Ministry of Education and Science of Ukraine

Zhytomyr Polytechnic State University
Khmelnytsky National University

"Current Trends in Young Scientists' Research"

XII All Ukrainian Scientific and Practical Conference

Book of Papers

April 16, 2025

Zhytomyr

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"**Current Trends in Young Scientists' Research"**

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СВІДОЦТВО ПРО ВНЕСЕННЯ ДО ДЕРЖАВНОГО РЕЄСТРУ СУБ'ЄКТІВ ВИДАВНИЧОЇ СПРАВИ ЖТ № 08 ВІД 26.03.2004 Р.

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Session work №1

CURRENT RESEARCH IN THE FIELD OF HUMANITIES

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ФОРМУВАННЯ НАЦІОНАЛЬНОЇ МОВНОЇ СВІДОМОСТІ ТА ПАТРІОТИЗМУ У ЗДОБУВАЧІВ ОСВІТИ ТЕХНІЧНИХ СПЕЦІАЛЬНОСТЕЙ НА ЗАНЯТТЯХ З УКРАЇНСЬКОЇ МОВИ ТА АКАДЕМІЧНОГО ПИСЬМА

Актуальність теми. У сучасних умовах глобалізації та війни в Україні формування національної мовної свідомості та патріотизму є невідкладним завданням вищої освіти, адже ці якості сприяють не лише професійному розвитку, а й усвідомленню своєї ролі у відбудові та зміцненні держави. Знання з української мови та академічного письма стають платформою для інтеграції технічних знань із національною ідентичністю, оскільки мова є інструментом спілкування, мислення та культурного розвитку. Варто зазначити, що саме завдяки художнім творам можна здійснювати національно-патріотичне виховання, закладаючи любов і повагу до рідної мови, до українського народу, до Батьківщини. Проблема формування високої національної свідомості та почуття патріотизму під час вивчення української мови є надзвичайно актуальною.

Роль української мови у професійному становленні. Студенти технічних спеціальностей часто недооцінюють значення мовленнєвої компетентності, вважаючи її другорядною, порівняно з математикою чи програмуванням. Однак вміння чітко формулювати думку українською мовою, писати наукові тексти та презентувати проєкти є ключовими для інженерів. На заняттях студенти вчаться адаптувати професійну термінологію до української мови, що сприяє її розвитку в технічній сфері та зміцнює свідомість як частину професійної ідентичності.

Зараз національно-патріотичне виховання втілює в собі мету і процес національно-етнічного оновлення українського народу, тому навчальні заклади розглядають його як основний елемент усієї української виховної системи.

Можна стверджувати, що національна свідомість і патріотизм відіграють важливу роль у вихованні морального духу особистості.

Інтеграція патріотичних тем у навчальний процес є важливим чинником формування національної свідомості та самосвідомості молодого покоління. Питання національної пам'яті відіграє визначальну роль у вихованні свідомого громадянина, а національно-політична свідомість впливає на становлення особистості та її суспільну активність. Національна свідомість розглядається як ключовий елемент етнодержавознавства, що підтверджує необхідність вивчення історичних та культурних аспектів у освітньому процесі. Тяглість національної традиції відображена у літописах, а використання художньої літератури як засобу патріотичного виховання сприяють поглибленню ідентичності. Отже, патріотичні теми в освіті формують глибоке усвідомлення національної належності та виховують відповідальних громадян, що є необхідним для розвитку суспільства.

Методи формування мовної свідомості. На заняттях застосовуються інтерактивні методи: аналіз україномовних технічних текстів, переклад іншомовних джерел, складання звітів, службових листів і презентації українською мовою. Наприклад, студенти можуть перекладати інструкції до робототехнічних систем або написання звітів чи редагування та написання тез на наукові конференції, які включають важливі теми для обговорення певних інженерних рішень. Однією з таких тем може бути "Роль автоматизації у часи відбудови України". Ці вправи не тільки забезпечують практику в набутті мовних навичок, а й підкреслюють важливість української мови в інженерній літературі.

