:

- The level of familiarity with clothing among all respondents, in accordance with their age and career;
- The extent to which one is aware of one's own native region's ethnic attire in comparison to other regions' costumes;
- Compositional-constructive characteristics, according to which the respondent appeared to be distinguishing traditional clothing.

The survey's findings showed that the respondents' opinions on the following: the proportion of the area in which they live, their sphere of interest, and age.

Additionally, the preferred classifications for particular complexes have been defined.

The results of the study are recorded on the diagrams accordingly (fig. 1 – 6).

The study was limited to the following ten Georgian regions: Samegrelo, Lechkhumi, Racha, Guria, Svaneti, Adjara, Kartli, Imereti, Kakheti, Meskheta-Javakheti. The percentage of respondents according to the region of residence is shown in fig.1.

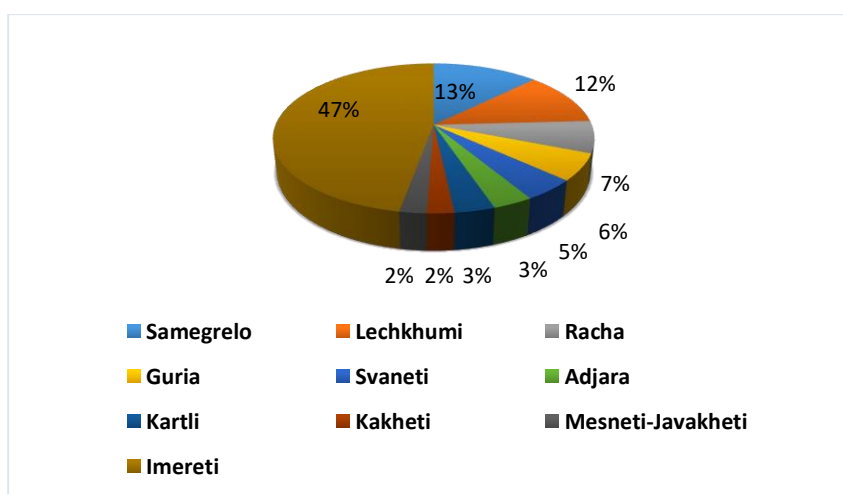


Figure 1. Percentage of Respondents by Residential Area

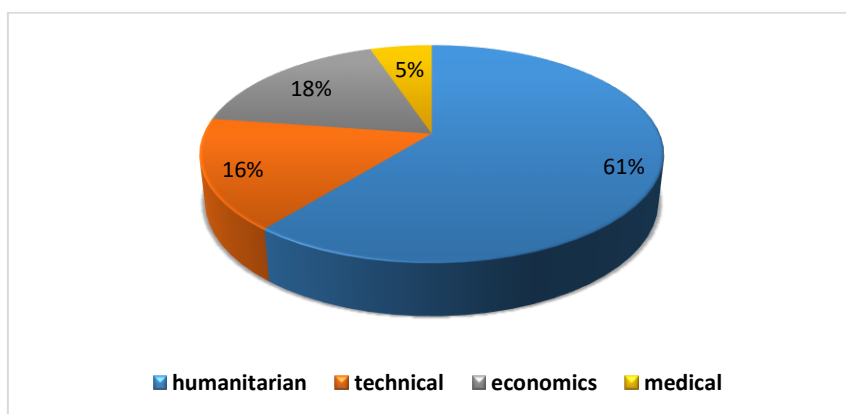


Figure 2. Percentage of Respondents by Career Field

As can be seen from the diagram, a large part of respondents (47%) were selected from Imereti, and the smallest (2%) from Meskheta-Javakheti regions.

Depending on the interests of the research topic, it is important to select the respondents according to their profession. The percentage of respondents according to their career field is given in fig. 2.

As can be observed from the graphic, 60% of the respondents work in the humanitarian field, and the smallest - in the medical sector.

The questionnaire is designed for respondents aged – 30, 40, 50, and over 60 (fig. 3).

Ten percent of the responders are older than sixty, and thirty percent are under thirty. The incorporation of ethnic characteristics into the design

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of contemporary clothing is actively considered by fashion trends.

One of the questions in the questionnaire concerns the issue whether consumers will

incorporate clothes with ethnic elements in their wardrobe displays the percentage of respondents who said they would like to incorporate ethnic characteristics into their wardrobe fig. 4.

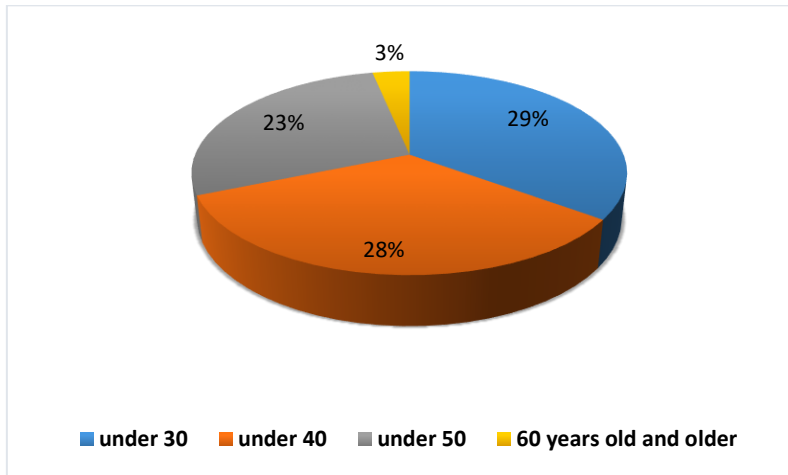


Figure 3. Percentage of Respondents' Age

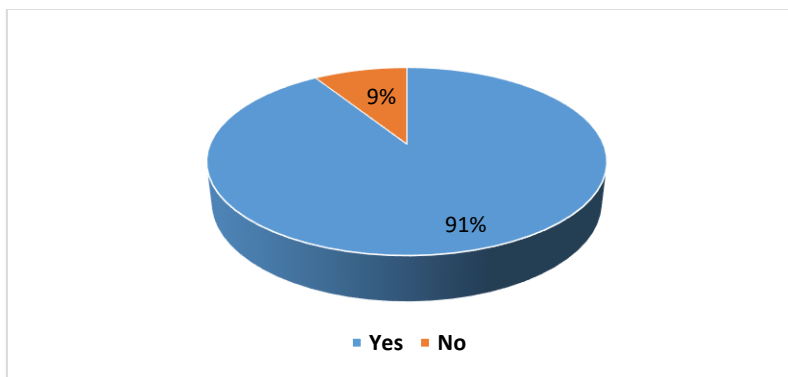


Figure 4. The percentage of respondents according to the use of ethnic elements in the wardrobe

The graphic indicates that 91% of respondents support the inclusion of ethnic components in clothing, demonstrating the acceptance of national dress and its distinctiveness.

As a consequence of the discussion of the colorful visual illustrations of the traditional Georgian ethnic clothing, the degree of familiarity of the costumes of different parts of Georgia was assessed by the respondents (fig. 5).

According to the questionnaire's results, traditional Rachian clothing has the lowest level of recognition (6%), while Gurian clothing has the highest (31%).

A crucial inquiry concerned the compositional structural characteristics of national dress recognition, including the elements of color, décor, silhouette, and structural element (fig. 6).

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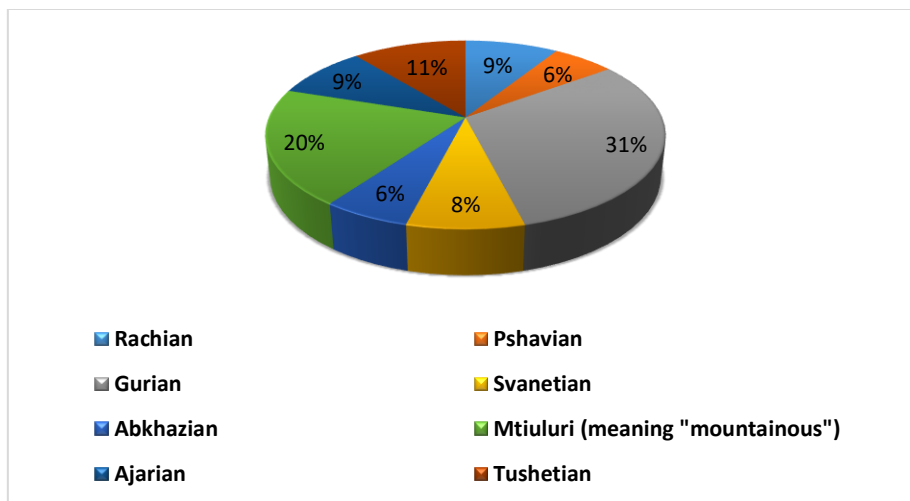


Figure 5. The Percentage of Recognition of the National Dress by the Respondents

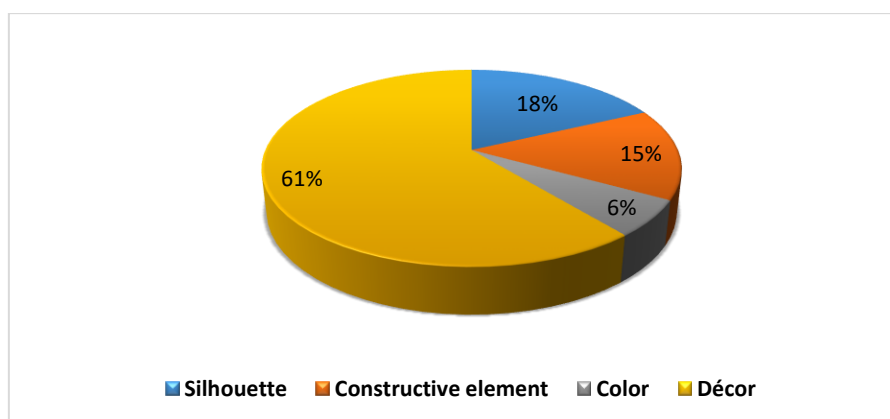


Figure 6. The Percentage of Constructive Compositional Characteristics Determining the Recognition of National Clothes

According to the findings, 61% of people are most observant of the garment's silhouette. Therefore, the following information was found as part of the research on people's awareness of traditional Georgian clothing: Gurian traditional clothing is the most recognizable among traditional Georgian complexes (31%), while traditional Rachian clothing is the least recognizable (6%).

Conclusion

A study of the compositional-constructive characteristics of the recognition of the national dress, namely the dress's silhouette, constructional elements, color, and decor, revealed that a significant portion of respondents (91%) prefer to use a costume with elements of traditional clothing in their wardrobe. The research's findings are significant to designers and will be taken into account when planning modern clothing collections using ethnic elements.

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ON THE ROLE OF LAW IN DETERMINING RELATIONS BETWEEN THE STATE AND THE PERSON

Abstract: The article "On the role of law in determining the relationship between the state and the individual" examines the influence of legal norms on the formation and regulation of relations between the state and individual members of society. The author emphasizes that law is an important tool with which the state formalizes its structure, determines the principles of power and ensures the protection of the rights and interests of citizens. The article analyzes the role of legal norms in shaping the legal status of an individual, ensuring his equality before the law and protecting fundamental civil, political and social rights. In the context of contemporary challenges and trends, the article also discusses how law helps resolve conflicts and strengthen interaction between the state and the individual, creating the basis for a just and sustainable social order.

Key words: law, state, personality, state and law, relationship between state and law, personality status, individual rights.

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О РОЛИ ПРАВА В ОПРЕДЕЛЕНИИ ВЗАИМООТНОШЕНИЙ МЕЖДУ ГОСУДАРСТВОМ И ЛИЧНОСТЬЮ

Аннотация: Статья "О роли права в определении взаимоотношений между государством и личностью" рассматривает влияние правовых норм на формирование и регулирование отношений между государством и индивидуальными членами общества. Автор подчеркивает, что право выступает важным инструментом, с которым государство оформляет свое устройство, определяет принципы власти и обеспечивает защиту прав и интересов граждан. Статья анализирует роль правовых норм в формировании правового статуса личности, обеспечении ее равенства перед законом и защите основных гражданских, политических и социальных прав. В контексте современных вызовов и тенденций статья также обсуждает, как право способствует разрешению конфликтов и укреплению взаимодействия между государством и личностью, создавая основу для справедливого и устойчивого общественного строя.

Ключевые слова: право, государство, личность, государство и право, взаимоотношения между государством и правом, статус личности, права личности.

Введение

Изучение содержания и форм функционирования политической системы требует внимательного рассмотрения не только институциональных структур, но и роли личности в данном контексте.

Анализ политико-правового состояния личности включает в себя оценку ее прав и обязанностей, степень участия в политических процессах, а также взаимодействие с другими участниками политической системы. Важно рассматривать взаимоотношения личности не

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только с государством в целом, но и с отдельными элементами политической системы, такими как политические партии, общественные организации, и другие.

Данное положение позволяет лучше понимать роль индивида в политической динамике, а также выявлять влияние политической системы на правовое состояние личности. Исследование этих взаимосвязей содействует более глубокому анализу демократических процессов, обеспечению гражданских свобод и формированию более эффективных политических практик.

История философии, права и социологии насыщена работами ученых, посвятивших свои труды различным аспектам взаимоотношений между государством и личностью[1]. Философы и правоведы рассматривали вопросы отношений между государством и личностью с разных точек зрения, включая этические, политические, социологические и юридические аспекты[2]. Вопросы чести, достоинства, имущественных прав, авторского права и другие аспекты были подвергнуты глубокому анализу[3].

Исследования в этой области способствуют формированию правовых и социальных стандартов, а также обогащают наше понимание того, каким образом государство и личность взаимодействуют в различных сферах жизни. Понимание этих взаимоотношений играет ключевую роль в формировании законов, правил и норм, которые регулируют современное общество.

Характер взаимосвязи между личностью и государством в контексте общественных отношений тесно связан с общественными нормами, ценностями и структурами[4].

Общество и личность взаимодействуют и воздействуют друг на друга, формируя сложные социальные отношения. Государство, как институт, играет ключевую роль в организации и регулировании этих отношений. Характер власти, система правосудия, политические институты и законы определяют, каким образом личность взаимодействует с государством.

В свою очередь, личность вносит вклад в формирование общественных структур через участие в политической активности, социальных движениях и культурных инициативах[5]. Таким образом, взаимоотношения личности и государства являются динамичными и взаимозависимыми, отражая изменения в обществе и формируя контекст для развития как индивида, так и общества в целом.

Необходимо отметить важность развития теории государства и права для более глубокого понимания взаимоотношений между личностью и государством. Продолжение исследований и совершенствование теоретических концепций

способствуют более точному и обширному освещению данных проблем.

Развитие теории государства и права позволяет углубить анализ ключевых аспектов взаимоотношений между государством и личностью, таких как законодательство, правопорядок, права и обязанности граждан. Теоретические рамки служат основой для формулирования правовых норм, политик и реформ, которые ориентированы на более эффективное сближение интересов государства и индивида[6].

Совершенствование теорий также помогает учитывать социокультурные изменения, технологический прогресс и другие факторы, влияющие на динамику отношений между личностью и государством. Такой подход обеспечивает актуальность и применимость теоретических концепций в современном обществе, способствуя разработке более сбалансированных и справедливых правовых основ[7].

Данное утверждение акцентирует внимание на том, как теоретико-методологическое исследование способствует глубокому пониманию политико-правового состояния личности в государстве. Анализ взаимоотношений между личностью и государством рассматривается как система, состоящая из множества юридических, социально-политических, экономических и нравственных связей.

Исследование теоретико-методологических проблем позволяет выявлять общие закономерности и принципы в этих взаимоотношениях, а также определять особенности и влияние каждого аспекта. Особое внимание уделяется правовым аспектам в широком контексте, учитывая их взаимосвязь с социальными, политическими, экономическими и нравственными факторами. Что позволяет строить комплексное представление о политико-правовом состоянии личности, обеспечивая глубокий анализ и оценку воздействия правовых норм на социальную и политическую динамику в государстве[8]. Подобные исследования имеют важное значение для формирования современных правовых концепций и разработки эффективных стратегий управления обществом.

Законы и подзаконные акты, как основные элементы правовой системы, действительно представляют собой формализованный выразитель государственной воли. Они устанавливают нормы, права и обязанности, регулируя поведение граждан, институтов и органов власти.

Государственная воля, заключенная в нормах правовых актов, служит основой для поддержания порядка, обеспечения справедливости и защиты

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прав и свобод граждан. Процесс разработки, принятия и исполнения законов является одним из ключевых элементов функционирования правового государства, который обеспечивает стабильность и предсказуемость в правовой системе, а также устанавливает рамки для развития общества и государства. Государственная воля, закодированная в законах, направлена на установление равенства, справедливости и обеспечение общественного благосостояния.

Следует подчеркнуть, что важность права и законности в обществе выделяется в юридической литературе с учетом трех основных аспектов:

1) Обеспечение порядка и стабильности: Право и законность служат основой для установления и поддержания общественного порядка. Нормы законов регулируют поведение граждан, институтов и органов власти, предоставляя структурированный и предсказуемый каркас для функционирования общества. Это создает условия для стабильности и предсказуемости в повседневной жизни.

2) Защита прав и свобод граждан: Право и законность призваны обеспечивать защиту прав и свобод индивидов. Нормы права определяют рамки допустимого поведения и предоставляют механизмы защиты в случае нарушения этих прав[9]. Этот аспект подчеркивает роль правовой системы в обеспечении справедливости и равенства перед законом.

3) Легитимность власти: Право и законность играют ключевую роль в обеспечении легитимности власти. Законы устанавливают правила для избирательных процессов, деятельности органов власти и ограничивают их полномочия. Это придает власти законный характер, что важно для поддержания доверия общества к правительству.

Представляется, что рост значения права и законности в жизни общества олицетворяет собой обеспечение порядка, защиту прав граждан и легитимность власти, создавая основы для устойчивого и справедливого общественного устройства. При этом, следует отметить первый аспект, связанный с экономической стороной роста значения права и законности в обществе. Экономическое развитие, особенно в условиях увеличения масштабов и сложности общественного производства, требует четкой правовой регламентации в сферах производства, распределения и обмена.

Через законы и нормативные акты государство создает правила игры для предпринимателей и обеспечивает рамки для нормального функционирования экономической системы. Это включает в себя регулирование контрактных отношений, права собственности, налогообложение, защиту инвестиций и другие

аспекты, необходимые для поддержания стабильного экономического развития.

Государственная дисциплина и обеспечение предпринимательской деятельности становятся важными элементами в этом контексте. Четкое соблюдение законов обеспечивает справедливые конкурентные условия, защиту прав и интересов бизнеса, а также создает благоприятное окружение для экономического роста и инноваций.

Второй аспект связан с политической стороной возрастания роли права в обществе. Это направление обусловлено процессом совершенствования демократии, который требует строгого соблюдения законности и поддержания правопорядка[10].

В демократическом обществе уважение к правам и свободам граждан, а также соблюдение принципов законности являются неотъемлемой частью демократических ценностей. Законы служат гарантом защиты прав граждан и обеспечивают равенство перед законом. Прозрачность законодательного процесса и уважение к конституционным принципам создают основу для функционирования демократического строя.

Строгое соблюдение правопорядка также является фундаментальным аспектом демократии. Это включает в себя соблюдение законов, поддержание порядка и обеспечение безопасности граждан. Эффективная правовая система способствует стабильности политического процесса и обеспечивает основы для развития демократических институтов. Поэтому, второй аспект подчеркивает важность права в обеспечении демократических принципов и обеспечении справедливости и порядка в политической сфере.

Третий аспект связан с идеологической стороной возрастания значения права в обществе. Этот аспект определяется повышением уровня правосознания и правовой культуры членов общества. Идеологический аспект включает в себя изменения в отношении к праву со стороны общества. Рост правосознания предполагает, что граждане лучше осознают свои права и обязанности, а также осознают важность соблюдения законов для поддержания порядка и справедливости.

Повышение уровня правовой культуры означает, что общество становится более осведомленным о правовых нормах и инструментах, а также более готовым использовать правовые механизмы для защиты своих интересов. Это также способствует уважению к правам других граждан и общему соблюдению законов. Такой идеологический сдвиг в сторону повышенного уважения к праву и соблюдению законов обогащает общественный

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диалог и создает благоприятные условия для развития гражданского общества.

Следует выделить ключевую роль права в организации и регулировании деятельности государства. Но, более того, право также выполняет важную функцию в охране и гарантировании стабильности и неизбежности общественных отношений, а также в укреплении взаимоотношений между государством и личностью в различных сферах жизни. В частности, выделяются следующие направления:

- Охрана и гарантирование стабильности: Правовая система служит фундаментом для устойчивого функционирования общественных отношений. Законы и нормы создают структуру, в пределах которой устанавливается порядок и предсказуемость. Это способствует стабильности в экономической, политической, социальной и культурной сферах.

- Взаимоотношения государства и личности: Право определяет рамки взаимоотношений между государством и личностью, гарантируя защиту прав и свобод граждан. Это включает в себя обеспечение справедливости, равенства перед законом, защиту частной собственности и другие аспекты, которые формируют основы гражданского общества.

- Преодоление отчуждения личности от средств производства: Правовые нормы могут способствовать преодолению отчуждения личности от средств производства путем установления справедливых правил в сфере экономики и труда, обеспечивая равные возможности и защиту интересов работников.

Таким образом, право не только закрепляет организацию государства, но и является инструментом для создания справедливого, стабильного общества, где права и интересы личности защищены и уважаемы.

Подчеркивается, что право играет важную роль в определении и закреплении фундаментальных правовых основ функционирования власти и других ключевых аспектов общественной жизни[11]. Данное утверждение можно разделить на несколько пунктов:

► *Определение правовых основ функционирования власти:* Правовая система устанавливает основы для деятельности

государственных органов, определяя принципы и правила, которые регулируют их функционирование. Это включает в себя законы, конституции и другие нормативные акты, которые устанавливают правовые основы для действий власти.