Виховання патріотизму через мову. Поняття з української мови стають простором для виховання патріотичних почуттів через обговорення сучасних викликів: війни, технологічного розвитку, культурної самобутності. Дискусії про значення мови у збереженні національної ідентичності, аналіз поезії чи прози воєнного часу (Максим Кривцов, Ярина Чорногуз, Сергій Жадан тощо) мотивують студентів бачити себе частиною українського народу.

Практичне значення для студентів. Формування мовної свідомості та патріотизму сприяння розвитку soft skills: комунікабельності, критичного мислення, командної роботи. Студенти, які вільно володіють українською мовою, можуть представляти свої проєкти на національних і міжнародних конференціях, просуваючи українську науку. Патріотизм, підкріплений професійними знаннями, спонукає їх спрямовувати свої навички на благо України – від розробки автоматизованих систем промисловості до створення технологій для оборони.

Висновок. Можемо стверджувати, що практичні заняття з української мови та академічного письма для студентів технічних спеціальностей є не лише інструментом мовної підготовки, а й платформою для формування національної свідомості та патріотизму. Об'єднання технічної освіти з мовною та культурною складовою готує фахівців, які усвідомлюють свою роль у розвитку України, зміцненні її технологічного потенціалу та збереженні ідентичності.

ДЖЕРЕЛА

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НАУКОВО-ФАНТАСТИЧНІ РОМАНИ К. ІШІГУРО І М. КІДРУКА В ПОЗАКЛАСНІЙ РОБОТІ ВЧИТЕЛЯ-СЛОВЕСНИКА (ЗА РОМАНАМИ «НЕ ВІДПУСКАЙ МЕНЕ» ТА «НЕ ОЗИРАЙСЯ І МОВЧИ»)

Позакласна робота – це невід’ємна частина всієї навчально-виховної роботи у школі, що має на меті розвиток різноманітних здібностей учнів. Вона допомагає вчителю ретельніше вивчити вихованців і вдосконалювати їхню підготовку, підвищує загальний культурний рівень школярів, викликає стійкий інтерес до предметів. Позакласна робота відрізняється від класної тим, що вона будується на принципі добровільності.

Л. Базильчук зазначає, що «позакласна робота – це система занять, заходів і організованого навчання учнів, що проводяться в школі і поза нею під управлінням учителів, громадськості, органів учнівського самоврядування» [1, с. 48].

За визначенням Ю. Бондаренка: «Позакласна робота представляє собою сукупність різних видів діяльності, що позитивно впливає на розвиток учнів і є складовою навчально-виховної роботи вчителя, що здійснюється у взаємозв’язку з роботою на уроці» [2, с. 100].

Позакласна робота має свої цілі та завдання, свій зміст, види та форми проведення, свої методи та прийоми. Насамперед, необхідно зазначити, що і урок, і позакласні заходи мають одну й ту саму мету.

Розглянемо завдання, які виконуються в ході позакласної роботи:

розширити, поглибити і доповнити знання, що набуваються здобувачами освіти на уроках, тим самим допомагаючи учням краще засвоїти програмний матеріал;

навчити учнів самостійно підбирати матеріал на потрібну тему тощо;

сформувати комунікативну компетенцію учнів;

систематично знайомити дітей з широким колом доступної для самостійного читання літератури та її видами;

формувати у них вміння орієнтуватися серед книг;

вчити передбачати зразковий зміст книги ще до читання;

формувати вміння розрізняти книги за суттєвими ознаками (тематиці, автору, призначенню тощо);

вчити вибирати потрібну книгу, користуючись бібліотечно-бібліографічними засобами;

виховувати прагнення читати книги, замислюючись і розмірковуючи над прочитаним тощо [1, с. 56].

Всі ці завдання вчитель вирішує з учнями під час уроків позакласного читання й у позаурочний час. Основний зміст позакласного читання становить індивідуальна навчальна діяльність учнів спочатку з окремими книжками, відібраними вчителем, потім – у колі читання, обмеженому обсягом книжок, і нарешті – у доступному колі книг без обмеження. У цій діяльності в учнів формується читацька самостійність.

Під час позакласної роботи можна виконувати такі форми роботи, як: творчі роботи, навчальні доповіді, підтвердження належності книги до певного письменника, узагальнюючі висновки наприкінці заняття [7, с. 240].

Зважаючи на ціль та завдання позакласної роботи, назвемо визначальні принципи, відповідно до яких проводиться позакласна робота:

принцип цільової установки;

принцип зв’язку позакласної роботи з життям;

принцип єдності та цілісності навчально-виховного процесу;

принцип виховання в колективі та через колектив;

принцип врахування вікових та індивідуальних особливостей учнів;

принцип поваги до особистості [6, с. 98].

Величезне значення в залученні школярі до читання художніх творів, у формуванні їх читацьких компетенцій – має методично грамотно організована позакласна робота [5]. На уроках позакласного читання через знайомство з кращими творами української та зарубіжної літератури необхідно донести до учнів суть подій, що відбуваються у світі. А обговорення цих творів сприяє вихованню у здобувачів освіти навичок аналізу сюжету, вчинків персонажів, формуванню почуттів кохання, співчуття, активної життєвої позиції.

Необхідно шукати шляхи для виховання в учнів потреби читання та вміння відчувати глибину прочитаного. Позакласне читання повинно задовольняти потреби учнів, відповідати на питання, що їх цікавлять, одночасно воно дає можливість ліквідувати прогалини в знаннях, закріпити вміння аналізувати художні твори.

У пошуку цікавих оповідань для позакласного читання, вчителеві-словеснику варто звернути увагу на сучасні науково-фантастичні романи М. Кідрука та К. Ішігуро. Для учнів науково-фантастичні твори цінні тим, що вони сприяють розвитку творчої уяви, тримають в тонусі пам'ять, розвивають креативне мислення.

Позакласне читання відіграє велику роль у формуванні культури читання в школярів, розширюючи їх кругозір і розвиваючи уяву. Правильний вибір творів для позакласного читання може значно вплинути на внутрішній світ учнів, їхній спосіб сприйняття реальності та прагнення до пізнання.

Роман М. Кідрука «Не озирайся і мовчи» наробив багато галасу в українській літературі – це книга, яка не залишить байдужим жодного любителя трилерів. Український письменник знову продемонстрував свій талант у створенні напружених та захоплюючих історій, які тримають читача у напрузі до останньої сторінки.

Цей роман поєднує у собі елементи містики, психології та драматизму, створюючи унікальну атмосферу, яка занурює у світ таємничих подій та глибоких переживань. Головний герой книги, молодий хлопець на ім'я Макс, стикається з незрозумілими та страшними подіями після смерті своєї сестри. Намагаючись розгадати причину її загибелі, він виявляється втягнутим у ланцюг містичних та небезпечних подій.

Кожен новий доказ і кожне нове відкриття лише додають загадок, змушуючи читача разом із героєм шукати відповіді та розплутувати складний клубок таємниць. Однією з сильних сторін роману є глибоке психологічне опрацювання персонажів.

М. Кідрук вміло розкриває внутрішні переживання своїх героїв, роблячи їх живими та справжніми. Читачі можуть легко співпереживати Максу та іншим персонажам, відчуваючи їхні страхи, сумніви та надії. Ця емоційна глибина додає книзі реалістичності і робить її ще більш цікавою. Крім того, М. Кідрук майстерно створює атмосферу напруженості та тривоги.

Містичні елементи та несподівані повороти сюжету триматимуть учнів у постійній напрузі, не дозволяючи відірватися від книги. Автор уміло балансує між реальністю та фантазією, створюючи світ, у якому кожен крок може призвести до несподіваних наслідків. Це робить роман по-справжньому захоплюючим та непередбачуваним.

Вибираючи літературу для позакласного читання слід враховувати безліч аспектів, від жанру до складності тексту. Деякі книги здатні торкнутися важливих тем, таких як дружба, відданість, (мужність) і самовизначення, в той час як інші можуть надати можливість для глибоких роздумів про життя та суспільство. Роман М. Кідрука «Не озирайся і мовчи» порушує важливі теми, такі як сімейні стосунки, втрата, страх та подолання себе. Ця книга не тільки розважить, а й змусить задуматися про багато аспектів життя.