► *Рациональные формы осуществления власти:* Право также определяет наиболее рациональные формы осуществления власти, устанавливая принципы разделения властей, систему checks and balances (взаимного контроля) и другие механизмы, направленные на предотвращение злоупотреблений и обеспечение эффективного функционирования системы.

► *Компетенция государственных органов и их отношения:* Право определяет полномочия государственных органов, их компетенцию и взаимоотношения между собой. Это обеспечивает ясность и стабильность в работе органов власти, а также устанавливает правила для разрешения конфликтов между ними.

► *Принципы внутренней и внешней политики:* Право формулирует принципы внутренней и внешней политики государства. Это включает в себя нормы, регулирующие внутренние дела, взаимоотношения с другими государствами, а также принципы, на которых строится мирное соседство и взаимодействие в мировом сообществе.

► *Правовой статус личности:* Право определяет правовой статус личности, защищая ее права и свободы. Это включает в себя гражданские, политические, социальные и экономические права, а также обязанности граждан. Право также устанавливает механизмы защиты прав личности через судебные и административные процедуры.

Таким образом, право является ключевым инструментом, оказывает глубокое воздействие на структуру и функционирование государства, воздвигая прочные правовые основы для организации власти и регулирования общественных отношений. Оно является фундаментом, на котором строится государственная система, определяя формы власти, компетенцию органов, их взаимодействие между собой и с гражданами.

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Article



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ON THE ISSUE OF POLITICAL AND LEGAL PERSONAL CONDITION

Abstract: This article represents an in-depth analysis of the current problem of the political and legal position of man in modern society. The author examines issues of interaction between the individual and the state, society and other subjects of the political system. Particular attention is paid to the generality of the concept of "person" in the constitutional context and its central role in the formation of various rights and obligations. The article highlights a humanistic and democratic approach to the consideration of personality, emphasizing the uniqueness of each individual and his influence on political processes. She also states the need for internal logical differentiation between the terms "legal status" and "legal status", based on the multidimensional understanding of "personality" in politics. The theoretical significance of the study of the political and legal state of the individual is noted, attention is drawn to methodological approaches and various areas of research. In general, the article presents a comprehensive view of the problem, combining theoretical, philosophical and legal approaches for a more complete understanding of the role of the individual in the political system.

Key words: personality, subject, individual, legal status of the individual, rights and obligations, legal status, political and legal status.

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К ВОПРОСУ О ПОЛИТИКО-ПРАВОВОМ СОСТОЯНИИ ЛИЧНОСТИ

Аннотация: Данная статья представляет собой анализ актуальной проблемы политико-правового положения человека в современном обществе. Автор рассматривает вопросы взаимодействия личности с государством, обществом и другими субъектами политической системы. Особое внимание уделяется обобщенности понятия "личность" в конституционном контексте и ее центральной роли в формировании различных прав и обязанностей. Статья выделяет гуманистический и демократический подход к рассмотрению личности, подчеркивая уникальность каждого индивида и его влияние на политические процессы. Она также заявляет о необходимости внутренней логической дифференциации между терминами "правовое положение" и "правовой статус", основываясь на разноаспектном понимании "личности" в политике. Отмечается теоретическая значимость исследования политико-правового состояния личности, обращается внимание на методологические подходы и различные направления исследований. В целом, статья представляет собой комплексный взгляд на проблему, совмещающая теоретические, философские и правоведческие подходы для более полного понимания роли личности в политической системе.

Ключевые слова: личность, субъект, индивид, правовое положение личности, права и обязанности, правовой статус, политико-правовое состояние.

Введение

Политико-правовое состояние личности

отражает ее отношение к политической системе, законам, нормам и ценностям общества. Это

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включает в себя ее политические убеждения, участие в общественной жизни, соблюдение законов и др. Общественное положение личности, в свою очередь, определяется множеством факторов, таких как социальный статус, образование, экономическое положение, этническая принадлежность и т.д.

Форма и содержание этих аспектов взаимодействуют друг с другом. Например, образование и социальный статус могут влиять на политические взгляды личности, а политические убеждения могут повлиять на ее деятельность в обществе. Поэтому, политико-правовое состояние личности и ее общественное положение формируют взаимосвязанный комплекс через взаимодействие различных аспектов ее жизни.

Следует подчеркнуть сложность и многогранность влияния общественного положения личности на ее политико-правовое состояние, а также обратно. Действительно, общественное положение личности представляет собой сложный набор факторов, охватывающих экономические, политические, социальные и культурные аспекты ее жизни.

Экономическое положение определяет доступ к ресурсам, уровень благосостояния и социальное положение. Политические взгляды и активность личности формируются в ответ на политические идеи, структуры и процессы в обществе. Социальные и культурные аспекты включают в себя социальные связи, культурные ценности и образ жизни. Все эти элементы взаимодействуют, формируя общественное положение личности.

Политико-правовое состояние личности, в свою очередь, является юридической формой выражения ее взаимоотношений с государством. Это включает в себя правовой статус личности, ее права и обязанности, а также взаимодействие с политическим и правовым устройством государства. Отношения между личностью и государством определяются политико-правовыми факторами, влияющими на ее правовой статус и взаимодействие с институтами власти[1].

Исследование политико-правового состояния личности с позиции науки общей теории государства и права предполагает взаимодействие с отраслевыми науками, такими как конституционное право, правовая социология, политология и др. [2] Одновременно оно должно обладать своей собственной общетеоретической базой, которая позволяет абстрагироваться от конкретных отраслевых аспектов и рассматривать политико-правовое состояние личности в общем плане.

1)Интеграция с отраслевыми науками: Исследование должно включать в себя анализ положений и выводов, сформулированных в рамках специальных отраслевых наук, таких как

конституционное право, правовая социология, политология и др. Взаимодействие с этими дисциплинами позволяет углубить понимание конкретных аспектов политико-правового состояния личности.

2)Общетеоретическая база: Исследование должно обладать собственной общетеоретической базой, которая позволяет рассматривать политико-правовое состояние личности в контексте более широких общественных и правовых процессов. Это включает в себя использование общетеоретических концепций, принципов и методов, таких как понятие правосознания, правовой культуры, правового государства и т.д. [3]

3)Абстрагирование и обобщение: Исследование должно быть способным абстрагироваться от конкретных случаев и обобщать полученные результаты, что позволяет формировать общие теоретические принципы, описывающие политико-правовое состояние личности.

Такой комплексный подход обеспечивает более глубокое и всестороннее понимание взаимосвязей между политико-правовым состоянием личности и общей теорией государства и права.

Необходимо отметить, что личность в контексте политики включает в себя различные аспекты, охватывающие как индивидуальные, так и социальные характеристики человека[4]. К ключевым аспектам относятся:

– *Индивидуальные качества*: Это включает в себя уникальные черты личности, такие как характер, ценности, убеждения и психофизические особенности. Эти качества формируют ценностные политические ориентации и определяют политическое поведение личности.

– *Социальная принадлежность*: Личность представляет собой не только индивида, но и члена определенной социальной группы. Это может быть связано с классовой, этнической, профессиональной, конфессиональной или демографической принадлежностью. Социальная принадлежность влияет на политические ориентации и предпочтения личности.

– *Социально-политический статус*: Личность обладает определенным социально-политическим статусом, который может быть выражен в ее роли как гражданина, сотрудника, члена организации и т.д. Этот статус определяет положение личности в политических отношениях и ее влияние на политические процессы.

– *Активность и влияние*: Личность рассматривается как первичный субъект политики, обладающий возможностью и степенью влияния на политические процессы. Это подчеркивает активное участие личности в

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политической жизни общества и ее способность оказывать влияние на политическую власть.

Такой комплексный взгляд на личность в политике позволяет лучше понять ее роль и влияние в политическом пространстве, а также учесть множество факторов, формирующих политическую идентичность индивида[5].

Многие ученые в области философии, права и социологии рассматривают категорию "личность" как многоаспектное понятие, поддающееся исследованию в различных гуманитарных науках[6]. Это отражает понимание сложности и многогранности личности в контексте современного общества. Вот несколько ключевых аспектов этой точки зрения:

•*Многоаспектность личности:* Личность рассматривается как комплексное явление, включающее в себя различные стороны, такие как индивидуальные характеристики, социальные роли, культурные особенности, этические убеждения и другие аспекты, которые могут быть изучены разными гуманитарными науками.

•*Единое понимание личности:* В соответствии с этой точкой зрения каждый человек признается личностью, что означает признание уникальности каждого индивида и его права на признание как субъекта прав и обязанностей.

•*Мнение современных философов, юристов и социологов:* Многие современные мыслители в различных областях, включая философию, юриспруденцию и социологию, высказывают сходное мнение относительно признания каждого человека как личности. Это поддерживается в рамках современных прав и утверждается в международных нормативных актах, где признается неделимое достоинство и права каждого человека.

Этот подход способствует более глубокому пониманию и уважению индивидуальности, признанию прав и свобод каждого человека в контексте современного общества[7].

Позиция, согласно которой каждый человек признается личностью, исходя из его уникальности и неотъемлемых прав, можно рассматривать как последовательно гуманистическую и подлинно демократическую. Вот почему:

1. Гуманистический подход: Подчеркивание уникальности и ценности каждого индивида соответствует гуманистическому видению, в рамках которого акцент делается на человеческом достоинстве, свободе и самореализации[8]. Гуманистическая парадигма предполагает признание неотъемлемой ценности каждого человека.

2. Демократические принципы: Идея, что каждый человек является личностью, соответствует основным принципам демократии,

включая равенство, уважение прав человека и признание его свободы и ответственности. В демократическом обществе принимается участие каждого гражданина в политической жизни, а их права и свободы защищаются законом.

3. Научная плодотворность: Такая позиция также может быть научно плодотворной, поскольку она способствует развитию исследований в области социологии, права, философии и других гуманитарных наук. Исследования, основанные на уважении к личности, могут привести к более глубокому пониманию социальных процессов и улучшению правовых норм и политических институтов.

Обозначенная гуманистическая и демократическая позиция способствует созданию общества, основанного на уважении к каждому индивиду, и может служить основой для развития более этических и справедливых общественных отношений.

По смыслу Конституции Кыргызской Республики[9], личность рассматривается как член общества и носитель личного индивидуального начала. Это означает, что личность рассматривается с учетом ее социальной принадлежности и индивидуальных характеристик. Подчеркивается, что в рамках правовой системы каждый человек признается субъектом права. Это означает, что у человека есть определенные права и обязанности, признаваемые и защищаемые законом.

Личность, как субъект конституционных отношений, выступает в различных качествах. Это может включать в себя роль гражданина, носителя прав и свобод, а также участника конституционных процессов. Отмечается, что главное в конституционном понятии "личность" — это ее социальная ценность. Это подчеркивает важность учета личности в контексте общественных отношений, признание ее прав и свобод как фундаментальных социальных ценностей. Личность, будучи субъектом конституционных отношений, обладает различными правами, свободами и обязанностями. Это может включать в себя права на жизнь, свободу, равенство, участие в управлении, собственность и др.

Данная позиция к пониманию личности в конституционном контексте подчеркивает ее центральное место в обществе и важность защиты ее прав и свобод в рамках конституционных принципов[10]. Следует отметить обобщенность и высокий уровень абстракции понятия "личность" в Конституции, которое может быть представлено как:

а) Обобщенность и универсальность: Понятие "личность" действительно представляет собой обобщенную категорию, которая охватывает разнообразие человеческих

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индивидуумов. Это позволяет Конституции быть универсальным документом, применимым к различным категориям людей независимо от их социального, культурного или экономического статуса.

б) Правовое положение и защита прав: Подразумевается, что понятие "личность" в Конституции не только описывает человека как индивида, но также закрепляет и защищает его правовое положение. Защита прав и законных интересов личности становится одной из важнейших задач конституционного права[11].

в) Широкое применение в научных дисциплинах: Такой подход характерен не только для отраслевых юридических наук, но и для науки теории государства и права, подчеркивает универсальность и распространенность этого понятия в рамках различных юридических дисциплин.

г) Значение в защите прав и свобод: Подчеркивается, что уровень абстракции понятия "личность" в Конституции не делает его менее важным. Напротив, такой широкий обхват дает возможность эффективной защиты основных прав и свобод каждого человека, что является ключевым элементом конституционной системы.

Проблема личности и ее взаимоотношений с государством, другими субъектами политической системы и обществом в целом является важным объектом исследования в рамках правоведения и теории государства и права[12]. Несколько ключевых аспектов подчеркивают актуальность и перспективность этой проблематики:

► Правовые гарантии личности: Исследование взаимоотношений личности с государством помогает выявить и анализировать правовые гарантии личности, включая защиту прав и свобод граждан. Это крайне важно для обеспечения справедливости и правового равенства в обществе.

► Участие личности в политической системе: Анализ взаимодействия личности с политической

системой позволяет понять уровень ее участия в принятии решений, выборе представителей, а также в формировании общественного мнения. Это связано с вопросами гражданской активности и демократии.

► Этические и культурные аспекты личности: Изучение личности в правовом контексте также требует внимания к этическим и культурным аспектам. Различные культурные, этнические и религиозные группы могут иметь разные представления о правах и обязанностях личности.

► Новые технологии и человеческие права: С развитием технологий встают вопросы обеспечения конфиденциальности и защиты личности в цифровом пространстве. Это стало важной областью исследований в свете современных вызовов и возможностей.

► Развитие концепции человеческих прав: Взаимоотношения личности с государством и обществом также связаны с развитием и совершенствованием концепции человеческих прав. Это включает в себя борьбу за права и свободы, в том числе в контексте изменяющейся социокультурной динамики.

Таким образом, исследование взаимоотношений личности с государством и политической системой представляет собой актуальное направление в правоведении, которое требует учета разнообразных аспектов, включая правовые, этические, культурные и технологические. Изучение политико-правового состояния личности должно быть основано на общетеоретической базе, взаимодействуя с отраслевыми науками. Разноаспектное понятие "личность" в политике включает в себя индивидуальные, социальные, биологические, психофизические и духовные качества человека, выражаясь в его ценностных политических ориентациях и поведении.

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Article



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GREAT POWER COMPETITION AND MULTIPOLARITY IN FLUX

Abstract: The fact that certain military conflicts are present and peace is gradually threatened is part of our reality mostly since February 2022. This article aims to observe the cycle of the recent political trajectories and analyze the macro perspective of the ongoing political uncertainties. Furthermore, it can be argued that this process must be discussed in a complex way as far as it is much more than first meets the eye. Thus, it will be accurately emphasized how the current international system can be characterized or defined with its clear orientation. The power projection together with existing severe security issues worldwide is what matters for this discussion. Explaining things requires addressing certain theories that are expected to make better sense of reality. That is the reason why realism is addressed as a theoretical frame. What is power? What does the strongest state's lifecycle depend on? How to understand that once a unipolar anarchical international system becomes multipolar with its growing political and economic challenges? Under the anarchical international system where destructive weapons exist; stability becomes a top priority. However, we should take into consideration that not all states have the same values and actors perceive each other differently. Therefore, multipolarity or the increased number of leaders under anarchy is arguably more unstable compared to a bipolar world.

Key words: anarchy, realism, constructivism, multipolarity, military conflict, insecurity.

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Introduction

An outstanding realist thinker Kenneth Waltz states that "the pressures of bipolarity have helped to produce responsibility of action" The author argues that when this tension changes it conditions a huge confusion among states and in a multipolar world it won't be clear who will be against whom. Hence, according to the author "Dangers from abroad may unify a state and spur its people to heroic action". (Waltz 1979) In the political scenario the actors might believe that: "The enemy of my enemy is my friend". (Manigault 1884)

In his book 'Politics' Heywood defines unipolarity as an international system in which there is one dominant state; from the hierarchy perspective it is the existence of a single great power. While claims that multipolarity is an international system in which there are three or more power centers, creating a bias in favour of fluidity and, perhaps, notability. (Heywood 2003)

It can be argued that global political order stays in a state of flux and as many scholars believe, it has been going through a severe phase since the Russian invasion of Ukraine. In other words, there is no such condition in an anarchical international system that can be fixed or permanent. Having said that, this period can be considered crucial as far as the new world order is shaping which itself means that the international system will never be the way it was before the event.

Domination of the system, or hegemony, is commonly understood to refer to the entire world. However, the idea of a system can be used more narrowly to characterize particular areas, as the Western Hemisphere, Northeast Asia, and Europe. As a result, it is possible to discern between regional and global hegemonies—those that rule particular geographic regions and those that rule the entire planet. For the last 100 years at the very least, the United States has dominated the Western Hemisphere

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as a regional power. The United States is generally acknowledged as the only great power. (Mearsheimer 40, 2003)

On the other hand, certain theories address multipolarity as the reason why the occurrence of wars becomes more probable. Before our complex analysis, it can be argued that potentially it is always easier to measure issues between two rather than among multiple parties. Therefore, the latter is considered as the main incentive of violence and growing disorder. During the Cold War Era, the anarchical international system was hard bipolar, represented by the United States and the Soviet Union. Among IR scholars there is no fixed position about which system, Bipolar or Multipolar is more stable. Moreover, according to the IR schools, the perspectives on this matter vary. Furthermore, as Kenneth Waltz argues it is considered that the "Real Partnership" is only possible among equals. (Waltz 1979) That statement itself stays quite ambiguous. By instilling terror among the great countries, potential hegemony also encourage war. States in the international system are rife with fear, which motivates them to struggle for dominance in order to improve their chances of surviving in a perilous environment. The other great powers, on the other hand, are particularly alarmed by the rise of a prospective hegemon and will endeavor to redress the power imbalance by pursuing more dangerous policies. The explanation is straightforward: when a state poses a threat to the others, maintaining peace becomes less valuable in the long run, and threatened governments are more inclined to take risks to strengthen their security. It takes little for a potential hegemon to instill terror in the other nations within the system. Just its overwhelming power is likely to terrify nearby superpowers and force at least a few of them to establish a counterbalance alliance against their deadly foe. Rival great powers will be tempted to assume the worst about the potential hegemon's intentions because a state's intentions are difficult to ascertain and can change quickly. This will further reinforce the threatened nations' motive to contain and possibly even weaken the potential hegemon. (Mearsheimer 345, 2003)

The importance of international organizations is unprecedentedly important nowadays. Furthermore, according to a common belief, any integration, cooperation or alliance should be represented by the superior power and this is where inequality of states' power and influence becomes crucial or decisive. Therefore, the core concern is to identify which international system is a safer haven. For instance, during the Cold War Era, the tension between the United States and the Soviet Union had a growing tendency. In this regard, Waltz states that a bipolar world lessens the potential of conflict among states as he believes that one's threat is considered to be another's incentive to threaten back. The aforementioned scenario is more probable there where

actors are represented as equal powers and their threat contains vastly damaging potential. The main difference between multipolar and bipolar worlds according to Waltz are blurry situations in which interests, responsibilities, and duties are not clearly defined. Moreover, the importance of attention in a bipolar world is described as more focused. The tendency to have a nuclear weapon is growing among states and the crucial point is their understanding of how that power must be used. (Waltz 1979).

1.1 Methodology

The primary method used in this article is desk research. Moreover, it addresses realism while emphasizing the concepts of anarchy and power. Much of the material employed to discuss theory will consist of secondary sources in order to provide a more solid ground for analysis.

Qualitative research (QLR) is the method that the article uses. More precisely, causal Studies include process reconstructive methods. (Maxwell 1992) Furthermore, causality is explained by tracking and the process by which some events lead to or influence others. Causal explanations often have a narrative form that is presumed to be particular to that situation even if some patterns are shared with other situations. (Creswell 2009)

The main goal of this discussion is to understand how multipolarity in an anarchical international system complicates or facilitates potential peaceful cooperation. Therefore, the research question is as follows: What means can be used to characterize the upcoming world order? while the hypothesis is that: A great reshuffle of the anarchical international system is present.

2. Prehistory

The idea that wars do not occur randomly is the core belief of this discussion.

Why observing polarity can be crucial in the process of understanding global insecurity? The idea of fearful willingness to ensure independence and survival being central to integration is also evident in the realist assumption that small-states choose the path of integration based on a cost-benefit analysis, in order to feel secure and survive (Waltz 1979). Robert Keohane, too, a liberal who shares certain neorealist assumptions, has argued that "a state whose leaders consider that it can never act alone or in a small group, make a significant impact on the system" (Keohane, "Lilliputians"

Dilemmas: Small States in International Politics.") States, in other words, favor this policy of 'bandwagoning' in an attempt to ensure maximum gain and survival in the condition of anarchy and uncertainty of the system (Walt: 1990).

As there is no coercive authority everybody is free to do whatever they want. Even though the Security Dilemma (SD) dates back to John Hertz

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(1950), this definition comes from Robert Jervis. SD briefly refers to the situation in which one state's increased security simultaneously decreases the security of others. (Jervis 1968)

In his book 'Cooperation under security dilemma' published in 1978 Jervis argues that one's security causes another's insecurity in the reality in which no condition is permanent under the systemic level and states stay in flux. The author argues that anarchy itself encourages states' behavior and creates a paradox when a state is not willing to engage in war but finds itself doing so due to crucial misperceptions. Thus, the degree of potential threat among units pushes parties to think about defending themselves in order not to be conquered. Furthermore, as the author argues controlling areas on their borders or at least neutralizing them determines the degree of security for a state (Jervis 1968)

After the Soviet Union (SU) collapsed, several former SU states in the Black Sea region expressed their intention to cooperate with or join Western organizations like the World Trade Organization (WTO), the North Atlantic Treaty Organization (NATO), the organization for Democracy and Economic Development (GUAM) and the European Union (EU)... The Russian Federation considered the latter situation to be a growing geopolitical threat. (Hill et al. 2014) At this point, for Russia 'the paramount objective became to keep NATO and the US at a distance' (Stuerner 2009, 224).