Роман «Не озирайся і мовчи» М. Кідрука стане чудовим вибором для захоплюючого та насиченого позакласного читання. Цей роман пропонує не

лише захоплюючий сюжет, а й глибокі емоційні переживання, які залишать слід у серці кожного читача [4].

Чудовим вибором для позакласного читання також може стати науково-фантастичний роман К. Ішігуро «Не відпускай мене». Роман є спогадами Х. Кеті, молодої жінки близько 30 років, про її дитинство в незвичайній школі-інтернаті та подальшому дорослому житті. Дія відбувається в Великій Британії кінця XX століття, в якій люди клонуються для створення живих донорів органів для пересадки.

«Не відпускай мене» К. Ішігуро – це одночасно несамовитий і глибоко прекрасний роман, який ще довго залишається з читачем після прочитання останньої сторінки. Це не просто науково-фантастична антиутопія, це пронизливе дослідження людяності, кохання, дружби та прийняття своєї долі.

Автор створює напрочуд реалістичний і переконливий світ, у якому клони вирощуються для донорства органів. Але головне в сюжеті не шокуючі факти, а те, як автор занурює у внутрішній світ героїв: Кеті, Рут і Томмі. Читач бачить світ їхніми очима, через призму їхньої наївності, надії та страхів [3].

Автор із майстерністю створює напругу та недомовленість. Він не поспішає розкривати всі карти, дозволяючи читачеві поступово усвідомлювати трагічну правду життя героїв. Це додає історії глибини і змушує задуматися про цінність життя, про те, що означає бути людиною, і про те, наскільки ми готові чіплятися за кохання та дружбу у найскладніших обставинах [3].

Мова К. Ішігуро відрізняється елегантністю та стриманістю. Він уникає зайвої сентиментальності, але при цьому вміє передати всю гаму почуттів героїв. Його герої говорять простою мовою, але їхні слова пронизані глибоким змістом і змушують задуматися про найважливіші речі в житті.

«Не відпускай мене» – це книга, яка викликає бурю емоцій та залишає глибокий слід у душі. Це книга, яку хочеться перечитувати та обговорювати, щоб ще раз поринути у цей світ, сповнений смутку та краси, і спробувати зрозуміти, що ж насправді означає бути людиною.

Отже, мета позакласного читання – розвиток сталого інтересу вихованців до книг, як джерела знань та соціального досвіду, формування читацької самостійності як властивості особистості. Позакласне читання грає величезну роль у розвитку здобувачів освіти, їх сприйняття літератури, оскільки вчитель-словесник може на власний розсуд підібрати ті твори художньої літератури, які найефективнішим чином можуть вплинути на розвиток учнів.

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СЛЕНГ: АНГЛІЙСЬКЕ ВІДЛУННЯ В УКРАЇНСЬКІЙ МОЛОДІЖНІЙ КОМУНІКАЦІЇ

У сучасному світі, де процеси глобалізації та цифровізації дедалі інтенсивніше впливають на всі сфери людської діяльності, спілкування відіграє ключову роль в соціальній взаємодії. Мовлення безперервно змінюється, пристосовуючись до умов, в яких воно функціонує, набуваючи специфічних рис, характерних для певних соціальних груп чи регіонів. Особливо динамічні зміни ми можемо спостерігати в молодіжному середовищі, де мовлення є не лише засобом передачі інформації, а й інструментом самовираження та групової ідентифікації. У цьому контексті виникає сленг – особливий пласт лексики, який є невід'ємною складовою комунікації сучасної молоді та відображає її соціокультурні потреби, цінності та світогляд.

Мета роботи – розглянути сленгові слова, запозичені з англійської мови, з метою визначення їхнього впливу, функцій та особливостей вживання в україномовному середовищі.