As Mearsheimer argues: "When nations are dissatisfied with the status quo, the prospects for deterrence are not promising". (Mearsheimer 1984) The crucial starting point in terms of the ongoing military conflict is considered to be the NATO declaration on the 13th of April, 2008 with the following statement: 'NATO welcomes Ukraine's and Georgia's Euro Atlantic aspirations for membership. We agreed today that these countries will become members of NATO'. In the Bucharest Declaration where Georgia and Ukraine were considered as future members, worked as a direct threat to Putin. (<https://shorturl.at/IAC18>)

As many scholars argue, the disappearance of the Cold War bipolarity would alter the structural reality in which states had hitherto acted, give rise to a multipolar system that would now include EU states as the different poles of a new multipolarity and thus contribute to the jeopardizing of Cold War stability in Europe. In the context of a multipolar Europe, with new possible poles in the form of Europe's Great Powers, the UK, France, Germany, Italy, and others, Cold War peace would irreversibly disappear and such possible benefits like the emergence of international institutions, democracy, and a stronger EC/EU would enable to balance such an outcome (Mearsheimer, The Tragedy of Great Power Politics (Updated Edition).

Arguably, critical cases like the Orange Revolution in 2004, the 2008 Russo-Georgian war,

and the revolution of dignity in 2014 anticipated the ongoing scenario and worked as dangerous precedents in this regard. We should also keep in mind that Georgia and Ukraine both joined the partnership for peace in 1994, in so doing they showed their willingness to sustain peace. While, by its actions in Europe's biggest territory, Russia clearly shows how a state's sovereignty can be ignored or disrespected.

The five-day war ended with a six-point peace plan that was initiated by French President Nicolas Sarkozy. Furthermore, even though the initiative was stated on behalf of the EU not all members were willing to get involved in the conflict the way Sarkozy did.

The main concern at this point was the following: due to the different manipulations, a larger-scale military conflict could be probable. (Hill et al. 2014) The latter expectations turned out to be unavoidable as the war in Ukraine started in February 2022. Worth mentioning that, regarding the August War, the book 'Explaining Foreign Policy' by Mouritzen and Wivel highlights the following question: 'Why would Georgia attack South Ossetia in August 2008, with Russian forces conducting exercises nearby?' (Hill et al. 2014)

This statement can once again be used for strengthening the idea that a small state can never choose its fate as it's all about the realpolitik defined by powerful actors. Consequently, there was a precedent that clearly showed the potential danger that required careful and diplomatic means rather than harsh positioning that would never prevent it. Does it mean that the world is multipolar with the parties' gradually varied interests and that is the reason why at the earliest stage the ongoing war was not foreseen?

From the international theory perspective, as Kenneth Waltz argues, among men, like among states, anarchy or the absence of government is associated with the occurrence of violence. (Waltz 1979) With its brutal war in Ukraine, Russia distracted the existing peace balance. As a result, unprecedentedly Finland and Sweden decided to change their isolationist political positions as far as they acknowledged that whatever happens in Europe it directly impacts the neighboring countries. (NATO, 2022)

Furthermore, the fact that Finland and Sweden showed readiness and felt the necessity of joining NATO, once again proved the latter's sustainability. Thus, NATO's open-door policy stays viable and credible even in times of great uncertainty. As the matter of fact, Sweden is the country that stayed neutral since 1834 even in times of the Second World War, however, now unity plays a decisive role, to say the least, as the European security is in a great danger and the parties do face it. Obviously, this sudden shift means that the NATO expansion toward Nordic countries threatens Russia in terms of the European security paradigm. Therefore, the idea of being close to the NATO alliance was enough turned out to be

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naive as far as being its member is what matters in the end.

3. Opposing ideas

Realism is a theory of IR that emphasizes the anarchic state of international relations. According to that, the chief goal of states is to survive and strengthen or increase their role. However, since the system is anarchic and the states are engaged in a constant attempt to survive, they each act by their self-interest or *raison d'état* as they conduct their affairs about other states (Walt, 1998). Another important trait of the realist school of thought on IR is its pessimistic nature. Unlike other IR traditions, realists hardly at all believe in progress. Based on the negative anthropology manifest in the political thought of Thucydides, Machiavelli, and Hobbes among others, realists emphasize the fixity of human nature and the anarchical nature of the system. Accordingly, while reflecting on international relations and human history, they primarily see not progress or difference, but essential sameness. According to realism, fear, egoism, and self-interest are principal tenets of the never-ending process of the battle to maximize security and ensure survival. That is intimately connected with the distribution and nature of military capability. (Mearsheimer 1984)

Realism, in short, conceives of states as the key actors of international politics and focuses on the category of power, mostly conceptualized as military or hard power. Due to their primary analytic concentration on sovereign states and their military capability, realists have been characterized by a skeptical position toward international institutions. Firstly, realists have seen international institutions not as considerable innovations, but as newer forms of the same old principle of state sovereignty. In other words, international institutions have been seen as carriers of states' interests. Secondly, they have seen international institutions as mirrors of the state's interests, especially that of strong states.

Waltz has, for instance, argued that 'strong states use institutions, as they interpret laws, in ways that suit them'. The hard bipolar world that ended in 1963-64 was conditioned by the initiatives of France and Communist China. A bipolar world is characterized by global interests and ambitions, however, leading powers at this point are not free to choose as they have a fixed set of rules which limits and frames their behavior. Hence, according to that logic more powerful states are less flexible. Fearing unequal gains, states are not likely to favor substantially close interstate cooperation. (Waltz 1979)

Hence, the states being conceived as sovereign actors each attempting to pursue their national interests, realists have expected that states are not likely to give up sovereignty and transfer it to a supranational power. Therefore, the EU, as a successful project of political integration, has

represented a puzzle for realists, especially in the aftermath of the disappearance of the traditional Cold War bipolarity after 1991. Some neorealists, such as John J Mearsheimer, even predicted its eventual failure in the conditions of the post-Cold War multipolar system likely to emerge. (Mearsheimer 1984)

Mearsheimer has argued that the peaceful process of integration in Cold War Europe might be explained by the coexistence of several structural factors. Firstly, this process was supported by "the bipolar distribution of military power on the Continent"; secondly, it was made possible due to the military equality between the two states, the US and the Soviet Union, which represented the two opposing poles; and thirdly, the factor of nuclear deterrence played a positive role. (Mearsheimer 1984)

Waltz summarizes his article by saying that it was a bipolar world that conditioned peace which lasted for a long time. In other words, he criticizes a multipolar structure by saying that even interests under increased superpowers are not clearly defined and any tension at this point is considered as a risky condition. On the other hand, before a distinct bipolarity would emerge in the interwar period between 1919 and 1939 the Great Powers did not cooperate much with one another, precisely due to their fear of unequal, asymmetrical gains. It was only amid the appearance of a clear bipolarity that their fears abated, the mistrust decreased and they began to cooperate. (Waltz 1979)

In Wendt's article on anarchy, he refers to the realist perspective that highlights that the "self-help" system is an unavoidable part of the anarchical international system. As the author mentions the core complements in that statement are missing as far as the "central authority and collective security are absent" (Wendt 1999b). Wendt argues "against the neorealist claim that self-help is given by anarchic structure exogenously to process" (Wendt 1999b). Importantly, he differentiates process from structure. The latter concept will not exist with the process itself which frames and determines the structure as such. Hence, the author explains how "self-help" and power politics under the anarchical international system are conditioned by social means. Moreover, "identities and interests are transformed under anarchy: by the institution of sovereignty, by an evolution of cooperation, and by intentional efforts to transform egoistic identities into collective identities" (Wendt 1999b).

Wendt criticizes Waltz and argues that his explanation of anarchy is incomplete as he defines anarchy as "a condition of possibility for or "permissive" cause of war, arguing that "wars occur because there is nothing to prevent them." Waltz in this statement draws attention to the human nature which is the main reason why conflict occurs. Moreover, "the logic of anarchy seems by itself to

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constitute self-help and power politics as necessary features of world politics" (Wendt 1999b).

However, the global order is not unipolar. The United States is not a global hegemon, despite being one in the Western Hemisphere. Without a doubt, the United States dominates both the military and the economy of the globe. China and Russia, however, are the other two superpowers in the international system. Even though neither is as strong as American military power, however, both possess nuclear weapons, the ability to oppose and most likely repel an American invasion of their country, as well as a restricted capacity for power projection. (Mearsheimer 381, 2003)

On the other hand, the classical realists contend that the existence of a multipolar power structure and a "flexible" alliance system enhances stability (Morgenthau 1967, Gulick 1955), while neorealists contend that bipolarity outperforms multipolarity in terms of stability like Waltz 1979 and Mearsheimer 2003. Neorealists use polarity as a primary explanatory variable, but they have very little evidence to support their claims. Their arguments regarding earlier historical eras are not supported, and they overgeneralize from the Cold War experience, where bipolarity is confused with the existence of nuclear weapons and other important variables. While bipolarity is less common than multipolarity, it has happened before, as evidenced by the numerous wars that erupted during the Athens-Sparta rivalry in the fifth century BC and the Habsburg-Valois rivalry in the early sixteenth century. (Levy 147, 1998)

Wendt argues that while talking about the political structure Waltz says little about states behavior. Therefore, it is not clear what differentiates friendly states from unfriendly ones. The latter determines to what extent these states would recognize or support each other's sovereignty or other vital matters while interacting. At this point, while analyzing Waltz's perspective Wendt argues that actors' actions are framed by the "balance of threats". (Wendt 1999b)

Hence, Wendt claims that Waltz is missing the content of probable tendencies under anarchy. According to the author's concept about the "structure of identity and interest," the latter concept is not logically linked with the anarchical international system. Therefore, Wendt draws attention to the fact that an actor behaves differently with a state that is considered as a friend, while the same actor will act in a vastly different way when it comes to the state which somehow threatens its existence. Moreover, the author believes that "a state may have multiple identities as "sovereign," "leader of the free world," "imperial power," and so on" (Wendt 1999b).

According to Wendt states' interests are based on their identity which does not have fixed characteristics, but on the contrary, they are shaped by the unique and consistently changing scenarios as the

states continually interact. Hence, actors are in a constant flux that creates and conditions situations. Wendt describes institutions as relatively stable structures, which consist of interests together with identities. In particular, rules and norms are meant by this. Hence, this set of rules was not always there and it is the product of the process of states' interaction. Wendt claims that "institutionalization is a process of internalizing new identities and interests, while socialization is a cognitive process, not just a behavioral one".

Interestingly, from Wendt's perspective, "Self-help is an institution, one of the various structures of identity and interest that may exist under anarchy. Processes of identity formation under anarchy are concerned first and foremost with preservation or "security" of the self" (Wendt 1999b).

From a realist's perspective, collective action becomes difficult as the system is competitive and one's gain is considered to be another's loss from the security point of view.

Wendt at this point argues that partnership in security issues creates a common sense of responsibility among parties. Waltz states that "international political systems, like economic markets, are formed by the coaction of self-regarding units." (Waltz 1979) Wendt believes that "Self-help is an institution, not a constitutive feature of anarchy" (Wendt 1999b).

Waltz argues that "competition and socialization, by which structure conditions state action." The content of his argument about this conditioning, however, presupposes a selfhelp system that is not itself a constitutive feature of anarchy. As Wendt points out, Waltz's two mechanisms condition behavior, not identity and interest." This explains how Waltz can be accused of both "individualism" and "structuralism." (Wendt 1999b).

Causality among states conditioned by their interaction is the crucial point from Wendt's perspective. In other words, one state's action is caused by the interaction in which others consistently act and condition each other's behavior. Regarding institutions, the author argues that "institutions transform identities and interests," emphasizing that the key to such transformations is relatively stable practice" (Wendt 1999b).

Furthermore, Wendt highlights that "Sovereignty is an institution, and so it exists only by certain intersubjective understandings and expectations; there is no sovereignty without another" (Wendt 1999b).

This statement strengthens the fact that identities differ from each other and the institutions among them are defined by comparison as a product of social interaction.

Regarding cooperation, Wendt argues that it is a difficult process that requires complex actions among the so-called egoist states. At this point, the

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recognition of each other's sovereignty does not automatically condition their cooperation. The latter activity requires an efficient strategy with incentives for its parties. Moreover, the author says that "A constructivist analysis of cooperation, in contrast, would concentrate on how the expectations produced by behavior affect identities and interests" (Wendt 1999b).

4. Conclusion, limitations, and future lines of research

Therefore, for the following four reasons, bipolarity is the most stable architecture available. First, there is only one potential conflict dyad involving the great powers and comparatively fewer opportunities for conflict in bipolarity. Great powers tend to fight minor powers rather than the opposing great power when they engage in bipolar warfare.

Second, bipolarity is a significant structural source of stability since it increases the likelihood of power being distributed equally among the major powers. Moreover, the big powers have little chance of banding together against other nations or exploiting smaller ones. Third, bipolarity lessens the chance that the major powers will make a mistake and start a conflict by discouraging miscalculation. Fourth, despite the fact that fear is a constant factor in international politics, bipolarity does not make states' anxieties more severe. For that reasons, balanced multipolarity is more likely to result in conflict than bipolarity. First, there are a lot more opportunities for conflict when there is multipolarity, particularly between the great powers. However, it is unlikely that all the great powers will be involved in a war at the same time. Second, the leading states are likely to have unequal power distribution, and the more powerful states will be more likely to initiate wars because they believe they have what it takes to win. Great powers will also have plenty of opportunities to unite against third parties and to subjugate or force smaller powers. Third, because there are no particularly large power disparities between the major states in the system, miscalculation is probably going to be a major issue in balanced multipolarity, though high levels of anxiety among the great powers are unlikely. (Mearsheimer 346, 2003)

Therefore, multipolarity is less measurable and more complicated. Furthermore, "the absence of peripheries, the range and intensity of competition and the persistent of pressure and crisis are among the most important characteristics of the period since WWII" (Waltz 1979, 886).

Today's world is far from being unipolar or hard bipolar. In this regard, Waltz believes that "Multipolar military systems are more unstable than unipolar and bipolar ones because there are more points of interactions and thus more opportunities for miscalculations, as each country seeks to re-adjust the

balance of power in its favor". (Waltz, Theory of International Politics, 131)

Despite the above-mentioned arguments, there is considerable ambiguity among neorealists, who consider bipolarity to be more stable than multipolarity, and classical realists, who argue that stability is further enhanced by multipolar power distribution and "flexible" alliance system. Neorealists are also criticized for having very little evidence to support their claims regarding polarity as a key explanatory variable, although they rely heavily on it. They do not show that their ideas apply to earlier periods of history, and instead generalize the Cold War experience, conflating bipolarity with the presence of nuclear weapons and other important circumstances. Proponents of neorealists also claim that bipolarity and multipolarity can be equally prone to war and that conflicts arise for different reasons. Therefore, they believe that the structural conditions and polarity are not the main causal factors in the outbreak of war. (Levy 1998)

It is possible that unipolarity is merely a transitional state. The emergence of five or more major actors and the asymmetrical threats posed by so-called "rogue" states and international terrorism provide compelling evidence that the world order of the twenty-first century will be multipolar (see p. 382). The main players would be China, an EU dominated by Germany, Japan, and Russia, with important regional players emerging in the form of Brazil and India, in addition to the USA, which unquestionably continues to hold leadership in areas of "safe" power like intellectual capital and advanced technology. The rapid economic growth China has experienced since the 1970s when market reforms were introduced, its sizable population, and an increasing military power. According to World Bank estimates, China's economy will surpass all others by 2020 if current growth rates continue. After the end of the Cold War, Germany and the EU have demonstrated signs of increased assertiveness and independence from the USA and NATO, in addition to making steady economic progress since the 1950s. The expansion of the European Union, the strengthening of its defense capabilities, and the quickening pace of monetary and political union are all examples of this. Japan enjoys advantages from its connections to the "tiger" states of east and southeast Asia, and its economy is the second largest in the world.

Although Russia may no longer be a superpower in terms of economics and may have lost control of eastern Europe, its nuclear arsenal guarantees that it will continue to be a significant diplomatic force, and the abundance of its natural resources and population lay the groundwork for future economic growth. (Heywood 136, 2003)

To sum it up, cooperation and unanimity among those who share a core value system are decisive

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mostly in times of the great uncertainty. This matter requires further analyses. Ideally, the scholars must lessen the given uncertainty by structuring an effective

theoretical discussions that will ultimately stay peace-oriented.

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METHODOLOGY FOR CONDUCTING PRACTICAL ONLINE CLASSES IN BOTANY AT PEDAGOGICAL UNIVERSITIES

Abstract: Online learning during the period of quarantine restrictions greatly influenced the learning ability and motivation of students, the direction of training and the course of which is strongly related to the practical testing of acquired knowledge. For this reason, to compensate for the negative impact, additional incentive measures and special tools are needed to ensure the connection of theory with practice at the level of visual, conceptual and tactile perception. This work is devoted to the consideration of methods for conducting practical online classes in botany.

Key words: Teaching methods, practical classes, online, information technologies information technologies botany, academic performance, motivation.

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МЕТОДИКА ПРОВЕДЕНИЯ ПРАКТИЧЕСКИХ ОНЛАЙН ЗАНЯТИЙ ПО БОТАНИКЕ В ПЕДАГОГИЧЕСКИХ ВУЗАХ

Аннотация: Онлайн обучение в период карантинных ограничений сильно повлияло на обучаемость и мотивацию студентов, направление подготовки и курс которых сильно связан с практическим апробированием полученных знаний. По этой причине для компенсации негативного влияния нужны дополнительные меры стимулирования и особые инструменты, обеспечивающие связь теории с практикой на уровне визуального, концептуального и тактильного восприятия. Данная работа посвящена рассмотрению методики проведения практических онлайн занятий по ботанике.

Ключевые слова: методика преподавания, практические занятия, онлайн, ботаника, информационные технологии, успеваемость, мотивация.

Введение

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Онлайн-обучение играет ключевую роль в улучшении доступности образования и гибкости учебного процесса. Это позволяет студентам из разных регионов страны получать высококачественное образование, а также развивает навыки самостоятельного обучения. Однако, внедрение онлайн-обучения требует осторожного подхода и учета множества факторов, включая обучение преподавателей,

создание качественных образовательных ресурсов и обеспечение безопасности данных [2,4].

Совершенствование цифровой среды в сфере образования в Узбекистане - это важная задача, которая требует комплексных усилий со стороны правительства, образовательных учреждений и общества. Внедрение новых технологий и методов обучения должно сопровождаться контролем качества и поддержкой студентов и преподавателей [1].

Одной из актуальных проблем онлайн образования в период дистанционного обучения

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является проведение онлайн практических занятий. До сих пор не существует единых методов и онлайн инструментов, которые бы в полной мере соответствовали по своему мотивирующему влиянию и в полной мере способствовавшие полному усвоению практических знаний на уровне очных практических занятий, не смотря на наличие огромного количества существующих онлайн методов [6,7,9,10]. Каждый из них имеет в определённой степени свои преимущества и недостатки. Данная статья призвана рассказать об опыте организации онлайн практических занятий в период карантинных ограничений в курсе ботаники среди студентов ТГПУ имени Низами. Кроме этого, в работе также приводится краткая оценка студентами мотивирующего аспекта занятия и краткая сводка по успеваемости, в сравнении с ранними онлайн практическими занятиями.

Цель работы. Рассказать о положительных и отрицательных аспектах и опыте проведения онлайн практического занятия в курсе ботаники среди студентов, дать обоснование использованным методам.

Материалы и методы. В качестве методов исследования использовались статистический анализ, методический анализ и синтез результатов. В качестве статистических методов анализа использовался метод онлайн анкетирования.

Результаты.

В первую очередь стоит отметить, что непосредственному проведению онлайн практического занятия предшествовала долгая подготовительная работа студентов. Так, помимо непосредственно занятий, рассказывающих о филогенетических связях в растительном сообществе, преподавателями кафедры ботаники и экологии был создан онлайн тренажер на базе системы онлайн тестирования и параллельно на базе редактора мнемонических карточек.

По сути дела, тесты и мнемонические карточки были сделаны таким образом, чтобы вместо текстового описания в основе теста были графические материалы, в первую очередь, отличительных черт определённых семейств, родов и видов растений, наиболее распространённых в Республике Узбекистан, а также отражающие определённые этапы практической работы и подбор их практического значения. Кроме этого, на базе платформ по созданию собственных курсов преподавателями был создан шаблонный курс с закрытым доступом по ссылке, который включал в себя текстовое описание предстоящей практической работы,

видеоматериал по теме и аналогичные инструменты оценки знаний.

Далее группы студентов были разбиты по 4 малые группы в каждой. Малым группам давалась проектная работа по созданию теоретической текстовой и простой визуальной модели различия нескольких растений в качестве тренировочного занятия, а на выполнение задания выдавался срок в одну неделю, по итогу которого проводилось общее собрание в Google meetings для демонстрации докладов.

Все эти меры были сделаны для того, чтобы сформировать между студентами более тесные дружеские связи и сформировать малый коллектив. Это было необходимо, в свою очередь, для поддержания положительной мотивации к обучению и компенсации отсутствия качественного общения во время дистанционного обучения [4,6]

Дополнительным мотивирующим фактором для студентов являлось то, что преподавателями было объявлено о предстоящей практической ботанической онлайн олимпиаде, в которой, как было объявлено, многие задания были бы схожи по своей структуре и содержанию с данной практической работой. За 2 недели до непосредственного проведения практической работы малым группам также был дан проект, результатами которого запрещено было делиться между малыми группами. Им было необходимо создать анимационную модель или записать видеоматериал о том, как изучаются основные морфологические признаки растений для определения их таксономического положения.