Сленг являє собою окремий пласт лексики в межах будь-якої мови, який демонструє рівень культури, освіченості, а також соціальні та ментальні трансформації суспільства. Це явище є досить поширене, хоча той варіант сленгу, що вживається сьогодні серед українців, а особливо серед молоді,

сформувався відносно нещодавно. Разом з тим, межа між розмовною мовою та сленговими словами є доволі рухливою, оскільки мова є надзвичайно чутливою до змін, що відбуваються у всіх сферах людської діяльності. Це є причиною постійного оновлюється та адаптації мовлення до нових реалій. Як зазначено в одному з досліджень, присвячених цьому питанню: «Сленг не залишається постійним. Зі зміною одного явища іншим, старі слова забуваються, їм на зміну приходять інші..» [2, с. 212]. Цей динамізм і мінливість є характерною рисою сленгової лексики, бо «як тільки сленгізм стає загальновідомим, мовець швидко втрачає до нього інтерес і змінює його іншим, тому сленг можна вважати своєрідним «фільтром» новотворів» [3, с.10].

Існує безліч методів утворення сленгу, які охоплюють більшість наявної лексики. Основними з них є запозичення з інших мов, переосмислення значення вже наявних слів, скорочення, утворення нових слів шляхом словотворення тощо.

Важливу роль у виникненні сленгових слів відіграє потреба в стислому, емоційно насиченому та неформальному спілкуванні. Зазвичай такі слова виникають у межах вузьких соціальних груп і поступово поширюються серед ширших мовних спільнот, стаючи елементом сучасного повсякденного мовлення.

Значну частину сленгу сьогодні складають запозичення з англійської мови, що пов’язано з розвитком перекладознавства, інформаційних технологій, соціальних мереж тощо, зокрема: лайк, фейк, хейт, тренд, краш, дабл, френд, смайл, дрінк, сейл, флексити. У дослідженнях диференціюють соціальну мову англомовного походження наступним чином:

1. Слова, що і за звучанням, і за семантикою збігаються з англійськими. Наприклад: денс (від англ. dance) – танець, смайл (від англ. smile) – посмішка, френд (від англ. friend) – друг, паті (від англ. party) – вечірка, кеш (від англ. cash) – гроші, фейс (від англ. face) – обличчя, хелп (від англ. help) – допомога, блог (від англ. blog) – публічний контент, лузер (від англ. loser) – невдаха, трек (від англ. track) – музичий запис, онлайн (від англ. online) – в мережі, офлайн (від англ. ofline) – поза мережею, хейтер (від англ. hater) – людина, яка поширює негатив.

2. Слова, які в українському варіанті мають дещо інше значення, ніж в англійській мові. Наприклад: саунд (від англ. sound) – гучна музика (в англ. – звук), клуб (від англ. club) – нічний клуб (в англ. – об’єднання за інтересами), плейс (від англ. place) – модне місце чи заклад (в англ. – будь-яке місце), драйв (від англ. drive) – енергія, азарт чи емоційний підйом (в англ. – рух, водіння).

3. Слова-сленгізми англомовного походження, які нерідко зазнають деривaційної обробки відповідно до словотвірних моделей сучасної української мови (суперовий, бестовий, безкайфовий, безпонтовий, драйвовий, гламурний, геймер, задонатити, зашеймити) та українських засобів формотворення (піпли, гьорли, нефори, перенси, екіпа). Молодь не лише використовує готові англійські слова, але й творить від них нові деривативи за допомогою українських суфіксів,

префіксів та інших словотвірних моделей. Це свідчить про глибоке проникнення англіцизмів у мовну систему та їхню інтеграцію в активний лексикон.

На основі аналізу наукових досліджень та власних спостережень за процесом комунікації в підлітковому та молодіжному середовищі, можна відмітити тенденцію розширення семантичних меж запозичених слів. Прикладом може слугувати слово «вайб» (від англ. vibe – атмосфера, настрій), яке в українському сленгу може означати не лише загальну атмосферу, але й певне емоційне відчуття або навіть схвалення чогось. Англомовні сленгізми часто несуть сильніший емоційний заряд або відтінок, який може бути відсутній у нейтральних українських відповідниках. Наприклад, слова «крінж» (cringe) або «хайп» (hype) мають чітко виражену емоційне забарвлення, що дозволяє молоді більш яскраво висловлювати свої почуття та ставлення. Англійські сленгізми, особливо серед молоді, сприймаються як більш сучасні та «круті», що підсилює ефект неформальності. Деякі англомовні сленгові слова є коротшими або більш влучними для вираження певного поняття чи емоції, ніж їх українські аналоги. Наприклад, «шеймити» (to shame) є лаконічнішим за «присоромлювати» або «викликати почуття сорому». Деякі англіцизми завдяки своїй незвичності в українському контексті можуть створювати яскраві образи, роблячи висловлювання більш ефектними. Вживання англомовного сленгу може слугувати засобом демонстрації своєї обізнаності в сучасній культурі, технологіях та трендах, особливо тих, що походять з англомовного світу. Це може підвищувати соціальний статус у певних молодіжних колах.

Слід також відзначити вплив нових інформаційних технологій та онлайн-комунікації на формування сленгу. Інтернет-меми, вірусні відео, специфічна лексика онлайн-платформ – усе це стає джерелом нових сленгових одиниць, значна частина яких має англомовне походження або формується під його впливом. Швидкість поширення інформації в мережі сприяє швидкому поширенню нових сленгізмів серед молоді різних регіонів.

З огляду на динамічність мовних процесів та постійну взаємодію української молоді з англомовним контентом у різних сферах – від музики та кіно до ігор та соціальних мереж – можна прогнозувати подальше зростання кількості англійських запозичень у молодіжному сленгу. Цей процес не обмежуватиметься прямим копіюванням слів, а й включатиме активне їх пристосування до фонетичних, граматичних та словотвірних норм української мови.

Проте, варто також згадати про питання мовної чистоти та потенційний вплив надмірного використання англіцизмів в українській мові. Хоча запозичення є природним процесом для будь-якої мови, надмірна кількість неадаптованих або не завжди доречних англійських слів може викликати занепокоєння у лінгвістів.

Враховуючи вищевикладений матеріал, можна зробити наступні висновки. Англомовні запозичення наразі є невід’ємною частиною комунікації в українському мовному просторі. В свою чергу, вони теж збагачують сучасну українську мову, демонструючи динаміку мовного розвитку, потребу в стислому

та емоційному спілкуванні. Варто підкреслити, що значна частина цих слів зазнає адаптації до української мовної системи, утворюючи нові форми та значення. Сленг, зокрема англомовного походження, є яскравим прикладом живого мовлення, яке постійно змінюється відповідно до вимог часу.

Англомовні запозичення продовжуватимуть відігравати значну роль у формуванні та розвитку молодіжного сленгу в Україні, відображаючи глобальні тенденції та специфічні соціокультурні потреби молодого покоління. Подальше дослідження цього динамічного мовного явища є важливим для розуміння сучасних комунікативних процесів та мовної еволюції.

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ТИПИ ХУДОЖНЬОГО АСОЦІЮВАННЯ (НА МАТЕРІАЛІ ПОЕЗІЙ МИКОЛИ ВІНГРАНОВСЬКОГО)

Світ сповнений о́бразами, які викликають у нашій свідомості певні спогади, почуття, ідеї. Почувши слово «весна», ми найчастіше уявляємо буяння трав та квітів чи запах цвіту вишні, а почувши «крейда», згадуємо, наприклад, шкільні роки, вчителя біля старої зеленої дерев'яної дошки. Тобто між загальними властивостями явищ і їх назвами в уяві встановлюються зв'язки, які вкорінюються в пам'ять, допомагають опановувати мову, нову інформацію, Тому згодом, читаючи або промовляючи ці слова, ми уявляємо певні речі, явища, стани, з ними пов'язані. Усе це – плоди нашого асоціативного мислення.

Феномен асоціювання (з лат. «сполучення», «з'єднання», «поєднання») активно досліджують науковці в межах когнітивної психології, нейронауки, філософії, літературознавства. Ще античні мислителі цікавились сутністю асоціацій, зокрема саме Аристотель вперше ввів цей термін. Велике значення