Сама практическая работа состояла из трёх этапов. Первый этап предполагал определение студентами в индивидуальных комнатах ZOOM систематического положения растений, наименее распространённых в Республике Узбекистан, а также красно книжных растений Республики по их фотографическому материалу. Баллы отдельных студентов суммировались и выставлялась общая оценка подгруппы студентов. Фотографический материал для данного этапа был подобран преподавателями кафедры и не разглашался заранее.

Второй этап должен был отражать методику проведения практических занятий по ботанике и особенности работы с некоторыми растениями. Для оценки студентов в малых группах демонстрировался иллюстративный или видеоматериал другой подгруппы, полученный в результате проектной работы. Задача группы была определить правильные и не правильные элементы предоставленного материала, способы улучшить его качества, а также прокомментировать материал с методической точки зрения для теоретического использования материала для учащихся школ. Соответственным

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образом при этом студенты были распределены по ролям: роль критика, роль методиста, роль оппонента-защитника, роль рецензента. Каждому из студентов выставлялись индивидуальные оценки по ролям.

Третий этап работы заключался, как и первый в определении таксономического положения растений на филогенетическом древе, однако фотографический материал подбирался конкурирующей подгруппой студентов. Задача студентов в этом этапе практической работы заключалась не только в самом определении места растения на филогенетическом древе и его взаимосвязей с другими, но и также в том, чтобы обосновать по каким критериям был сделан вывод или почему невозможно точное определение систематического положения, если определенные элементы рисунка были скрыты или отсутствовали (Например, если на рисунке был только цветок, но отсутствовала корневая система или фотографии листа и общего вида кроны).

По итогу анкетирования большинство студентов отзывались положительно о проведенном занятии и средний балл оценки составил 8,33 из максимальных 10 баллов. Кроме этого, 67,84 % студентов в анкете отметили крайнюю заинтересованность в улучшении своих практических знаний и только 3% студентов оказались совершенно не заинтересованными в продолжении обучения. Успеваемость же по итогам занятия составила более 80%. Из этих 80%

более 57% студентов получили оценку «отлично» и 23% оценку «хорошо». Оставшиеся 20 % студентов распределились следующим образом: 14% «Удовлетворительно» и 6% «не удовлетворительно».

Выводы

Таким образом грамотный подбор инструментов онлайн обучения для проведения практических занятий в курсе ботаники способен значительно снизить негативное влияние на успеваемость и мотивацию к обучению студентов. В первую очередь для достижения результата необходимо проводить длительную подготовительную работу, а также расставлять краткие цели для подтверждения полученных практических знаний. Кроме этого, важно соблюдать принцип самостоятельности, коллективной работы и творческого подхода в обучении для обеспечения большей мотивации среди студентов [3,5,8].

Совершенствование цифровой среды в образовании — это долгосрочный и многомерный процесс, который требует согласованных усилий со стороны образовательных учреждений, преподавателей и студентов. Этот процесс имеет потенциал улучшить доступность и качество образования в Узбекистане, а также подготовить студентов к цифровой экономике.

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Issue

Article



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THE NEED TO IMPROVE THE PHILOSOPHICAL CHARACTERISTICS OF SOCIAL NETWORKS IN THE ECOTOURISM SYSTEM

Abstract: This article talks about the need to improve the unique philosophical features of social networks in the ecotourism system. In it, the philosophical justification of the essence of the concepts of ecotourism and social network, at the same time, the fact that it is aimed at increasing the role of human development in ensuring social stability today is scientifically and theoretically based.

Key words: ontology, substance, ecotourism, account, driver, licensing, reserve, media literacy, economy, ecology, geography.

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Introduction

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Today, special attention is paid to the development of media literacy in our country. Philosophical analysis of the historical processes, scientific-theoretical views, practical-conceptual foundations related to this concept in the emergence, formation and development of social networks can provide sufficiently complex and systematic scientific ideas about it. In this sense, the philosophical justification of the essence of this concept is distinguished by the fact that, at the same time, it is aimed at increasing the role of human development in ensuring social stability today. After all, the issue of ensuring security related to social networks, which arose at the end of the 20th century and the beginning of the 21st century, has become one of the urgent tasks facing scientists from all over the world. In particular, social networks have increased the relevance of researching issues aimed at meeting the needs of society.

LITERATURE REVIEW.

Although the research carried out by experts in the field is very close to each other, similar to each other in terms of implementation methodologies, it

can be recognized that their goals and fields of study are different. In particular, scientists such as Mayra Sanchez Morgan, [3.-P.17] I.P.Menbere, K.Miller, V.Zorin, V.A.Kvartalnov, V.V.Khrabovchenko on issues of expansion of ecotourism opportunities, sustainable development of ecotourism, role of ecotourism It is permissible to confess.

RESEARCH METHODOLOGY.

It should be admitted that today the speed of information distribution and delivery of information networks has become somewhat faster than that of the mass media. Internet information sharing and active use of social networks are becoming increasingly popular all over the world. In general, such actions are the cause of many discussions by the general public in terms of their positive and negative characteristics. It is no secret that social networks are becoming the main tool in terms of the impact of social, political, spiritual and educational changes taking place in society on the human psyche.

The development of ecotourism in Uzbekistan requires a comprehensive approach coordinated in all aspects. It is necessary to involve all interested parties involved in this work. This is the only way to prevent mistakes that may occur during the development of ecotourism and prevent negative consequences.

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Special attention should be paid to the local association whose main activity is tourism. It should be noted that the establishment of ecotourism based on local associations is a new structure that has not yet been fully tested in the conditions of Uzbekistan, involving local communities and organizations. Currently, there are no special credit schemes to support the local association. Funding of residences is carried out through local authorities. Investments in the Chotkal oasis and ecotourism regions are facing certain difficulties, because the financial benefits can only begin to come in the future. The development of the local association should be supported by the state and society. This issue is particularly related to land use, taxation, licensing and registration of economic activities, and solving border problems. Based on the current legislation, it is possible to propose several ways of developing ecotourism. Creating a center for the development and support of ecological tourism (creating laws on the tourism of specially protected natural areas, destinations, ecotourism regions, etc.); - creation of ecological tourism infrastructure (guaranteeing foreign investments involved in the construction of free tourist areas, tourist facilities, creating laws on supporting private entrepreneurship in tourism, etc.). There are great opportunities for the development of ecological tourism in Uzbekistan. Attractive mountains and rivers, beautiful landscapes, traditional lifestyle, historical and religious centers are the most necessary factors for ecological tourism. The development of ecotourism in Uzbekistan should become an integral part of the strategy of sustainable tourism development in the republic. The field of media literacy is of great importance in the further development of such processes and in increasing their effective influence on the country's economy.

"Ecotourism is tourism that is carried out in relatively intact natural areas, which does not lead to the destruction of the natural environment and its quality, but is based on the protection and direct contribution of natural areas that can be used, subject to adequate and competent management." The main task of ecotourism is to establish justice between people and nature. [3.] So, nowadays, different interpretations of the phenomenon of ecotourism can be observed. When analyzing the history of the development of ecotourism, some definitions given to ecotourism are partial, some are relative to others. It can be observed that it is interpreted in a wider scope. In particular, we can see the development of several types of ecotourism. For example, one of the most developed types of ecotourism is agrotourism, where each person travels to the heart of nature and gets to know the activities of agriculture, farmers and farms of the region, their traditional rural work, the culture of the rural people, customs, national values, applied arts, national songs and dances, local traditional holidays, and will have the opportunity to participate in the above events.

ANALYSIS AND RESULTS.

One of the main factors that lead to the development of ecotourism combines the interrelationships related to nature travel and its protection. Ecotourism serves as an economic incentive for environmental protection. Another advantage of this is that it provides a better understanding of the relationship between wildlife and the various cultural values of society and provides more information about it. The main task is to make the ecotourism industry commercially viable, ecologically sustainable, and to create a mechanism for a responsible approach to culture.

The development of the tourism sector in our country has become one of the main priorities of the state policy. In this regard, the head of our state, Shavkat Mirziyoyev, said: "Today's state policy in this area is in the perspective of comprehensive rapid development of regions and their infrastructure, solving urgent socio-economic tasks, increasing jobs, ensuring the diversification and development of regions, population aimed at increasing incomes, living standards and quality, and improving the country's investment attractiveness and image. Turning tourism into a strategic branch of the economy remains a priority for us. One of the most important tasks before the government is to increase the number of tourists coming to our country to 10 million in the coming years," [4.-B.173-174.] - he pays special attention to this area. This situation, of course, requires the improvement of the tourism infrastructure in order to provide all-round comfort to travelers. Tourism infrastructure means a system of buildings, engineering and communication networks, including roads, various tourism enterprises and their activities, which ensure the easy use of tourism resources by tourists, as well as other systems that provide this activity. Among these, it is possible to list the systems regulating the movement of highways, railways, airways, sea and rivers, heat, electricity and telephone communications.

One of the main factors that lead to the development of ecotourism combines the interrelationships related to nature travel and its protection. Ecotourism serves as an economic incentive for environmental protection. Another advantage of this is that it provides a better understanding of the relationship between wildlife and the various cultural values of society and provides more information about it. The main task is to make the ecotourism industry commercially viable, ecologically stable, and to create a mechanism for a responsible approach to culture. People responsible for tourism planning, tour operators, managers, marketing staff, mass media have been using the term "ecotourism" in a much broader sense. As a result, this concept was applied to a number of tourist products. Unfortunately, they logically do not fully correspond to the above definitions. The broad use of the term

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"ecotourism" has caused controversy and led to the use of other terms, such as "sustainable tourism", "minimum impact tourism", "partnership tourism", "responsible tourism". came But none of the terms or their alternatives can clearly define the boundary between ecotourism and other types of tourism.

In recent years, due to the large-scale increase of environmental problems in the whole world, including in our country, the rights of every person to a comfortable natural environment together with the formation, strengthening and improvement, the issues related to the systematic establishment of ecotourism activities and their effective use are being highlighted. Ecological culture is a component of human culture as a product of material and spiritual environment. [6.-B.249-250.] However, today the participation of environmental public organizations in solving problems in this regard cannot be considered satisfactory. In this sense, it is necessary to effectively use the functions of environmental public associations and non-governmental non-profit organizations in this regard in order to effectively use the opportunities of ecotourism in our country and transform it to the general public.

As the first President of the Republic of Uzbekistan, Islam Karimov, said: "The goal of the development of non-governmental and public organizations is to ensure and protect the balance of interests of society members. In the political and social sphere, as an alternative force to the state systems, they should contribute to ruling the balance of justice in life" [2.-B.112-113.]. Also, about the importance of non-governmental non-profit organizations today, as the President of Uzbekistan Shavkat Mirziyoyev noted, "The place and role of non-governmental non-profit organizations in the reforms we are implementing to build a free civil society and protect human rights and freedoms is special. it is worth noting". After all, the role of environmental public and non-governmental non-profit organizations, along with tourism organizations, remains incomparable in the full use of the internal opportunities of the country's ecotourism.

In this sense, the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan, the Ministry of Public Education and the

State Committee for Nature Protection (now the State Committee for Ecology and Environmental Protection of the Republic of Uzbekistan) It is acknowledged that the Program and Concept was adopted on November 7, 2005 by the joint decision of "Prospects for the development of environmental education in the Republic and the further improvement of the system of training, retraining and professional development of environmental personnel". This is important in providing the need for environmental personnel, in particular, personnel directly engaged in ecotourism activities. Uzbek researcher O.H.Khamidov in one of his scientific articles, "Ecological tourism helps to develop the organic connection and direct communication of people with nature and to provide comfort in nature, help, energy, knowledge, and for the organizers to get a lot of income, and overall environmental and economic stability and is based on active rest while maintaining balance" [5.-B.1.], he emphasizes. After all, today the development of ecotourism is one of the urgent issues and serves as one of the most important factors ensuring the ecological natural environment and economic stability of the country.

In particular, the researches conducted on issues such as socio-economic problems of ecotourism, impact of ecotourism on nature, sustainable development of ecotourism, possibilities of ecotourism are gaining importance. Although the research carried out by experts in the field is very close to each other with the implementation methodologies, it can be recognized that their goals and fields of study are different.

CONCLUSION/RECOMMENDATIONS.

It can be seen that the main goal of ecotourism development is to educate the individual and thereby preserve the stability of the natural environment. From this point of view, significant work has been carried out in recent years in our country to develop the potential of tourism, especially ecotourism. Due to the importance of ecological legal literacy of every person in the process of development of ecotourism, today in the development of modern ecotourism there is a need to increase the ecological legal consciousness of the individual.

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Article



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THE PHENOMENON OF TOLERANCE IN JALALIDDIN'S TEACHING OF ROMAN PHILOSOPHY CONCEPTUAL SIGNIFICANCE

Abstract: This article deals with the issues of tolerance and inter-ethnic harmony in the socio-philosophical views of Maulana Jalaluddin Rumi, who is considered one of the major figures of Middle Eastern philosophy. It was analyzed on the basis of the conceptual ideas put forward in the scientific heritage of Jalaluddin Rumi that the features that form the culture of compromise, such as tolerance, solidarity, inter-ethnic harmony, unity and unanimity, which are universal human values, are one of the political factors that strengthen the atmosphere of peace and tranquility and stability in the society. It has been scientifically and theoretically analyzed that such apodictive theories in Jalaluddin Rumi's socio-philosophical views are an important factor in ensuring peace and tranquility in the development of society.

Key words: tolerance, tolerance, interethnic harmony, friendship, solidarity, social compromise, stability.

Language: English

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Introduction

In the system of socio-philosophical views of Jalaluddin Rumi, who is considered one of the great thinkers of Central Asia, philosophical ideas about peace and harmony, society and state management, international harmony and humanitarianism are of special importance.

Maulana Jalaluddin Rumi was a superstitious sage of his time, therefore he strongly condemns the principle of chauvinism through the idea that "We came to the world not to divide people, but to unite them." He is a scholar who spread the word to the world as a supporter of uniting all people as a family around noble goals and thereby promoting the friendship of peoples. "No way, O Muslims, I do not know whether I am a Tarsus, a Jew, a heathen, or a Muslim." promoted and promoted. The only wish for him was the happiness of all humanity, the beauty of the whole world. Thus, he became the pride of all mankind. Throughout his life, Jalaluddin Rumi fought against various religious beliefs, various customs and rituals that shackle human thinking and emotions.

LITERATURE REVIEW.

According to Maulana, all people are pure and innocent when they are born, and the various defects in their character are formed later under the influence of people in the environment, and their character changes. According to Rumi, vices in a person are not immutable qualities or character, but on the contrary, they are spiritual deviations that occur in them, and this condition can be transformed into goodness, virtue or can be reformed. The great thinker Beruni said: "The hearts of uneducated people are prone to superstition." Indeed, it is a pity that some people who do not understand the true essence of Islam do their evil deeds under the guise of religion. In almost all works of Jalaluddin Rumi, the most mentioned word is "Remember, this is the word of the prophet. A believer is a mirror to a believer. The heart of a believer is always in need of the Truth, because he turns from the darkness to the light in the hope of the Truth, says Maulana. According to the mystic, the bodies of believers are diverse, but their faith is one. People of faith who are united for a common goal and

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become friends become united. "Believers, without a doubt, are brothers and sisters". The One who created brotherhood between them is the Supreme Truth. The bond he made will never be broken. But it must be admitted that not all believers-Muslims adhere to the qualities mentioned above.

RESEARCH METHODOLOGY.

They are ruining the well-being of many people with their destructive ideas and actions that harm the development of society. As stated by Jalaluddin Rumi, it is necessary to value peace and to draw reasonable conclusions from the consequences of various conflicts happening in the world. "We are like iron in battle, candles in a meeting. Blessings for a friend, death for an enemy," Mavlano said. Continuing his thoughts, he says that if the caravan gets lost on the road, someone says the road is this way, someone says it is that way. At that time, Satan comes to them and invites them to a completely different destination. In this way, the believers in the caravan go astray from the right path. And Satan calls them to him in a more active voice than before and keeps them away from their destination. In the same way, when some people lose their way in life and end up in a state of asceticism, some devils in human form use this mental state in them for their own benefit and mislead them by spreading negative disinformation. Such processes are useful for various fanatics and extremist groups that threaten the whole world, and cause them to expand their ranks. In this regard, Jalaluddin Rumi says: "This category of people does not stay behind the devil in the desert of lowness, stubbornness and opportunity, but follows this imitation. They follow so much that they have no inclination to turn or turn back. As a result, they die of hunger and dehydration in the desert and become food for worms." That is, people who are influenced by various destructive foreign ideas are also despised in foreign countries under the label of traitors. "O people, O believers! If a scoundrel stops you and calls you to do evil, if he promises that this work will bring you so much benefit, do not believe him. They are trying to mislead you, make you sad, and make you happy. If they follow you, you will have neither a friend nor a partner - they will all get tired of you". Although such hypocrites who mislead righteous people with various corruptions pretend to be religious leaders, in fact, their aggressive actions cause the death of many civilians. Those who fall into the trap of such hateful people and are their accomplices will follow them. They propagate the negative ideas of fundamentalism in the spirit of destructive ideas that we are following the right path and doing the deeds of Islam. However, all this is nonsense. Haqq the Most High said: "These are their words without evidence". Jalaluddin Rumi comments on such situations as follows: "Some people who are a minority, despite the fact that they remember the Truth with their tongues, they do not have any honor

in their hearts. Faith, in fact, is born in the heart, not in the tongue".

ANALYSIS AND RESULTS.

One of the main ideas of the state policy carried out in our country today is the stabilization of inter-ethnic relations. The concept of inter-ethnic harmony becomes a universal value, when the citizens living in that country are recognized as citizens of that country regardless of their race, religion, social status, and the state is responsible for rationally solving ethnic problems related to them. If based on the criterion of justice, in such a case compromise relations will arise in the society. The features that form the culture of compromise, such as tolerance, solidarity, inter-ethnic harmony, solidarity and unanimity, which are considered universal values, are one of the political factors that strengthen the atmosphere of peace and stability in the society. We all know that inter-ethnic harmony and tolerance is not a process that happens by itself. This process is an eliminative process that is directly related to the lifestyle, activity in society, and worldview of citizens living in that country. In order for the people living in the country to fully understand the essence of the concept of inter-ethnic harmony, they should be guided by the principle of social solidarity, that is, they should directly understand the common goals in understanding and solving the existing problems and changes in society, as well as the destiny of the country. Should be closely connected with Such spiritual and spiritual harmony serves as an important basis for the stabilization of society. It should also be noted that the intellectual potential of the people living in the society, respect for our spiritual and moral values, and friendly relations with representatives of different nationalities and peoples are of particular importance in the rise of universal human values such as inter-ethnic harmony and tolerance in the country. In particular, by studying the works of great scientists and geniuses who lived and created in different eras in the stabilization of issues of inter-ethnic harmony and solidarity in the society, and made a worthy contribution to the civilization of mankind, through scientific research and translation of their rare works into different languages, we will find commonalities in their ideas. Learning, regardless of race and religion, is a necessary factor in uniting all mankind, and most importantly, not giving in to various ethnic conflicts.

Special attention was paid to this issue in Jalaluddin Rumi's social views, which is why today he has become one of the figures whose works are translated, published and whose books are read the most in the world. Because the scholar does not choose religion, nation or people, the concept of Man occupies the highest place in his views, and he glorifies universal human values through his philosophical ideas.

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CONCLUSION/RECOMMENDATIONS.

Jalaluddin Rumi, one of the great figures of the Middle Ages Muslim East, the scientific heritage, mystical and mystical views of time and time again call mankind to healthy faith, high spirituality, broad outlook, mutual cooperation, harmony and tolerance. These altruistic views of Rumi do not lose their spiritual, social and political value in any period of

development. After all, if we read and analyze any work of a mystic, I am sure that their main idea is that Maulana Rumi is calling on mankind to live happily, following the criteria of peace, harmony, and religious tolerance. This is the main reason why Jalaluddin Rumi is equally loved by all nations and peoples.

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THE ISSUE OF WIVES AND GIRLS IN THE RELIGIOUS-SUFISM VIEWS OF JALALIDDIN RUMI

Abstract: This article deals with the relationship to women in the religious-mystical views of the great philosopher and poet Jalaluddin Rumi. Eastern peoples have long had different views on the issue of women and their activity in the social life of the society. Philosophers of antiquity, Eastern thinkers, scholars of Central Asia and Western philosophers also created their concepts about these issues. Jalaluddin Rumi's socio-philosophical teachings also focused on the views on honoring women and strengthening their position in the spiritual life of society. In the socio-philosophical teaching of Jalaluddin Rumi, the views on honoring women and strengthening their position in the spiritual life of society are analyzed scientifically and theoretically.

Key words: gender equality, family relations, social reconciliation, the phenomenon of jealousy, national mentality, society, morality, universal values.

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Introduction

Today, we are living in the 21st century technology age, under the severe crises of globalization. Eastern peoples have long had different views on the issue of women and their activity in the social life of the society. Philosophers of antiquity, Eastern thinkers, scholars of Central Asia and Western philosophers also created their concepts about these issues. Jalaluddin Rumi is one of the great scholars with such a concept.

LITERATURE REVIEW.

In Eastern nations, it is important to observe the culture of compromise in the regulation of family relations. In the family, the couple strengthens the foundation of their livelihood by making compromises. A wise man shows love to his woman and agrees with her. Ignorant people lose their human form and enter animal form through their wickedness, i.e. cruelty to women, violence, humiliation and humiliation. Indeed, it is said in the holy hadith, "Fear God concerning women, because you have received

them as a trust from God." And in "Avesta": "On the first day, Ahuramazda ordered the women: O woman! I created you to give birth to faithful and brave men and nurture them in your loving arms. So that they may destroy the roots of corruption and impurity from the face of the Earth" [12.-B.76-77.] are quoted. A woman is a great gift of the Creator, she is a mother, a friend, a sister, and an active member of society. Looking back, we can see that women were looked down upon and even labeled as Satan.

RESEARCH METHODOLOGY.

According to Rumi, an adulterous woman (man) is not worthy of a chaste woman (man) and God's painful punishment is inevitable for such immoral people. Do not consider an unfaithful person to be your true companion, and do not return impurity to an impure person, because the punishment for this is twice as heavy. As much as it is useless for a farmer to scatter grain on the ground without thawing it, it is just as useless to live with an unfaithful and dishonorable person. No matter how difficult such

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separation is, keep yourself and your body away from such people, says Rumi. And in the 4th verse of Surah Noor of the Holy Qur'an: "Those who slander chaste women (as adulteresses) and then cannot bring four witnesses (to their claims) - flog them eighty lashes and never deny their testimonies. do not accept!" [10.], Jalaluddin Rumi says about chaste women in his work "Ichindagi Ichindadir": "If she has the gem (in her nature) of not doing bad deeds (depravity), even if you do not prevent her, she will certainly works according to its beautiful creation. Your attempt to discredit him is nothing but corruption" [3.-B.33.]. Also, in his works, Jalaluddin Rumi devotes a lot of space to family wisdom written in the Hadith Sharifs. In the 2nd book of the work "Masnavii Ma'navi" the hadith "What Allah hates the most is marrying", in the 3rd book the hadith "It is not taken into account that a drunkard or a drunken man marries a wife or trades" " and in the work "There is no celibacy in Islam", "There is no celibacy in Islam. Interpreting such hadiths as "concentration is a blessing" through various stories and examples in a simple, understandable way, he advises that marriage protects men from various troubles. Allama strongly condemns the destruction of families due to a trivial complaint, women's flirtatiousness, men's excesses in sensuality, and cases of family splits due to similar factors. He says that a man should be careful with his wife and control her, otherwise, such indifference can lead to a man's isnad. A man is a woman's protector and guardian. As there is a price for everything in this world, there is an undoubted price for every compliment and every misdeed of a man to his wife. According to Maulana, the way a man treats the women of his people, he will inevitably receive the same fate from God.

ANALYSIS AND RESULTS.

Jalaluddin Rumi's socio-philosophical teachings also focused on the views on honoring women and strengthening their position in the spiritual life of society. "When a man falls in love with a woman, he realizes his essence, that is, the essence of humanity. A man's love for a woman is like his love for nature," says Rumi. It also honors the love for a woman, and the level of love a person has for a woman indicates his level, advises him to touch his heart with your attention. "A wife is not a lonely lover. He is not only a slave, but also the Creator. Does everyone understand the Creator? "Do all men understand women?" Allama expresses his respect for women. In the words of a mystic, just as the eyes accustomed to the darkness cannot withstand the golden light of the sun, some ignorant people who look down on women as miracles do not want to recognize the intelligence, courage and tenacity of a woman. Some illiterate jurists say, "Don't allow women to walk with their faces uncovered, don't lock them in harems without consent, don't listen to their words. Even after their

death, they say, "Don't write their names in their books." What is the reason for this? The reason is that those who are drowned in the mire of ignorance and ignorance are afraid of a woman's heart. Because they realize that women are superior to them both mentally and emotionally, they try to put pressure on them with such debauchery and senseless harassment, says Maulana and emphasizes: "Men should stand above women. But repeating someone's words does not mean understanding their meaning. During the time of Muhammad (pbuh), women did not cover their faces. They are not born husbands, they grow up to be husbands. "Many women are superior to men in virtue - perfection and courage" [5.-B.94.]. Timothy George Winter, an American scholar and specialist in Islamic studies, says: The Holy Prophet said: the mind of a woman is superior to that of a man, They are the owners of men's hearts [7.-B.110.].

Jalaluddin Rumi acknowledged that the rights of women and men are equal in society with his ideas, and this is firmly established even in the verses of the Holy Quran. The difference of the Mavlaviya sect, founded and developed by Mawlana Rumi, from other sects was that women were the majority among the representatives of this sect. According to the sources, many women who lost their way and entered the path of depravity in their time returned from this path under the influence of Maulana and started a family following the path of piety. A woman nicknamed Tovus, who danced in taverns and accumulated many concubines and property, freed her concubines at the invitation of Rumi, took part in the samo dances organized by Maulana and the Akhi community, and completely renounced her bad habits. Similarly, under the influence of Maulana, a woman named Fakhrinisa took the path of purity by wearing the garment of piety. It is known from the biography of Hazrat Rumi that "light girls" accepted Islam under his influence and began to lead a Sufi life [8.-B.155.]. Gumej Khotun, the wife of Georgian princess and minister Azam Amiriddin Mikail Parvona, gathered the ladies of the court, set the ghazals of Maulana to music, read his poems, and formed a meeting of Nisvans. According to A. Schimmel, a German scholar of Islam, "Rumi had a kind of charm that attracted women of all classes."

Among the reforms being carried out in our country today, a number of things are being done to take care of women, pay attention to the health of mothers and children, and strengthen the position of women in society. As President Sh. Mirziyoyev noted: "We are always indebted to our honorable mothers and honorable women. That is why it is a special part of our program to ease the burden of our women and sisters, who carry the heavy burden of life on their thin shoulders, perform both family chores and social duties seriously, and always live with gratitude takes place". Also, the First President of the Republic of Uzbekistan I. Karimov, recognizing the role of women

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in the development of society and the well-being of the family, said: not even. When a woman is in a good mood, when a woman is satisfied with life, the family is satisfied with life. If the family agrees, the neighborhood and the whole country will agree."

After his son's wedding, Maulana immediately left for Filabad garden near the city to continue "Masnaviyi Ma'naviy". Sources say that he sent a letter to his beloved son Sultan Valad before drowning in the ocean of creativity. In his letter, the poet advises his child Arjumandi: "Today, during your wedding day, I entrust you to take care of Fatima, the light of my eyes and heart, because this is a great test for you. My hope is that you will always treat him in a fair manner and do not withhold your protection from him. If you say that your father's manglai, your own manglai, the name of your children will be bright and pure, every day spent with your wife will be a

wedding, every night will be a wedding evening. If you always hunt it with the trap of your heart, if you never look at it as a prey that does not need to be hunted, because those who look at it are frivolous people, and about them, they only see the image of the world, it is not said for nothing..." [6.-B.111.]

CONCLUSION/RECOMMENDATIONS.

Just as everything in this world has a price, every compliment and every wrong done by a man to a woman has an undoubted price. According to Maulana, the way a man treats the women of his people, he will inevitably receive the same fate from God. In particular, our prophet Muhammad (pbuh): "Fear God about women. Because you received them as a deposit from God. Therefore, men should pay attention to God's trust, preserve and protect it.

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MEANINGS AND ALGEBRA OF CONSTANT FACTORS OF REPEATED “SHREDERIZATION” OF EUROPE

Abstract: A cognitive model of cognition has been developed for the well-known consistent model of a political phenomenon: the repeated “Schroederization” of Europe. The model abstracts 3 real situations: cold winter, reduction in LNG supplies, jump in energy prices and models the values of 6 z-factors affecting them (with given dependent meanings). In addition to 3 independent (uncorrelated) y-factors from the cognitive model [1], which extracted hidden knowledge and information [1], the article constructed new 3 phrases (within the algebra of stable y-factors) for the semantic variables meaning(y₄), meaning(y₅), meaning(y₆), conveying new meanings from previously developed [1] semantic equations. Model digitized “measurements” of all 12=6+6 unmeasured properties of subjects and situations of the phenomenon under consideration were made.

Key words: multisense equation with known and unknown semantic variables, Cognitive Model of Europe's Re-Schröderization.

Language: Russian

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СМЫСЛИ И АЛГЕБРА СТАБИЛЬНЫХ ФАКТОРОВ ПОВТОРНОЙ «ШРЕДЕРИЗАЦИИ» ЕВРОПЫ

Аннотация: Разработана когнитивная модель познания для известной словесной модели политического явления: повторная “шредеризации” Европы. Модель абстрагирует 3 реальные ситуации: холодная зима, сокращение поставок СПГ, скачок цен на энергоресурсы и моделирует значения влияющих на них 6 z-факторов (с заданными зависимыми смыслами). В дополнение к 3 независимым (некоррелированным) y-факторам из познающей модели [1], извлекая скрытые знания и информацию [1], в статье сконструированы новые 3 фразы (в рамках алгебры стабильных y-факторов) для семантических переменных смысл(y₄), смысл(y₅), смысл(y₆), передающие новые смыслы из ранее разработанных [1] смысловых уравнений. Произведены модельно оцифрованные «измерения» всех 12=6+6 неизмеряемых свойств субъектов, ситуаций рассматриваемого явления.

Ключевые слова: многосмысловое уравнение с известными и неизвестными семантическими переменными, Когнитивная Модель Повторной «Шредеризации» Европы.

Введение

Продолжим извлечение скрытых знаний из известной словесной модели политического явления: повторная “шредеризации” Европы. Речь идет об сторонниках и крупном бизнесе

Германии, активно призывающих за укрепление российско-германских энергетических связей через энергетические компании обеих стран. Мы применим познающую модель и «проверим алгеброй истину». Выясним кто прав и насколько

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прав в своих проявлениях тех или иных предложений в адрес структур власти Германии. Проверим алгеброй факторы политики (словесную модель) повторной «шредеризации». Необходимая формализация рассматриваемой ситуации проведена в статье [1]. Познание целого явления проведем аддитивно размышляя. Выберем возможные суммы смыслов, прибавим только существенное, заметное знание. Будем использовать аддитивные формулы, имеющие смысл, не будем рассматривать те формулы, которые не имеют смысла в рассматриваемом аспекте. При переходе от реального (обязательно присутствующего в словесной модели) к абстрактному происходит фиксация соответствия между реальными объектами, их свойствами и абстрактными числовыми параметрами, переменными, функциями связи свойств между собой. Эти функции ограничивают области определения аргументов и одна из них требует нахождения таких значений особо выделенных переменных, при которых целевая функция достигает экстремального значения (или заданного значения). Исследуем только стабильные показатели, относящиеся к явлению «повторная шредеризация Европы».

Исходные данные

Исходными данными является словесная модель повторной "шредеризации" Европы. Словесная модель имеет зависимые по смыслам показатели, имеющие 6 смыслов:

- 1) активные выступления бывшего канцлера Германии Герхарда Шредера за укрепление российско-германских энергетических связей, так как он создал все условия для реализации трубопроводного проекта "Северный поток-1", удешевляющий потребляемый газ (смысл(z_1)).
- 2) затянувшийся вооруженный конфликт в Украине(смысл(z_2));
- 3) усиливающаяся работа лоббистов политики "шредеризации" Европы, проводимая в интересах государственных структур или клептократии (смысл(z_3));
- 4) налаженные (западноевропейскими энергетическими компаниями) прочные личные и деловые связи с советской, а затем и с российской газовой отраслью (смысл(z_4));
- 5) требования стран Западной Европы (с учетом факторов из пунктов 2,3,4) возобновить поставки газа из России (смысл(z_5));
- 6) высокие цены на энергоресурсы (смысл(z_6)).

Эти разнородные по содержанию смыслов показатели зависят от 3-х факторов, независимых друг от друга:

- 1) холодная зима;
- 2) сокращение поставок СПГ;
- 3) скачок цен на энергоресурсы (критические сырьевые материалы).

Проявления показателя z_1 с смыслом(z_1) изменяются во времени, их значения неизмеримы, но моделируются модельно. Динамика модельных значений проявлений показателя z_1 отличается от динамики модельных значений проявлений другого z -показателя. Такие же условия присущи и другим z -показателям, отличающимися значениями своих дисперсий, но имеющих средние арифметические, равные нулю. Ниже будет показана визуальная адекватность различий динамик реальным различиям. Адекватность модельной кривой к субъективной кривой субъективна и не доказуема. В исходных данных не заданы смыслы y -переменных (y_4, y_5, y_6). Причина этого в том, что в словесной модели приведены только существенные по смыслу 3 фактора. Но при моделировании явления повторной "шредеризации" Европы количество y -переменных может быть любым. Здесь в данной статье мы вводим новое условие: полагаем количество y -переменных равным количеству z -переменных ($=6$).

Это условие привело, как показано ниже, к тому, что дисперсии y -переменных (y_4, y_5, y_6) смоделировались пренебрежимо малыми. Малая дисперсия отображает слабую изменчивость y -переменной, следовательно наша модель должна выявлять (помимо существенных) и постоянно действующие факторы явления повторной "шредеризации" Европы.

Постановка задачи: построить познающую модель (извлечь скрытые знания и информацию), дополняющую исходные данные. Объектами, из которых извлекаются знания, являются 3 смысловых уравнения, неизвестные смыслы семантических переменных соответствуют формулам y -переменных (y_4, y_5, y_6) с дисперсиями, близкими 0. Найти фразы, передающие новые смыслы: смысл(y_4), смысл(y_5), смысл(y_6).

Словесная модель повторной "шредеризации" Европы выделяет эти факторы в качестве «управляемых» политиками «в интересах Европы». Открыто озвучивают именно эти смыслы, легко воспринимаемые как «внизу», так и «наверху». В верхах приводят неоспоримые доводы в пользу приоритетности этих 3-х факторов, а остальные 6 показателей должны зависеть (подчиняться) от хотя бы одного управляющего фактора. Познающая модель должна извлечь скрытые знания и информацию, дополняющую исходные данные.

Применяемая система многосмысловых уравнений

Многосмысловое уравнение конструируется из смыслового матричного равенства вида: $\text{смысл}(Y_{m6}) = \text{смысл}(Z_{m6}C_{66})$ [1], оно служит исходным условием. Ищется и находится одно семантическое решение смыслового

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многомерного уравнения вида
смысл(y_1) \oplus ... \oplus смысл(y_6)=смысл($Z_{m6}c_1$) \oplus ... \oplus
смысл($Z_{m6}c_6$), где $c_j^T=(c_{1j},c_{2j},c_{3j},c_{6j})$, $y_j^T=(y_{1j},\dots,y_{mj})$,
 $Z_{m6}=\{z_i\}$, $z_i^T=(z_{1j},z_{2j},z_{3j},z_{mj})$, $j=1,\dots,6$. Наш мозг по
умолчанию включает аддитивное мышление. Выбирая эти возможные суммы смыслов, мы прибавляем только существенное, заметное. В многомерной математической модели введены числовые параметры, переменные, функции связи, соответствующие реальным свойствам информационных многомерных объектов разных типов. Тип объектов, их свойств отражается в смыслах свойств объектов [2-3]. В статье [11] найдены 3 смысла 3-х сумм смыслов свойств (z-переменных) для 3-х у-переменных (y_1, y_2, y_3).

В соответствии с значениями $\lambda_4, \lambda_5, \lambda_6$ из пары смоделированных матриц (C_{66}, Λ_{66}) проставляются числовые параметры $\{c_{1j}, \dots, c_{6j}$, $j=4,5,6\}$ в 3 уравнениях системы многосмысловых уравнений:

$$\text{смысл}(y_4)=\text{смысл}(z_1)*c_{14}\oplus\text{смысл}(z_2)*c_{24}\oplus\text{смысл}(z_3)*c_{34}\oplus\text{смысл}(z_4)*c_{44}\oplus\text{смысл}(z_5)*c_{54}\oplus\text{смысл}(z_6)*c_{64};$$

$$\text{смысл}(y_5)=\text{смысл}(z_1)*c_{15}\oplus\text{смысл}(z_2)*c_{25}\oplus\text{смысл}(z_3)*c_{35}\oplus\text{смысл}(z_4)*c_{45}\oplus\text{смысл}(z_5)*c_{55}\oplus\text{смысл}(z_6)*c_{65};$$

$$\text{смысл}(y_6)=\text{смысл}(z_1)*c_{16}\oplus\text{смысл}(z_2)*c_{26}\oplus\text{смысл}(z_3)*c_{36}\oplus\text{смысл}(z_4)*c_{46}\oplus\text{смысл}(z_5)*c_{56}\oplus\text{смысл}(z_6)*c_{66}.$$

В многомерной математической модели переменные делятся на 2 вида [2-3]: z-переменные с известными именами-смыслами $\text{смысл}(z_1), \dots, \text{смысл}(z_6)$ и у-переменные с неизвестными именами-смыслами $\text{смысл}(y_4), \dots, \text{смысл}(y_6)$, объекта могут образовать новый смысл (у-переменную) или нет [1-3].

После удаления слагаемых с «весами» c_{ij} , величины которых не удовлетворяют критерию быть индикатором скрытых знаний [2-3], количество слагаемых в уравнениях с неизвестными новыми смыслами $\text{смысл}(y_4), \text{смысл}(y_5), \text{смысл}(y_6)$ сократится. И система многосмысловых уравнений будет содержать меньшее число известных смыслов. Более «короткие» суммы смыслов легче осмысливать для конструирования 3-х фраз для 3-х новых смыслов (новых семантических переменных) $\text{новый_смысл}(y_4), \text{новый_смысл}(y_5), \text{новый_смысл}(y_6)$, дополняющих исходные смыслы (исходные семантические переменные) $\text{смысл}(y_1), \text{смысл}(y_2), \text{смысл}(y_3)$ [1]). Метод сложного преобразования исходных семантических переменных в новые семантические переменные называется когнитивной моделью повторной "шредеризации" Европы.

Требуемые фразы, отражающие смыслы неизвестных 3 смыслов у-переменных, можно

сконструировать, если смоделировать 4 числовых объектов они смоделированы в [1] (Таблица 1):

а) пару матриц собственной структуры (Λ_{66}, C_{66});
б) матрицы значений некоррелированных изменчивостей Y_{m6} , коррелированных изменчивостей (отклонений от 0) Z_{m6} , соответствующих своим системам многосмысловых уравнений с известными и неизвестными семантическими (смысловыми) переменными.

Новые моделируемые 2 матрицы в нашей модели обладают свойствами [4-9]: ортонормированная матрица C_{66} собственных векторов $c_j=(c_{1j},c_{2j},\dots,c_{6j})^T$, расположенных по столбцам матрицы $C_{66}=[c_1|c_2|\dots|c_6]$ согласована со своим спектром Λ_{66} корреляционной матрицы $R_{66}=(1/m)Z_{m6}^T Z_{m6}$, $\Lambda_{66}=\text{diag}(\lambda_1,\dots,\lambda_6)$ таким образом, что выполняются равенства $R_{66}C_{66}=C_{66}\Lambda_{66}$, $C^T C=CC^T=I_{66}$, $\text{diag}(R_{66})=(1,\dots,1)$, $\text{tr}(R_{66})=1+1+\dots+1=\text{tr}(\Lambda_{66})=\lambda_1+\dots+\lambda_6=6$, $\lambda_1\geq\dots\geq\lambda_6\geq 0$. В решаемой ниже Оптимизационной Задаче (I_{66}, I_{66})=>(C_{66}, Λ_{66}) целевой функция $\lambda_1+\dots+\lambda_6$ равна 6 при изменяемых значениях элементов матрицы C_{66}, Λ_{66} , ограничения: $\text{diag}(R_{66})=(1,\dots,1)$, $C_{66}^T C_{66}=C_{66} C_{66}^T=I_{66}$, Матрицы U_{m6} и Y_{m6} такие, что $(1/m)U_{m6}^T U_{m6}=I_{66}$, $Y_{m6}=Z_{m6}C_{66}$, $C_{66}=(1/m)Z_{m6}^T Y_{m6}$, в матрице Y_{m6} элементы j-го столбца $y_{1j}, y_{2j}, \dots, y_{mj}$ (j-ая у-переменная, $j=1,\dots,6$) имеют среднее арифметическое, равное нулю: $(1/m)(y_{1j}+y_{2j}+\dots+y_{mj})=0$, и дисперсию равную λ_j : $(1/m)(y_{1j}^2+y_{2j}^2+\dots+y_{mj}^2)=\lambda_j$, сумма дисперсий равна 6: $\lambda_1+\dots+\lambda_6=6$. Матрицы $Z_{m6}, Y_{m6}=Z_{m6}C_{66}$, интерпретируются как многомерные выборки. Стандартизованные коррелированные z-переменные являются многомерными данными, объединенных в матрицу Z_{m6} , в которой элементы j-го столбца $z_{1j}, z_{2j}, \dots, z_{mj}$ (j-ая переменная, $j=1,\dots,6$) имеют среднее арифметическое равное нулю: $(1/m)(z_{1j}+z_{2j}+\dots+z_{mj})=0$, и дисперсию равную 1: $(1/m)(z_{1j}^2+z_{2j}^2+\dots+z_{mj}^2)=1$, сумма дисперсий равна 6. Элементы матрицы C_{66} интерпретируются как индикаторы знаний. Матрица $Y_{m6}=Z_{m6}C_{66}$, в которой элементы j-го столбца $y_{1j}, y_{2j}, \dots, y_{mj}$ (j-ая у-переменная, $j=1,\dots,6$) имеют среднее арифметическое равное нулю: $(1/m)(y_{1j}+y_{2j}+\dots+y_{mj})=0$, и дисперсию равную λ_j : $(1/m)(y_{1j}^2+y_{2j}^2+\dots+y_{mj}^2)=\lambda_j$, сумма дисперсий равна 6: $\lambda_1+\dots+\lambda_6=6$ [10-13]. Матрица $Y_{m6}=Z_{m6}C_{66}$, интерпретируется как многомерная выборка. Стандартизованные коррелированные z-переменные – данные, объединенные в матрицу Z_{m6} , в которой элементы j-го столбца $z_{1j}, z_{2j}, \dots, z_{mj}$ (j-ая переменная, $j=1,\dots,6$) имеют среднее арифметическое равное нулю: $(1/m)(z_{1j}+z_{2j}+\dots+z_{mj})=0$ и дисперсию, равную 1: $(1/m)(z_{1j}^2+z_{2j}^2+\dots+z_{mj}^2)=1$, сумма дисперсий равна 6. Матрица Z_{m6} интерпретируется как многомерная выборка [14,15].