художньому асоціюванню надавав І. Франко, вбачаючи в ньому можливість "знайти наукове пояснення процесу поетичної творчості" [7]. Дослідник присвятив її висвітленню добру частину праці "Із секретів поетичної творчості". Наголошував, що саме асоціювання лежить в основі порівняння та поетичної градації. Назагал асоціація – це зв'язок відчуттів та уявлень у людській психіці, коли одне з них викликає цілу низку інших. Саме тому процес асоціювання, або «роботу поетичної фантазії» І. Франко прирівнює до сну, оскільки і там, і там відбувається довільне поєднання колишніх забутих чи напів забутих вражень і творення нових образів, ситуацій, сцен. Тож як підсвідомо будуються різнорідні образи уві сні, так і в мисленні виникають ті чи інші асоціації. [6, с.44]

У сучасній науці асоціативне мислення трактують як один із ключових складників творчого процесу та навчання. Зокрема, когнітивні психологи стверджують, що воно відіграє важливу роль у вирішенні проблем, формуванні мовлення та навіть у процесі прийняття рішень [8]. У літературознавстві ж розглядають поняття «художнє асоціювання», що означає творче перетворення дійсності, яке зумовлюється здатністю асоціативно співвідносити предмети і явища навколишнього світу, продуктивно конструювати їх за допомогою різноманітних художніх образів, символів [5, с.48]. Асоціювання може відбуватись за кількома параметрами: за схожістю, за суміжністю у часі/просторі та за контрастом.

Вміння творити асоціації є одним з визначальних показників художнього хисту митця, його майстерності. Художнє асоціювання є тим інструментом, що дозволяє автору вийти за рамки звичайного сприйняття світу, побачити зв'язки між, здавалося б, далекими поняттями, і передати ці зв'язки через слово. Особливо багате асоціювання характерне для стилю українського письменника-шістдесятника Миколи Вінграновського. Про глибоке світовідчуття, артистичність та неймовірний талант цього майстра проникливо писав Іван Дзюба у своїх спогадах: «Неповторна індивідуальність Вінграновського невловна і біжуча, як живе срібло. Його поезія – це стихія, що в ній цілковито відсутня якась навмисна спрямованість, передбаченість. Постійне переливання настроїв, станів, натхненна гра уяви. Ніколи не вгадати, про що він говоритиме за мить, що зрине дивовижно з глибинних нуртів його душі і який настрій хвилею його огорне й хвилею спаде, щоб поступитися місцем іншому... Все, чого коли-небудь сягав його душевний зір і що чутно чи нечутно торкалося колись його душі, - все воно живе в ньому постійно, глибоко жевріє здатною щомиті спалахнути живою жариною; живе, готове щохвилі полинути водоспадом, упасти росинкою чи вдарити громом – з найнепомітнішого і найнесподіванішого приводу» [4, с.21]. Багатство, афористичність, глибока асоціативність, легкість поетичної мови, неповторність образів, гра слів – усе те, що свідчить про унікальність творчости Миколи Вінграновського. Тож, розглянемо основні типи художнього асоціювання на матеріалі його поезій:

1. За схожістю. Проаналізуємо на прикладі вірша Миколи Вінграновського: «Що сама тоненька, як бриндуша, / бистроцвітна, як бриндуша, теж…» [1, с.25]. Автор порівнює образ ліричної героїні з бриндушею

(крокусом/шафраном сітчастим), що підсвідомо викликає у нас асоціацію гарної маленької квіточки у лісі. Так утворюється асоціація за схожістю.

2. За суміжністю в часі/просторі. У вірші «Сеньйорито акаціє»: «Сеньйорито акаціє, добрий вечір. / Я забув, що забув був вас, / Але осінь зійшла по плечі,

Осінь, ви і осінній час, /Коли стало любити важче, / І солодше любити знов... / Сеньйорито, колюче щастя…». Можемо помітити, як послідовно автор вибудовує асоціативний ряд з образів: «кохана», «осінь», «акація», «осінній час», «колюче щастя». Імовірно, образ осені митець використовує задля опису кохання, яке вже минуло, і з приходом осінньої пори несе у собі тугу та смуток, а образ ліричної героїні асоціює із «колючою акацією» – яка і вабить і відштовхує через свої голки. Отже асоціація вибудувана за суміжністю у часі («кохання з минулого» - «осінь» - «осінній час») та за схожістю («акація» - «колюче щастя»).