Применяемые вычислительные модели

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приведены в статье [[1], вычисленные матрицы $\Lambda_{66}=\text{diag}(3.0024,1.0423,1.0423,0.9000,0.0100,0.0100)$, Y_{m6} , Z_{m6} , $Y_{m6}=Z_{m6}C_{66}$, приведены в Таблицах 2,3.

Когнитивная модель "повторной шредеризации" Европы

Поставим в соответствие 3 реальным ситуациям: холодная зима, сокращение поставок СПГ и скачок цен на энергоресурсы, 3 у-переменные. Шесть z-переменные: активное выступление бывшего канцлера Германии Герхарда Шредера политические, требования, прочные личные и деловые связи, затянувшийся вооруженный конфликт в Украине, будучи объединены в ту или иную комбинацию смыслов, образуют 3 новых смысла 3-х u-переменных новый_смысл(y_1), новый_смысл(y_2), новый_смысл(y_3), фразы которых выражают новые знания, дополняющие знания из исходного знания $\text{смысл}(y_1) \cup \text{смысл}(y_2) \cup \text{смысл}(y_3)$. Исходными данными когнитивной (познающей) модели являются словесная модель повторной "шредеризации" Европы, имеющая смыслы 6 своих показателей, т.е. вернуться к привычному порядку вещей и потреблять российский газ. Для этого понадобится всего три условия:

- 1) холодная зима
- 2) сокращение поставок СПГ;
- 3) скачок цен на энергоресурсы (критические сырьевые материалы).

Этим условиям поставим в соответствие 6 независимых факторов, они являются на фиксированный момент времени независимыми друг от друга, но начинающие влиять через некоторое время. При этом они управляются государством с помощью 2 факторов: «сокращение поставок СПГ» ($\text{смысл}(y_2)$), «скачок цен на энергоресурсы» ($\text{смысл}(y_3)$). Еще одним влияющим по смыслу на эти факторы является незави симый климатический фактор «холодная зима» $\text{смысл}(y_1)$, присоединяемый к нашим независимым 2 факторам. Эти 3 u-фактора являются независимыми на фиксированных моментах времени. Порядок нумерации смыслов y_1, y_2, y_3 назначим в соответствии с убыванием дисперсий: $\text{disp}(y_1) > \text{disp}(y_2) > \text{disp}(y_3)$.

Они (u-переменные) зависят от смыслов z-переменных:

Посредством одновременно моделируемых 2-х матриц (Λ_{66}, C_{66}), где матрице индикаторов C_{66} , где индикаторы легко заметных знаний назначены экспертом. При решении Оптимизационной Задачи в матрице C_{66} могут появиться другие заметные значения, их мы должны признать индикаторами и включить соответствующие смыслы в уравнения системы многосмысловых уравнений. Но мы познаем это явление, применяя интеллектуальный анализ только в рамках

матричного равенства вида когнитивной (познающей) модели, учитывающей словесную модель повторной "шредеризации" Европы [1].

Конструирование новых смыслов, дополняющих новым знанием неизвестные смыслы (у u-переменных y_1, y_2, y_3 были заданы исходные смыслы) u-переменных y_4, y_5, y_6 следующее. Новые смыслы u-переменных y_4, y_5, y_6 конструируются (учитывая модельные значения сил влияния и смыслы z-переменных своего уравнения) из смысловых уравнений:

$$\begin{aligned}\text{смысл}(y_6) &= \text{смысл}(z_1) * 0,3754 \oplus \text{смысл}(z_6) * 0,9269; \\ \text{смысл}(y_5) &= \text{смысл}(z_3) * 0,5758 \oplus \text{смысл}(z_4) * 0,2778 \oplus \\ &\text{смысл}(z_5) * 0,6861 \oplus \text{смысл}(z_6) * 0,3467; \\ \text{смысл}(y_4) &= \text{смысл}(z_1) * 0,4612 \oplus \text{смысл}(z_2) * 0,4009 \oplus \\ &\text{смысл}(z_4) * 0,7787 \oplus \text{смысл}(z_5) * 0,1397.\end{aligned}$$

Учитывая заданные исходные смыслы имеем фразы для новых неизвестных смыслов u-переменных y_4, y_5, y_6 . Новый $\text{смысл}(y_6) =$ «постоянно (с практически нулевой дисперсией $\lambda_6 = 0.0100$) идет давление (с силой $c_{16}^2 = 0,3754^2$) на власть по поводу укрепления российско-германских энергетических связей, так как растут высокие цены на энергоресурсы ($\text{смысл}(z_6)$ (с силой $c_{66}^2 = 0,9269^2$))». Новый $\text{смысл}(y_5) =$ «постоянные усилия лоббистов, налаженные деловые связи (постоянно (с практически нулевой дисперсией $\lambda_5 = 0.0100$)) начинают требовать возобновления поставок газа из России». Смысл условно постоянного фактора $\text{смысл}(y_4) =$ «при растущих «активных выступлениях сторонников Герхарда Шредера за укрепление российско-германских энергетических связей (с силой $c_{14}^2 = (0.4612)^2$, $\text{смысл}(z_1)$) компании Германии (из-за потери рынков во время затянувшейся войны в Украине (с силой $c_{24}^2 = (0.4009)^2$, $\text{смысл}(z_2)$) возобновляют (с силой $c_{44}^2 = (0.7787)^2$, $\text{смысл}(z_4)$) налаженные прочные личные и деловые связи с российской газовой отраслью, не смотря на высокие цены на энерго ресурсы (с силой $c_{64}^2 = (0.1397)^2$, $\text{смысл}(z_6)$)». Из спектра $\Lambda_{66} = \text{diag}(3.0024, 1.0423, 1.0423, 0.9000, 0.0100, 0.0100)$ выделяем дисперсию $\lambda_4 = 0.9$, отражающую слабую изменчивость, меньшую 1-дисперсии стандартизованной z-переменной. Дисперсия $\lambda_4 = 0.9000$ характеризует слабую изменчивость значений ($y_{1j}, y_{2j}, \dots, y_{mj}$) j-ой u-переменной ($j = 1, \dots, 6$). Каждая u-переменная имеет среднее арифметическое равно нулю: $(1/m)(y_{1j} + y_{2j} + \dots + y_{mj}) = 0$ и дисперсию равную λ_j : $(1/m)(y_{1j}^2 + y_{2j}^2 + \dots + y_{mj}^2) = \lambda_j$. У нас $\lambda_4 = 0.9 < 1 = \text{disp}(z_j)$, $j = 1, \dots, 6$. Каждая j-ая z-переменная имеет ряд значений ($z_{1j}, z_{2j}, \dots, z_{mj}$), $j = 1, \dots, 6$, имеет среднее арифметическое равно нулю: $(1/m)(z_{1j} + z_{2j} + \dots + z_{mj}) = 0$, и дисперсию равную 1: $(1/m)(z_{1j}^2 + z_{2j}^2 + \dots + z_{mj}^2) = 1$, сумма дисперсий равна 6. Дисперсия $\lambda_4 = 0.9 < 1$ практически близка к 1, является малой величиной среди всех дисперсий,

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поэтому соответствующий ряд значений $(1/m)(y_{1j}^2 + y_{24}^2 + \dots + y_{m4}^2) = \lambda_4 = 0.9$ полагаем мало изменчивым, а фактор y_4 постоянно действующим фактором явления «повторная "шредеризация" Европы».

Теперь выявим смысл фактора y_4 . Фраза, выражающая смысл (y_4) содержит новые знания, дополняющие знания, выраженные в (y_6) , в (y_5) . Три фразы, отражающие смыслы 3-х y -переменных, выражают скрытые новые извлеченные при помощи модели знания. Новый смысл $(y_4) = \text{«постоянные усилия налаженные деловые связи (постоянно (с практически нулевой дисперсией $\lambda_4 = 0.900$)) разными способами требуют возобновления поставок газа из России»}$.

Для явления «повторная "шредеризация" Европы» модель выявила 2 типа скрытых y -факторов: постоянно присутствующие факторы их отражают y -переменные y_4, y_5, y_6 и y -факторы, наблюдаемые (их обнаружила модель и в цифрах обосновала) в результате реальных действий субъектов политики, бизнеса – их отражают y -переменные y_1, y_2, y_3 . Выше мы изложили как конструировать новые смыслы для y -переменных y_1, y_2, y_3 , дополняющие их заданные исходные смыслы. При этом фразы осмысления конструировали в соответствии с убыванием дисперсий y -переменных y_1, y_2, y_3 : $\text{disp}(y_3) < \text{disp}(y_2) < \text{disp}(y_1)$.

В статье [1] были сконструированы смыслы 3-х y -переменных с большими и заметными дисперсиями. Большая дисперсия присуща фактору, подверженному сильным воздействиям большого количества случайных разного вида

реальных воздействий. Воздействия отражают действия тех субъектов, которые скрыты в смыслах y -переменных $\text{смысл}(y_1)$, $\text{смысл}(y_2)$, $\text{смысл}(y_3)$ с фразами, раскрывающими их смыслы: $\text{имя-смысл}(y_1) = \text{«холодная зима»}$, $\text{имя-смысл}(y_2) = \text{«сокращение поставок СПГ»}$, $\text{имя-смысл}(y_3) = \text{«скачок цен на энергоресурсы»}$.

Три y -переменные с большими и заметными дисперсиями имеют и более широкие трактовки смыслов 6 сил проявлений исходных 6 z -факторов повторной "шредеризации" Европы». Более широкие трактовки смыслов 6 сил проявлений исходных 6 z -факторов видны в 3-х следующих фразах. Краткая фраза для $\text{новый_смысл}(y_1) = \text{«растущее многостороннее давление (из-за холодной зимы) компаний и лоббистов политики "шредеризации" Европы»}$. Краткая фраза для $\text{нового_смысла}(y_2) = \text{«сокращение поставок СПГ из-за «затянувшегося вооруженного конфликта в Украине, когда Западная Европа начинает требовать возобновления поставок газа из России»}$. Краткая фраза для $\text{нового_смысла}(y_3) = \text{«Так как затянулся вооруженный конфликт в Украине, выросли очень высокие цены на рынке на энергоресурсы, то связанные с газовой отраслью компании, и лоббисты политики "шредеризации" Западной Европы, официально действуют»}$. Иначе говоря, результат «официально действующих сил является следствием влияния разных значений 6 сил проявлений исходных z -факторов явления «повторная "шредеризация" Европы».

Таблица 1. Матрица $C_{66} = \{c_{ij} = \text{corr}(z_i, y_j)\}$ (z, y -корреляций)

	c 1	c 2	c 3	c 4	c 5	c 6	
meaning(z ₁)	0.8038	0.0000	0.0086	0.4612	0.0149	0.3754	1.0000
meaning(z ₂)	-0.0423	0.7073	0.0751	0.4009	0.5758	-0.0045	1.0000
meaning(z ₃)	0.1964	-0.0005	0.9404	-0.0001	0.2778	0.0009	1.0000
meaning(z ₄)	0.5509	0.0004	0.3000	0.7787	0.0093	-0.0031	1.0000
meaning(z ₅)	0.0000	0.7069	0.1000	0.1397	0.6861	0.0018	1.0000
meaning(z ₆)	0.1000	0.0000	0.1000	-0.0266	0.3467	0.9269	1.0000
	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	6.0000
meaning y ₁		meaning y ₂	meaning y ₃	meaning y ₄	meaning y ₅	meaning y ₆	

Таблица 2. Матрица y -изменчивостей Y_{m6}

№	y ₁	y ₂	y ₃	y ₄	y ₅	y ₆
1	-0.2386	0.4284	-1.8327	0.5010	0.0321	-0.0643

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2	-1.5037	0.1322	-0.8649	1.7690	-0.0950	0.0752
3	2.3121	-0.5818	1.2071	-0.1654	-0.2055	-0.0270
4	0.7477	-0.3094	0.3644	1.1279	0.0256	0.1988
5	-2.2487	0.9907	-1.3285	0.9105	0.0496	-0.0152
6	-0.9180	2.1002	0.0836	-0.8021	-0.0919	-0.1277
7	1.4435	0.8794	1.5572	-0.7148	0.1130	-0.0750
8	-0.5658	-0.6662	0.5070	0.1298	0.2313	0.0539
9	0.7473	-0.8356	-2.3867	-1.2882	-0.0427	-0.0405
10	-0.1103	-0.6119	0.4275	-1.3908	-0.0236	0.1855
11	-0.3595	-1.6593	-0.8872	-0.0416	-0.1291	0.0628
12	0.1238	1.8972	-0.2234	1.4390	-0.0795	0.0628
13	-0.7188	0.2329	-0.1951	-0.9960	0.1253	-0.0330
14	1.2888	-0.0248	0.6514	-0.2245	-0.0510	0.1033
15	-5.0691	-0.0984	0.3001	-1.2279	-0.0470	0.0326
16	1.1697	-0.5597	-0.7322	-1.4448	0.1093	-0.0322
17	3.9944	0.4052	-1.1593	-0.2814	-0.0042	-0.0126
18	-0.3495	-0.2919	1.6062	0.6937	-0.0287	-0.1904
19	1.0409	0.7704	0.2275	1.1165	0.1528	-0.0546
20	-1.0526	-2.4784	0.8387	1.0627	-0.0421	-0.1770
21	0.3991	1.1695	1.4126	-0.5523	-0.0595	0.1370
22	-1.8132	0.5079	0.4125	-0.7826	-0.0305	-0.0566
23	-0.2658	-1.1346	0.3349	0.7899	0.1390	0.0819
24	1.9463	-0.2622	-0.3208	0.3724	-0.0478	-0.0878
mean	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
disp	3.0024	1.0423	1.0423	0.9000	0.0100	0.0100

Таблица 3. Матрица z-изменчивостей Z_{m6}

№	Z_1	Z_2	Z_3	Z_4	Z_5	Z_6
1	-0.2442	-1.3390	-0.8883	-0.5612	-1.3086	-0.1426
2	-1.8071	-0.0198	-1.9054	-1.5051	-0.2735	-0.2422
3	-0.8631	0.3244	-1.1909	-1.2230	0.4148	-0.1306
4	0.4183	-0.2486	0.0927	0.1894	-0.1817	0.1494
5	-1.9407	-0.5163	-1.8277	-2.1179	-0.4365	-0.3033
6	-0.4871	-0.6679	1.5657	-0.0296	-0.5191	0.2257
7	0.8008	-0.7543	2.2992	0.5668	-0.3066	0.5224
8	-1.1939	0.0112	1.2048	-0.6019	0.1236	0.1624
9	-0.7954	-0.8416	1.3622	-0.1978	-0.7544	-0.0544
10	-0.5323	1.2180	0.5254	-0.0572	1.1424	0.0399
11	-2.9769	1.2692	-0.5089	-2.0893	1.1930	-0.3856
12	0.6748	-0.9337	-0.1674	0.9240	-1.2460	-0.0094
13	-0.1698	0.1097	-0.6359	-0.6222	0.2991	-0.1957
14	2.1733	0.8339	-0.0516	2.4273	0.2880	0.0908
15	0.5034	1.4007	-0.0666	0.4340	1.3399	-0.0505
16	2.2620	0.6254	0.9894	1.8153	0.7012	0.2334
17	-1.7973	-0.5244	-0.2539	-1.3040	-0.5203	-0.3211
18	1.5974	0.6387	0.3882	1.7548	0.3555	0.1139

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19	-0.5576	-1.2335	-1.4411	-1.5009	-0.9014	-0.0727
20	-1.3763	0.8146	0.1850	0.1872	0.2142	-0.3088
21	0.7736	-0.8881	0.1812	0.1854	-0.6253	-0.0268
22	1.2574	-0.1586	0.1064	0.0769	0.2891	0.3457
23	1.4025	1.2340	0.4274	1.1602	1.1911	0.1973
24	2.8782	-0.3541	-0.3897	2.0889	-0.4784	0.1629
mean	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
st ev	2.1287	0.6795	1.0371	1.5468	0.5520	0.0508

Визуализация числовых характеристик знаний о 3-х постоянно действующих факторах модели повторной "шредеризации" Западной Европы

Проведем визуализацию знаний (в виде изображений взаимных динамик кривых) о модельных «весах», их изменчивостях, линейных комбинациях x z -переменных, y -переменных с смыслами $\text{смысл}(y_6)$, $\text{смысл}(y_5)$, $\text{смысл}(y_4)$. Извлеченные знания дополняют знания из смыслов y -переменных y_1 , y_2 , y_3 «при холодной зиме», «при сокращении поставок СПГ», «при скачке высоких цен на энергоресурсы». Правая часть смыслового уравнения $\text{смысл}(y_6) = \text{смысл}(z_1) * 0,3754 \oplus \text{смысл}(z_6) * 0,9269$ визуализирует смысл, передаваемый фразой «при малых колебаниях высоких цен на энергоресурсы ($\text{смысл}(z_6)$), слабо коррелированного с пропагандой шредеризации, изменчивости z -переменных z_1 , z_6 слабо коррелируют: $r_{16} = \text{сог}(z_1, z_6) = 0,2346$. Эта слабая корреляция видна по 2 независимым траекториям кривых « z_1 », « z_6 » на Рисунке 5. Независимость $c_{16} = \text{сог}(z_1, y_6) = 0,0001$ отчетливо видна по независимым траекториям двух кривых « z_1 », « y_6 » (Рисунок 5). Сильная зависимость $c_{66} = \text{сог}(z_6, y_6) = 0,995$ отчетливо видна по независимым траекториям двух кривых « z_1 », « y_6 » (Рисунок 5). Сильную связь траекторий кривых « y_6 », « z_6 » показывает Рисунок 5.

Правая часть смыслового уравнения $\text{смысл}(y_5) = \text{смысл}(z_3) * 0,5758 \oplus \text{смысл}(z_4) * 0,2778 \oplus \text{смысл}(z_5) * 0,6861 \oplus \text{смысл}(z_6) * 0,3467$ визуализирует смысл, передаваемый Рисунком 6. Взаимные траектории подтверждают сильные парные связи между z -переменных z_3, z_4, z_5 и их слабые связи с z -переменной z_1 . Из-за этих заметных связей тройка (z_3, z_4, z_5) вошла в формулу $y_5 = (z_3) * 0,5758 + (z_4) * 0,2778 + (z_5) * 0,6861 + (z_6) * 0,3467$ и их смыслы суммируются при конструировании смысла (y_5). Заметная зависимость $c_{35} = \text{сог}(z_3, y_5) = 0,2437$ отчетливо видна по независимым траекториям двух кривых

« z_1 », « y_5 » (Рисунок 6). Также независимы пары (z_4, y_5), (z_5, y_5). Заметная зависимость $c_{65} = \text{сог}(z_6, y_5) = 0,3467$ видна по зависимым траекториям двух кривых « z_6 », « y_5 » (Рисунок 6). Сильную связь траекторий кривых « y_5 », « z_4 » показывает Рисунок 6. Слабая зависимость $c_{45} = \text{сог}(z_4, y_5) = 0,2778$ видна по зависимым траекториям двух кривых « z_4 », « y_5 » (Рисунок 6). Таким образом 2 z -переменные z_3, z_5 в наибольшей степени влияют на y -переменную y_5 , а 2 z -переменные z_4, z_6 в меньшей степени влияют на y -переменную y_5 . Полученная количественная согласованность связей 4-х z -переменных с y -переменной y_5 с «весами» $c_{35} = 0,5758$, $c_{45} = 0,2778$, $c_{55} = 0,6861$, $c_{65} = 0,3467$ отражает познавательную способность модели повторной "шредеризации" Европы.

Правая часть смыслового уравнения $\text{смысл}(y_4) = \text{смысл}(z_1) * 0,4612 \oplus \text{смысл}(z_2) * 0,4009 \oplus \text{смысл}(z_4) * 0,7787 \oplus \text{смысл}(z_5) * 0,1397$ визуализирует смысл, передаваемый Рисунком 7. Взаимные траектории подтверждают: сильная зависимость $c_{44} = \text{сог}(z_4, y_4) = 0,7787$, отчетливо видна по независимым траекториям двух кривых « z_4 », « y_4 » (Рисунок 7). Заметно зависимы пары (z_1, y_4), (z_2, y_4). Заметная зависимость $c_{14} = \text{сог}(z_1, y_4) = 0,4612$ видна по зависимым траекториям двух кривых « z_1 », « y_4 » (Рисунок 7). Слабая зависимость z -переменной z_5 с y -переменной y_4 : $c_{45} = \text{сог}(z_5, y_4) = 0,1397$ видна по слабо зависимым траекториям двух кривых « z_5 », « y_4 » (Рисунок 7). Ведущими z -переменными, количественная согласованность связей с y -переменной y_4 , являются 4 z -переменные с «весами» $c_{14} = 0,4612$, $c_{24} = 0,4009$, $c_{44} = 0,7787$, $c_{54} = 0,1397$ отражает познавательную способность модели повторной "шредеризации" Европы. Эти 4 z -переменные по смыслам отличаются от смыслов 4-х z -переменных, влияющих на y -переменную y_5 (смотрите соответствующие рисунки в статье [1]).

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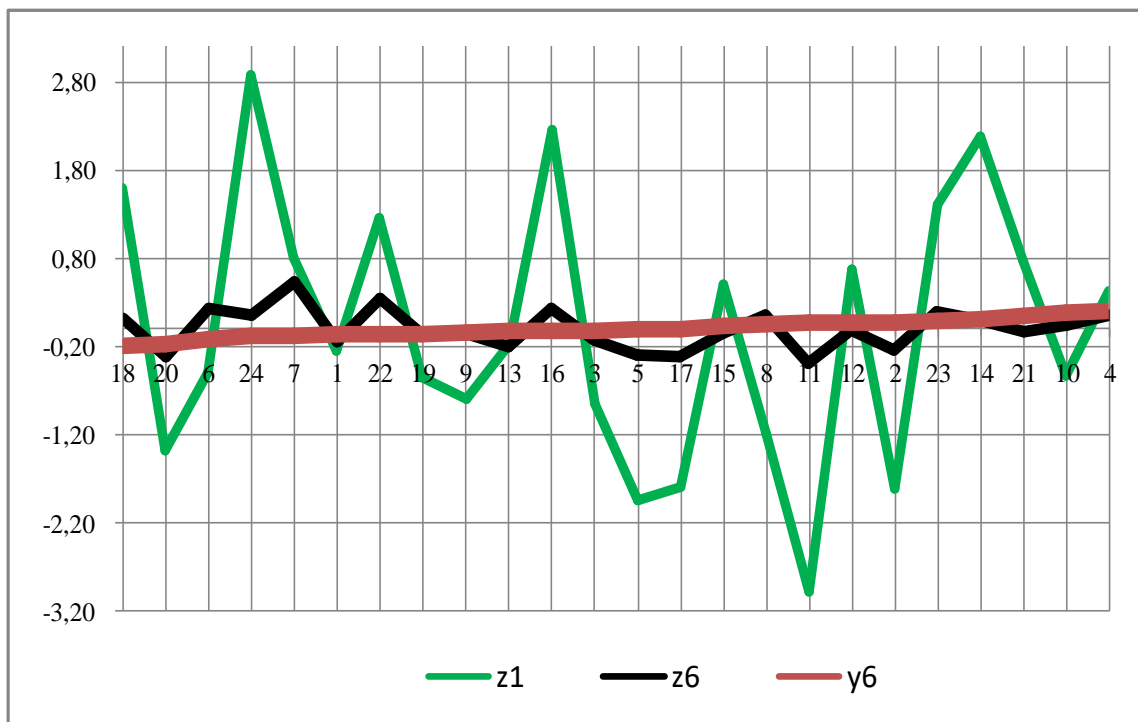


Рисунок 1. Взаимная динамика кривых «z1», «z6», влияющих на кривую «y6», смысл(y6)= «постоянно (с практически нулевой дисперсией $\lambda_6=0.0100$) идет давление (с силой $c^2_{16}=0.3754^2$) на власть по поводу укрепления российско-германских энергетических связей, так как растут высокие цены на энергоресурсы (смысл(z6), с силой $c^2_{66}=0.9269^2$)»

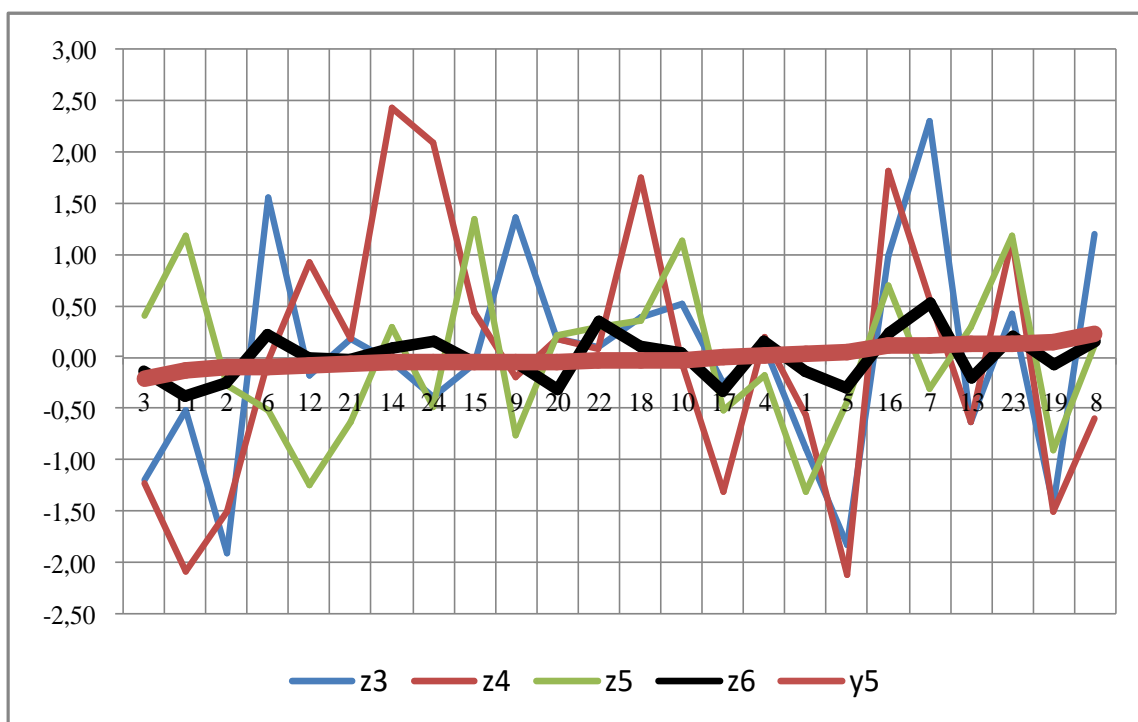


Рисунок 2. Взаимная динамика кривых «z3», «z4», «z5», «z6», влияющих на кривую «y5», смысл(y1)= «постоянные усилия лоббистов, налаженные деловые связи (постоянно (с практически нулевой дисперсией $\lambda_5=0.0100$)) начинают требовать возобновления поставок газа из России»

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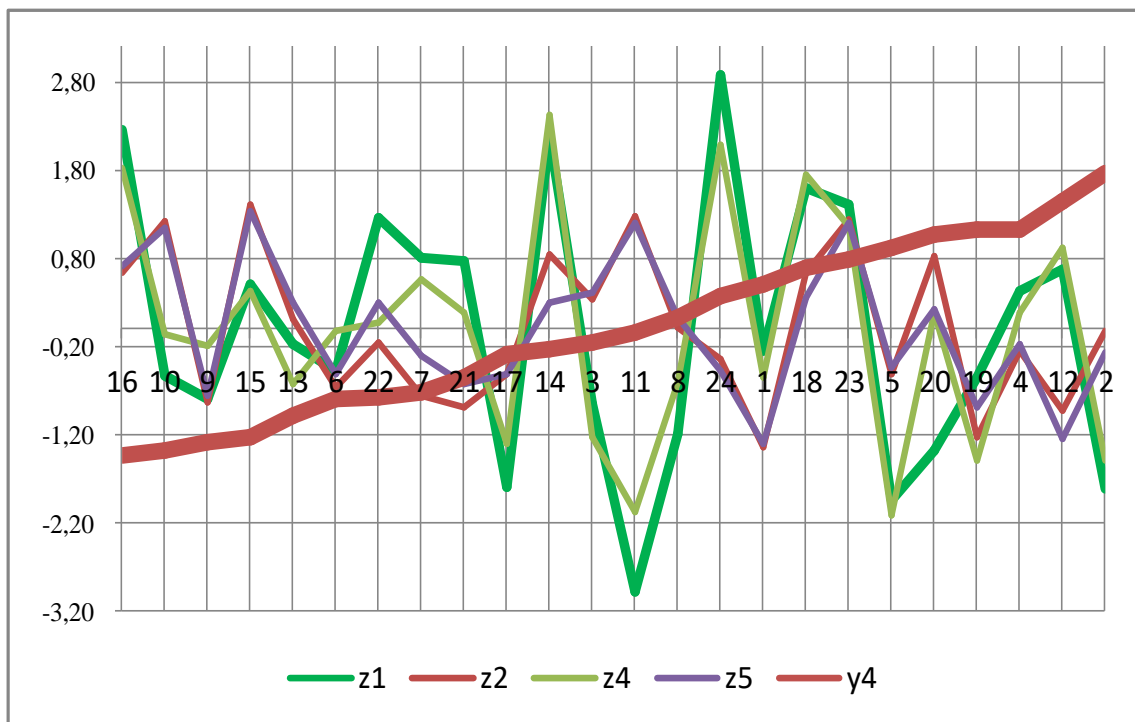


Рисунок 3. Взаимная динамика кривых «z1», «z2», «z4», «z5», «z6», влияющих на кривую «y4», смысл(y4) = «при растущих «активных выступлениях сторонников Герхарда Шредера за укрепление российско-германских энергетических связей (с силой $s^2_{14}=(0.4612)^2$, смысл(z1)) компании Германии (из-за потери рынков во время затянувшейся войны в Украине (с силой $s^2_{24}=(0.4009)^2$, смысл(z2)) возобновляют (с силой $s^2_{44}=(0.7787)^2$, смысл(z4)) налаженные прочные личные и деловые связи с российской газовой отраслью, не смотря на высокие цены на энергоресурсы (с силой $s^2_{64}=(0.1397)^2$, смысл(z6))»

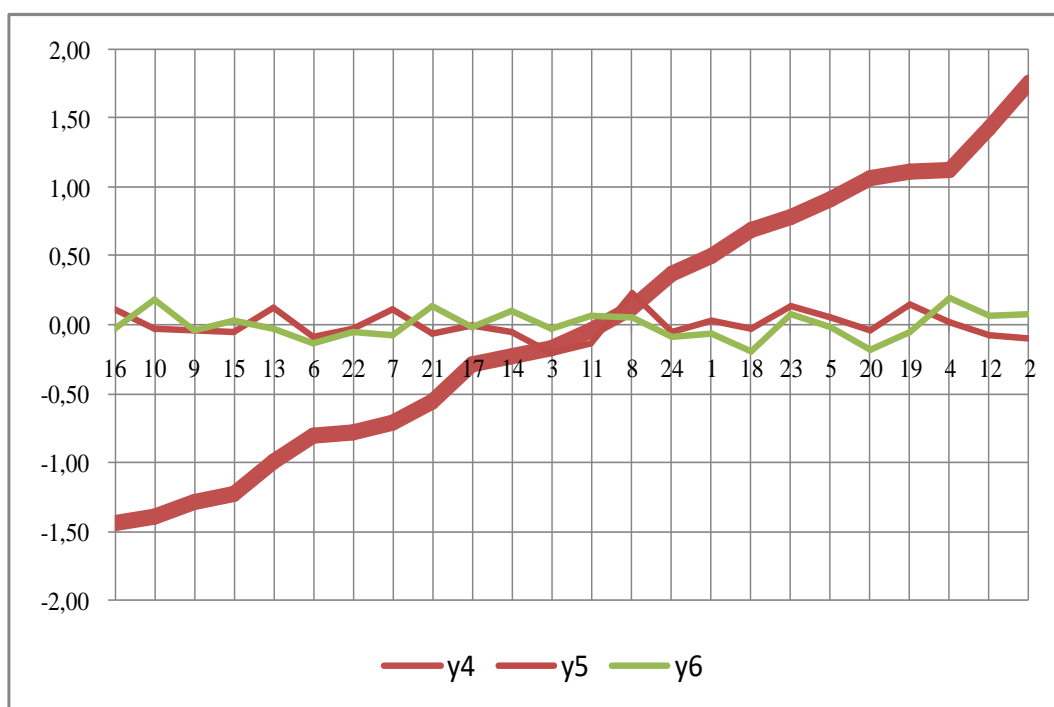


Рисунок 4. Взаимная динамика независимых кривых «y4», «y5», «y6», влияющих на свои подмножества коррелированные z-переменных

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SJIF (Morocco) = 7.184

ICV (Poland) = 6.630
PIF (India) = 1.940
IBI (India) = 4.260
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Заклучение

Сконструированы 3 новых смысла (найжены фразеологические значения новых семантических переменных) новый_смысл(y_4), новый_смысл(y_5), новый_смысл(y_6), фразы которых дополняют исходные фразы смыслов (исходные семантические переменные) смысл(y_4), смысл(y_5), смысл(y_6) [1]. Система многосмысловых уравнений содержит меньше, чем 6, число известных смыслов. Получены фразы, отражающие смыслы 3-х стабильных переменных и смоделированы 4 числовых объектов [1] (Таблица 1): пара матриц собственной структуры (Λ_{66}, C_{66}), 2 матрицы значений некоррелированных изменчивостей Y_{m6} , коррелированных изменчивостей (отклонений от 0) Z_{m6} , соответствующих своим системам много смысловых уравнений с известными и неизвестными семантическими (смысловыми) переменными. Новый смысл(y_6)=«постоянно (с практически нулевой дисперсией $\lambda_6=0.0100$) идет давление (с силой $c^2_{16}=0,3754^2$) на власть по поводу укрепления российско-германских энергетических связей, так как растут высокие цены на энергоресурсы (смысл(z_6) (с силой $c^2_{66}=0,9269^2$)). Новый смысл(y_5)=«постоянные усилия лоббистов, налаженные деловые связи (постоянно (с практически нулевой дисперсией $\lambda_5=0.0100$)) начинают требовать возобновления

поставок газа из России». Смысл условно стабильного фактора: смысл(y_4)=«при растущих «активных выступлениях сторонников Герхарда Шредера за укрепление российско-германских энергетических связей (с силой $c^2_{14}=(0.4612)^2$, смысл(z_1)) компании Германии (из-за потери рынков во время затянувшейся войны в Украине (с силой $c^2_{24}=(0.4009)^2$, смысл(z_2)) возобновляют (с силой $c^2_{44}=(0.7787)^2$, смысл(z_4)) налаженные прочные личные и деловые связи с российской газовой отраслью, не смотря на высокие цены на энергоресурсы(с силой $c^2_{64}=(0.1397)^2$, смысл(z_6))».

Модель познала 3 ситуации при помощи 3-х когнитивных модельных уравнений. В статье [1] модель повторной "шредеризации" Европы правильно абстрагировала 3 реальные ситуации: холодная зима, сокращение поставок СПГ и скачок цен на энергоресурсы. Анализ других стабильных ситуаций через другие соотношения дала, как изложено в настоящей статье, еще больше знаний об нашем изучаемом явлении. Эти и другие результаты дают обоснованный вывод: модель извлекает и добавляет новые скрытые знания путем извлечения их из решения оптимизационной Задачи: $(I_{66}, I_{66}) \Rightarrow (\Lambda_{66}, C_{66})$ без заданной мозаики индикаторов в матрице C_{66} .

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Article



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FAMILY-MARRIAGE RELATIONS IN UZBEK PEOPLE (EXAMPLE OF SURKHAN OASIS)

Abstract: This article describes ethnographic information about the lifestyle of the people living in the Surhan oasis, especially the unique way of conducting the marriage ceremony, and highlights regional differences and similarities based on the interpretation of rituals. Additionally, information about historical events regarding the thoughts of the Surhan people is also presented.

Key words: endogamy, Avesta, Zoroastrianism, Zain ul-Akhbar, unity of religious faith, sharia, Alengerism, Levirat, Vay-woy marriage, Sororat, Anti-God, drinking.

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Introduction

A family is formed as a result of marriage. Marriage is a special union between husband and wife and its recognition and approval by society and the state. Two young people, who grew up in different houses and under completely different conditions, start a family and start living together thanks to marriage. The term "Nikah" is of Arabic origin and comes with concepts such as "marriage", "touching the ground", "marriage", "union". More precisely, marriage is a contract formalized by the Sharia of marital relations.

Therefore, marriage and family have developed in an integral relationship with each other. In the Uzbek language, there are terms related to marriage and family such as "to marry", "to get married", "to get married". The word "home", which originates from the word "marry", means having an independent home and family of one's own.

Historical forms of marriage include such types as "exogamy", "endogamy", "monogamy" and "polygamy". Scottish scientist John McLennan first defined the terms "endogamy" and "exogamy" in his work "Primitive Marriage" in 1865. According to him, "endogamy" refers to marriage between certain ethnic groups, races, classes, religions or castes. "Exogamy" refers to the prohibition of marriage between relatives

and the prohibition of marriage with people outside one's own clan.

The good thing about endogamous marriage is that it allows many skilled craftsmen to pass on their knowledge and skills to their children and keep it a secret from others. However, the generation born due to endogamy gradually becomes weaker, shorter, and even disabled or infertile. With this in mind, exogamy was born.

Exogamies aim to improve the health of one's children, end ethnic or regional conflicts, create political alliances, ensure peace in society, and other goals. Exogamies were common among nomadic Turkish tribes. As a result, the baby born in the clan saw her children as brothers or sisters because her mother's milk was insufficient, and she grew up breastfeeding other mothers in the village. We should also not forget the influence of Islam. According to Islamic belief, children breastfed by the same mother are considered siblings. As a result, an adult boy or girl had to marry a member of another clan. It is precisely on this subject that concepts such as "kidnapping" and "giving away a girl" emerged.

"Monogamous" marriage means that a man and a woman marry at the same time. "Polygamy" is a concept related to polygamy and is related to economic factors. In the past, polygamy was widely

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practiced in times of war. This measure, in addition to improving the demographic situation, also saved wives from corruption and children born to their deceased husbands from starvation.

The Uzbek family has been formed since ancient times. According to ethnographic research, it is possible to be sure that the family in the oldest epics, tales and legends belongs to the matriarchal period. According to MOKosven, in matriarchal relationships, marriages are usually initiated by the wife rather than the husband.

In rock petroglyphs (rock paintings) preserved in Sarmissay (Navoi region), women are depicted as extremely colorful and strong, while men are depicted as weaker. It appears that in the distant past, women were stronger than men. Moreover, it is not surprising that the belief that healthy men are actually born from physically strong women has been preserved in the historical memory of the people since the time of matriarchy.

Ancient Greek and Roman sources confirm that women of marriageable age in our country are physically strong. Especially according to the Roman historian Claudius Aelian, if a Sac man wants to marry a girl, he will fight with her. Whoever wins will rule and govern; defeated - presents.

In Avesta, which is considered an ancient source of Zoroastrianism, great importance is given to society, clan, tribe, marriage and family. For example, according to the "Mikhr-Yasht" section of the "Avesta", the foundation of the family was formed by the grandfather clan. Here, the big house is called "nmana" (nmana-he), the clan is called "vis" (vis-ô), the region is called "zantush" (zant-âuš), and the country is called "dakhyush". (da i ŋh-âuš). Their leaders are called "pati" (pat-âe) - "father". In particular, the owner of the house is "nmanapati" (nm-an=ô=pat-âe), the owner of the clan is "vispati" (yis=pat-âe), and the owner of the district is "zantupati". (zantu=pat-âe), owner of the land - called "dahyupati" (da i ŋhu =pat-âe).

The grandfather clan consisted of nmanapati (householder), nmanapati (housewife), their children, grandchildren and great-grandchildren. The seed was counted by the male and the vis (village) consisted of 25 sibling nmana (families). The village was ruled by a vispati. Since "Vis" is a large paternal clan, daughters are not included in it. It was taken into account that their father was from a separate tribe.

According to Zoroastrian belief, celibacy is not approved by society. The girl had to touch the ground from the age of 15. If a girl reaches adulthood, does not take into account the wishes of her parents and tribe, does not touch the ground and does not leave children, she is put in a bag and whipped 25 times. Men have the right to marry from the age of 17. If he did not marry and did not want to leave children, they stigmatized him. As a result, such a man was harassed and forced to wear an iron chain around his waist.

Men were allowed to take more than one wife. In this case, the first wife was the leader of the other wives. In order to get married, the man had to be strong financially and spiritually. After all, a man who cannot eat on time will not be able to fulfill his duty towards his family, so such a man will not have children.

In the pre-Islamic period, special importance was given to the protection of women's rights in our country. For example, in the Sughd inscriptions dated 710, there is a marriage contract for Uttegin, one of the Turkish cavalymen, to marry a Sughd girl named Dugduguncha, the son of the Navkat governor Cher Vakhzanak, whose father's nickname was Chata. Accordingly, Uttegin must honor his wife as a beloved husband, take care of her, provide her with food, clothing, jewelry, and Dug'dgun must respect Uttegin as a beloved husband and accept his orders as law. It is noteworthy that in this agreement the groom's obligations to the bride's side were shown: if Uttegin took another wife or slave without asking his wife, Uttegin would have to give Chata 30 dirhams of pure silver and release her.

Also in the agreement, the groom promises Cher and her sons that they will not sell Chata, will not make her a slave to pay off the debt, will not let her become a prisoner, will not fall into someone's custody. Uttegin was required to return it to Cher and her sons without causing any harm, and if he did not return it he had to pay compensation of 100 dirhams of pure silver.

In ancient Turks, women were considered sacred. Before Islam, Turkish women could attend meetings of tribal celebrities, that is, congresses or weddings, and kagans made their decisions together with their wives. In ancient Turks, families were formed as a result of marriage. Marriage between close relatives is prohibited in Turks. There is no age limit for marriage.

Materials and methods

A father could marry off his children early or give them away. However, for this to happen, children had to grow up and become adults. Consent of parents and children was required as a condition for marriage. Fathers or fathers would act in accordance with the wishes of their sons. They rarely objected to their sons marrying their beloved wives. As another condition for marriage, the groom or his parents had to give a khik to the bride's father. The price of the thick bride is not calculated. On the contrary, they understood it as a fee given to the parents of a girl to cover the expenses incurred in raising her from childhood. The number of flocks varied from a few sheep to hundreds of horses or flocks of sheep.

Some terms related to kinship in ancient Turks have been preserved in the living language of the inhabitants of the Surhan oasis. This can also be seen in the following examples:

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Ata, blood - father, residents of Surhandarya call the father "Dada", Tajiks call them "Doda" or "Bobo".

Ana, e.g., means "mother" in Kungyrot, Juz dialects, and "ocha" in Khataki and Tajik dialects.

Agha is a brother, this expression is mostly used by Turkmen, Khataki and other tribes.

Jäznä, the elder sister's husband, pochcha, bells and juz call it "jezda" and Tajiks call it "yazna".

Yanga is the brother's wife, referred to as "checha" in kungirat and juz, and as yanga in others.

in Abag means "plain" in Barlos and Khatakis, "dede" in kungirat and juz, "dede", "aka" and "uncle" in Tajiks.

Tagai - uncle, mother's brother. Tajiks call it "tago".

The fact that Turks meet all the special terms related to kinship ties shows that they have strong kinship ties. The absence of words related to polygamy in the ancient Turks shows that they did not have such a tradition when the language was formed. There are not even words like "prostitute" or "illegitimate child" in Turkish languages. All these words came from the Arabic language. This shows that the family institution is very strong in Turks and that Turkish women are true and honest. For example, according to the medieval historian Gardiziy in his work "Zain ul-abbar", Turkish-Karluk wives stood out with their high morals and intelligence.

In ancient Turkish tribes, after the wedding, young people lived in the house of the bride's parents, not in the husband's house. According to tradition, in such a case the groom builds a temporary house for his wife, usually a kapa. Sometimes after the wedding, the groom would frequently visit the bride, who was living in her parents' house. These are all considered remnants of matrilineal rule.

There are many references to groom selection competitions in Turkish epics. In the famous "Oğuznoma" epic, Boyraka's rivalry with Boybijan's daughter Boyçeçak is described. Bahadır had to chase the girl on horseback, break the arrow thrown at her while flying, and defeat her in the process. A similar episode can be found in "Alpomish". Barçın himself sets this condition and says that the one who knocks down 90 mountains will touch the ground.

In the events mentioned above, it can be seen that the marriage issue among the ancient Turkish people was resolved through fighting. Competitions such as horse racing, long-distance shooting, archery and wrestling were held to determine whether the boy was suitable for the girl. This type of competition has also been preserved in games such as "chasing the girl" and "pulling game". It is worth noting that in such competitions, equality between men and women and the birth of strong and mature children from healthy mothers are taken into account.

In some Turkish tribes, the groom is chosen personally by the girl. According to Ibn Rust, the groom chosen by the girl from the Burtas tribe along

the Volga came to her father and asked to marry him. If the groom likes the father, he gives his daughter to him.

As soon as Arabs came to the territory of Uzbekistan, marriage and family relations were Islamicized. During the rule of Islam, our ancestors gave great importance to marriage issues. After all, marriage is one of the most sacred concepts in Islam. For the marriage to be in compliance with sharia, the following conditions had to be met:

1. Mutual consent of the parties to the marriage. According to Sharia rules, the consent of the bride and groom is required. They cannot be forced to marry. In this case, the teacher who receives marriage education asks the girl's consent three times. If the girl did not answer, her silence was taken as a sign of consent.

2. Reaching marriageable age. According to sharia, the age of marriage is 12 for boys and 9 for girls. However, in practice, marriage is concluded when boys turn 14 and girls turn 12. Since young girls were not physically and mentally ready for marriage, their early marriages had serious consequences. For example, premature birth, early death of the child, disability of the girl child, etc.

3. During marriage, the testimony of two men is not taken into account, nor is a marriage without witnesses. If there is only one male witness, two female witnesses must accompany him. Because according to sharia, the testimony of two women is equivalent to the testimony of one man. Boys must be 15-16 years old and girls must be 9 years old.

4. The dowry, that is, the amount of gift the husband will give to his wife, must be determined. Mahr has absolutely nothing to do with today's Udum "oil fee" or "milk fee". In fact, dowry is a gift given by the groom in honor of the bride, that is, any jewelry, clothes or money. The dowry is considered the bride's personal property and no one can own it. According to Sharia, there is no limit on the amount of dowry, but it is permissible not to exceed this amount. If the bride wishes, she can waive the dowry in favor of her husband. Even if the time of marriage is not specified, the dowry must be given to the bride later.

According to Sharia law, marriage is a contract and is similar to sales in many respects. The bride, on the one hand, and the groom, on the other hand, agreed with this, and the payment, that is, the dowry, which was considered the main condition of the transaction, had to be given to the bride.

Mehr is of two types: Mehri müeccel and Mehri müeccel. If both dowries are not specified in the marriage, the dowry must be given as a dowry. Dowry misl is the amount of dowry given by the girl's father for the marriage of girls of the same age among their relatives. Mahri mu'ajjal means dowry that must be paid quickly. It is obligatory to pay this dowry immediately after the marriage. That is, it is given before entering the house. Mahri mucacel means

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dowry that is not given immediately but must be given later.

5. Unity of religious belief. In Islam, it is commanded that the bride and groom belong to the same religion. Muslims are prohibited from marrying someone from another religion. If either husband or wife converts to another religion, their marriage will break down and all relations between them will end.

6. Those getting married must not be close relatives. Islam prohibits close relatives and cousins from marrying. In addition, it is not possible to take other people's wives or marry women who have husbands. This subject is mentioned in the Quran, Surah An-Nisa, verses 12, 23-24. It is discussed in detail in the verses.

7. Mental health of married couples. According to Sharia, the parties to the marriage must be mentally healthy and sound people. It is not permissible to marry a mentally ill person and it is considered invalid to marry a crazy person.

Of course, the above-mentioned conditions served to create a perfect marriage and honest marital relations. At the same time, some mistakes and deficiencies were made in the application of marriage rules under certain historical conditions. Class, social and religious factors were not taken into account. As a result, in some cases, some unfortunate situations have arisen in marriage matters.

Great importance was given to caste equality of individuals in marriage. For example, in the Middle Ages, and even in the 20th century, it was not possible for Eshans, who were considered **Aksuyaks**, to marry ordinary people, that is, **Karachas**. Eshans are only allowed to marry descendants of Eshans or members of the ruling class. Only those whose parents were pure-blood Eshan could call themselves "Eshan". Those whose father was Eshan and whose mother was Karacha could not say this. When people say "Eşan", they mean Hz. He understood the grandchildren of Muhammad's daughter Fatima and his son-in-law Ali. Local residents respected them and called them "Eshonbobo" and their wives or daughters "bibi moma" or "poshsho moma".

Unlike Eshans, Khojas are allowed to marry ordinary people. However, endogamy was also common among them. "Khoja" means the descendants of the four caliphs - Abu Bakr, Omar, Osman and Ali. In this case, the descendants of Caliph Omar were called "mian" owners. Due to the high number of tribal leaders among the hodjas, they were also called "eşhan" since the mid-20th century.

As a result of the existing socio-political system and cultural processes in the country from the second half of the 20th century, caste restriction in marital relations began to lose its importance. It has become common for Eşanlıs and Hodjas to marry girls from other tribes.

Much attention is paid to the issue of marriage in the hadiths. In particular, our Prophet Muhammad

(pbuh) said: Whoever can afford to get married should get married, because getting married prevents a person from looking at single women and engaging in immoral relationships. A person who cannot afford to marry must fast. Because fasting cuts off lust.

According to the views of Eastern scholars, many opinions are put forward about marriage and family issues, the rules of choosing a spouse, and the relations between husband and wife. For example, Abu Ali ibn Sina in his work "Tadbir Al-Manozil" : Let his wife be knowledgeable. Let him believe in religion. She should be shy, timid, shy, brave by nature, deeply in love with her husband, think about giving birth and raising children, not be oppressive and submissive towards her husband, honest, modest, prudent.

Our great grandfather Yusuf Khos Hajib, who lived in the 11th century, divides men who take women into four categories:

1. Those who are looking for a rich spouse;
2. Those who aim to get a handsome, beautiful wife;
3. Those who want to marry noble women;
4. People who want smart, intelligent and thoughtful partners.

A man who marries a rich wife is in danger of becoming her slave. Because if such wives want wealth, they can put their husbands in a difficult situation. Everyone laughs at the man who marries a beautiful girl. Because a beautiful woman has many lovers and people love such women. Wives of noble, white-skinned clans have a long tongue, which turns their husbands into slaves and makes them worthless.

If a thoughtful, understanding girl is found, the man should not leave her. Because if a man marries such a woman, he will find his happiness and achieve his goal. Because a good wife brings wealth to her husband, appreciates and loves him. Therefore, Yusuf Khos Hajib advises a man to marry a girl whose origin is clean, pure, dreamy, beautiful, whose face no other man has seen. He recommends marrying girls from the caste below him whenever possible. Because he warns that if he marries a woman of a higher class than his own, he may become her slave. He emphasizes that it is necessary to want a good character, not a beautiful face. It is enough for a woman to love her husband, not to misbehave and to have a good character.

This is the advice given to men who want to get married in the work called "Nightmare" by the great Eastern thinker Unsurmaoliy Kaikovus. In this case, the woman should not marry for her wealth. Because marrying a rich wife destroys a man's reputation. You shouldn't look at a beautiful wife either. After all, such wives are loved. Nor should you want wives of high lineage. Unmarried men should also not claim widowhood. It is necessary to marry a noble, good-natured woman who is worthy of being a housewife. Even when his wife demands it, he should not want anyone's daughter, but the daughter of a good family.

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A wife is created for homemaking, but not for lust. Such a woman teaches that her mother is a housewife and her father is a housewife. Spouses who are not friends and housewives should be avoided. This type of woman takes away her husband's property and makes him dependent on her. As a result, he becomes her wife but she never becomes his wife. A good wife is the joy of her husband and his life.

Marriage with daughters of high-pedigree clans has existed in society for a long time. Especially 13-15. In the centuries, it was customary for Genghis Khans to marry kungirat and kiyat daughters. It was taken into account that Genghis Khan was from the Qiyat clan, and his mother Oelun Uchjin and her husband Borta Fujin were from the Kungirots clan. In Hazrat Alisher Navoi's work titled "Chor Devan", the following verses were written about the Uzbek clans and qiyat tribes and their relations with the khans:

I wish good luck, but the king really wants good luck.

A gypsy recognizes me as Hindu and calls and reads me.

Or:

O Navoi, you are so old, I have a prayer for you
Mirzai Mirak call to the king, the khan.

With these lines, Alisher Navoi emphasizes that there are caste relations in the society he lives in. In conclusion, these verses indicate that the ruling class has blood ties with the higher-line tribes.

Family relations and the position of husband and wife in the family occupy a special place in the works of the famous intellectual scientist Rezauddin ibn Fakhridin, who lived and worked in the second half of the 19th century and the beginning of the 20th century. Alloma defines the words "husband" and "wife" and writes:

According to sharia, a woman is the husband's life partner. She is the wife of her husband's house and country. The woman is the guardian of her husband's property, tries to use his money economically, educates the bodies and minds of her husband and children, and helps him give up his bad habits. A woman is the person who softens her husband's hard heart, gathers the whole family in one place, and collects more or less wealth for the difficult times that happen to family members due to her husband's wealth. A spouse is not an employee to be kept around if he serves well, or fired if he does not serve well. On the contrary, the spouse is a companion for life.

According to Sharia rules, the husband is the one who accepts his wife as his companion. A husband respects and cherishes his beloved wife. The husband is the protector and protector of the woman from various difficulties. He forgives his wife's mistakes and gives good advice. A husband always treats his wife kindly. He does not order his wife to do things that he cannot afford. He is restrained from strict voluntariness towards his wife. The husband does not disturb his wife on necessary and unnecessary matters.

The fact that representatives of several generations live together in an Uzbek family and the bond between them is stronger than in other countries has further increased its social importance. Uzbek characteristics include devotion to the family, knowledge of its seven branches, respect for close relatives, parents and the elderly, and concern for the future of children. The Uzbek family is very large and people lived as a community in this family.

The Uzbek family has had different forms and contents depending on social, economic and political factors throughout the development of society. Therefore, they can be divided into main groups such as small family, undivided family and large family. A small family consists of a couple and children. An indivisible family consisting of a couple, their children and the couple's parents, 10-12 people lived in a house.

A characteristic feature of the Surhan oasis in the 19th and 20th centuries was that its inhabitants lived as a large family. An extended family is an economic group of one hundred or more people, including three or four generations of a father's closest relatives, their spouses and children, and sometimes sons-in-law and other relatives accepted into the family. Such families are called "patriarchal clans". Several large families came together to form a clan community, and they also formed an aymak. The word Urug-aymak comes from here. As a result of the unification of the regions, tribal unity and then people and nation were formed.

Results and discussions

Historical conditions in the Surhan oasis forced people to live in crowded families. In the Kohitang mountain villages, the major family associations are the "pot brotherhood". It is called "big pot" or "kara pot" among the Uzbeks living in the upper parts of Kashkadarya, "ulkan uy" among the Kazakhs, "chong potn" (big pot) among the Kyrgyz, and "big pot" in Turkmen. It is called "irisigi bir" (single pot), "shangrak" (house) in Karakalpak, and "big family" in Khwarezm. Considering that small families may have difficulties in weddings, people unite in large-scale friendships. Clans united on the basis of kinship are also organized into elders. They were led by a specially chosen elder. Even when the families united in Kazandoş increased in number and became a separate people, they did not sever their ties with their associations.

In the area under study, the ancestral descendants of the fourth, fifth and even seventh generations were called "top" or "toda" after their great-grandfather. In particular, the village in Sherabad district of China consists of Karim gang, Tora gang, Mergan gang, Khudoybergan gang, Jora gang and Kholyor gang. Dede Derviş, who belonged to the Tortuvli tribe of Kungirats living in Akkorgon village, had seventeen families consisting of five generations, a total of 55 people.

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In a large family, elders have a high position and everyone obeys them unconditionally. Elders decided on children's conduct, behavior, upbringing, household chores, rituals, weddings and festivals, marriage, entertainment, pestilence, funerals, and other matters. If any family had problems raising a child, tribal elders would go to that house and scold the child's parents. Along with the elders came a few fast-talking and also strong young men of the village. If a child who was difficult to raise disrespected the adults, the young people would catch him and punish him. Even then the child was beaten so that he would not be seriously injured. The parents apologized to the elders and villagers for the child's bad manners.

The scope of duties of elders is not limited to these. If a family member died, such as a husband or wife, the elders would intervene and force the man to marry. The most important thing is that children do not become orphans. If any member of the community had difficulty getting married, the elders would try to help him using the team.

The head of the family in the oasis was the father. The father's duty was to manage the family and provide for its members. Mothers are busy with housework. Children were often raised by mothers.

In the early 20th century, marriage and family issues in Turkestan were regulated by sharia and customary rules. Sharia is a set of rules and regulations that the Islamic religion prescribes for people to comply with. Knowing the rules of Sharia is obligatory for every Muslim. The tradition is the first public intercourse carried out by nomadic clans. This situation is more common in Kazakh and Kyrgyz tribes. According to the customs and traditions of the Kazakh tribes, no matter how much a woman earned, she could only have her dowry and rich money. However, women did not have the right to use their property freely. Customary and sharia rules did not recognize his rights. Traditionally, women could not inherit at all. However, this does not mean that wives will remain completely husbandless. Mothers were under the care of their young sons, sisters were under the care of their brothers, and brothers had to give dowries to their sisters.

In the Surhan oasis, marriage matters were handled on the basis of sharia and customary law. Among the marriages based on tradition, we can show "levirate", "sororate", "vay-vay marriage", "kush kuda", "strong groom", "inner groom".

"Levirat" (Latin "levir" - brother of the soil) — It means marrying your deceased brother's wife. This custom is called "widow robbery" ("widow robbery" in Chinese). If a widow touches her unmarried brother-in-law or brother-in-law, when the time comes, she will find a girl and marry her off so that she will look beautiful to her husband. In the Kungiroi and Jüz tribes, if one of the brothers does not marry a widow, relatives and clans gather and are forced to marry one of the deceased's nephews, saying "the

widow who remains on the land belongs to her nephew". (i.e. the widow remaining on the land belongs to her nephew).

A man who has two or three wives dies early and his young wives are young, while the old lady gives away her concubines as soon as the festival is over. She took the children from her husband and raised them. Sometimes there were cases where women who only had daughters or gave birth to sons took another wife as their husband. If the fiancé's boyfriend died, the unmarried brother or sister of the deceased was supposed to touch the ground. The purpose of this was to prevent the division of the inheritance. This form of marriage was especially common during the war years.

In Kazakh, the concept of levirate is expressed with the expression "alengerlik". "Alengerlik" is land belonging to the widow's mother-in-law or brother-in-law, one of her relatives. In this case, the man who has the right to marry can use this right one year after the beginning of widowhood. The widow's children, animals, and property were taken away from her if she refused, and she was then allowed to touch the land with whomever she wanted. According to "Baranta", the cattle belonging to the bride's parents were forcibly taken away. These traditions are not common among the settled population.

"Sisterhood" (Latin "soror" sister) - to marry the sister of the deceased spouse. A man was marrying his deceased wife's unmarried sister so that the kinship ties would not be severed and their children would not be left in the hands of another woman. If the engaged girl dies, she becomes engaged to the deceased's sister and then gets married.

"Wow-Wow Marriage" - forcing a widow to marry another man. If a woman does not want to marry, she is forced to marry. "Do you agree to touch so-and-so on the ground?" Not all women accepted this question. In such cases, one of the girl's relatives came from behind and applied harder pressure to her waist without any warning. At that moment, when the woman said "wow", the man and the woman said "the girl also agrees" and got married. This type of marriage was usually reserved for the widow of a deceased wealthy person. There were often many people who wanted to marry a rich widow. If the woman does not want to touch the ground, she gives it to someone like this.

If something bad happens to the bride-to-be before she gets married, a donkey's tail is tied to the groom's back during the marriage. If the groom does not put the seed in the donkey, the mullah did not perform the marriage. In this way, young people were required to abide by Islamic rules and thus were punished before the clan for their crimes.

This type of marriage was considered extremely offensive to women. Taking this into consideration, some celebrities had to take precautions to protect their young spouses from this before they died.

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Especially in the winter of 1920, a sniper who went to war against the occupation of the Red Army entrusted his family to his most loyal disciple and made a will to him: If I die, you will marry my wife immediately. This is my seal, proof that all my possessions belong to you. I'll give you my rifle too. If someone wants to force my wife into an unhappy marriage, you will protect my family members by pointing this gun at them. After Mergan is martyred in the battles of Sherabad, the disciple fulfills his teacher's will and marries his widow.

Karshi kuda is the marriage of a girl from two families with mutual consent. In this type of marriage, economic opportunities are taken into account. They gave their daughters a dowry as much as they could, but they did not pay much. Most often such marriages were made between poor families.

"Karshi kuda" culture also existed in other parts of Uzbekistan. For example, in Fergana he was called the "god of scissors".

In the "strong groom" tradition, young orphaned men who could not afford to marry the girl would live in their father-in-law's house and work for a fortune. In "Ichkuyov" udu, a family without a son invites the son-in-law to live with his father-in-law while marrying off his daughter. However, when the groom's side agrees, the young man lives in his father-in-law's house as a "groom".

As in all Muslim countries, polygamy existed in the Surhan oasis. According to Udum, men who can afford it can have up to four wives. However, polygamy was not common. Remarriage was usually

done with widows. If the widow's children are young and there is no one to marry her, the elders of the society agree to marry the woman to a rich man.

Polygamy was especially common during the war years. As a result, many young men would die due to the war, resulting in women being outnumbered in the population. Clan elders tried to send the women away as soon as possible so that they would not be left unattended.

There have also been cases where if a woman married a younger man, her husband also married a younger woman.

Tests were carried out on well-known wives in the Kohitang mountain villages of Surhandarya to prevent underage girls from getting married early. In this, mothers were preparing their daughters for family life and marriage, and girls who turned 17 on Nevruz were examined by older women. Only girls who passed the test were declared ready for marriage.

Conclusion

As a result, living as a family is unique to humans. Therefore, the family is the basic link of society. Accordingly, it is possible to say without exaggeration that the family is the basic structure of society. Because in this holy shrine man is not only born, but also educated spiritually and morally. Thus, a family is a group consisting of a couple, their children, and their closest relatives, the household. Family is also a social unit based on the natural, economic, legal and spiritual relations of people.

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Contents

	p.
16. Kudaiberdi uulu, D. About the main types of euthanasia.	211-215
17. Qodirova, D. D., & Sulaymonova, G. N. Identification of cotton seedling diseases.	216-219
18. Soatov, E. The role of digitalization in the fight against the shadow economy (in conditions Uzbekistan).	220-223
19. Kozhevnikov, V. A., & Tolpygin, S. S. Automation system for generating university courses.	224-231
20. Chemezov, D., et al. Modeling and analysis of the aluminum plate drawing process.	232-235
21. Chemezov, D., et al. Pressure distribution curves on the surfaces of the impeller blades and the performance of the centrifugal pump.	236-242
22. Dolidze, N., & Darsavelidze, Kh. Research on awareness of traditional Georgian clothing.	243-247
23. Ergeshov, A. K. On the role of law in determining relations between the state and the person.	248-252
24. Ergeshov, A. K. On the issue of political and legal personal condition.	253-257
25. Tsutsunashvili, A. Great power competition and multipolarity in flux.	258-264
26. Shakhmurova, G. A. Methodology for conducting practical online classes in botany at pedagogical universities.	265-268
27. Amonov, M. E. The need to improve the philosophical characteristics of social networks in the ecotourism system.	269-272
28. Akhmedov, S. S. The phenomenon of tolerance in jalaliddin's teaching of roman philosophy conceptual significance.	273-275
29. Mirzayeva, N. O. The issue of wives and girls in the religious-sufism views of Jalaliddin Rumi.	276-278
30. Zhanatauov, S. U. Meanings and algebra of constant factors of repeated "Shrederization" of Europe.	279-289
31. Dusnazarova, M. I. Family-marriage relations in Uzbek people (example of Surkhan oasis).	290-297

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