Асоціацію за суміжністю у просторі можемо помітити у поезії «До себе» [1, с.43] у рядку «Не дивися на небо, де хмари пішли». Суміжність у просторі «небо» – «хмари»: хмари, які «пішли», викликають асоціацію втрати, плинності часу, минулого, яке неможливо повернути. Сам вірш побудований з заперечень, які повторюються з рядка в рядок: «не дивись» - «не люби» (від візуального до емоційного). Так ми бачимо, що ліричний герой ніби закликає (чи прагне) відмовитись від усього: від спогадів, від минулого, від прив’язаностей. Проте чи можливо це? Імовірно, відповідь на це запитання у кінці поезії: «Не люби всього світу, себе не люби, / Не люби свого духу – домовину роби!». Тобто йдеться про розуміння того, що людина не може відмовитись і перестати любити все, що її оточує, інакше життя втрачає свій сенс.

3. За контрастом. Візьмімо рядки з поезії «Я скучив по тобі, де небо голубе»[2, с.39]: «Люблю тебе. Боюсь тебе. Дивлюсь / Високим срібним поглядом на тебе. / З вогню і вод, від неба і до неба / Твоїм ім’ям на тебе я молюсь…». З чим найперше асоціюється кохання у нашій уяві? З чимось прекрасним, незабутнім, таким, що притягує і тішить. Складність переживань закоханого ліричного героя Микола Вінграновський вдало передав за допомогою контрасту. Почуття до коханої, імовірно, є наскільки сильними та трепетнами, що закоханий чоловік боїться їх, боїться ними «налякати». Саме тому він зображує їх як суміш протилежностей: «любов» - «страх», «вогонь» - вода».

Поет, критик, літературознавець Ю. Ковалів подає ще один тип художнього асоціювання – за причинно-наслідковим принципом [3, с.101]. Можемо простежити його у поезії «Заходить сонце, сніг іде…» [2, с.53] у рядках: «Їй сніг невидимість жене, / А змерзлі сльози опівночі / Лице ховають крижане. / В Холодній балці, в білій піні / Вона іде й співа з ночей. / Намерзло льоду в її пісні / І снігу в пісні – до плечей…». У вірші змальована зимова холодна пора, сніг, образ приблуди зі сну, яка не покидає ліричного героя. Образ «приблуди» можемо потрактувати, як образ коханої з минулого, почуття вже охололи – «намерзло льоду в її пісні». Тобто автор, зображуючи зимову пору року, утворює причинно-наслідковий асоціативний ряд: «зима» - «сніг» - «все біле» - «замерзлі сльози» - «намерзло льоду у піснях».

Як бачимо, асоціативне мислення є важливим складником людської когніції, яка проявляється у формуванні зв'язків між явищами, поняттями та образами. Воно допомагає нам краще розуміти світ, опановувати мову та творчо осмислювати дійсність. Микола Вінграновський майстерно використовує асоціації, створюючи живі й глибокі художні образи, що є чудовим прикладом того, як асоціативне мислення збагачує поетичний текст, роблячи його багатозначним, смислово невичерпним та глибоко емоційним. Так твориться неповторне диво поезії.

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ФОНЕТИЧНІ ЧИННИКИ ФОРМУВАННЯ АКЦЕНТУ В МІЖМОВНІЙ КОМУНІКАЦІЇ

Питання акценту в контексті міжкультурної комунікації та мовної компетентності давно перебуває в полі зору фахівців із лінгвістики, психолінгвістики, фонетики та мовної педагогіки. Акцент, з погляду сучасної лінгвістики, визначається як специфічна вимова іноземної мови, зумовлена артикуляційною базою рідної мови, або ж як сукупність діалектних ознак, що не відповідають літературній нормі.

Акцент- своєрідне вимовляння звуків нерідної мови, зумовлене артикуляційною базою рідної мови (іншомовний акцент), або сукупність

особливостей вимови, характерних для певного діалекту й не властивих літературній мові, зумовлена не досконалим володінням її нормами (діалектний акцент). З визначення випливає, що акцент зумовлений артикуляційною базою рідної мови. Чи можна позбутися акценту протягом вивчення іноземних мов? Артикуляційна база кожної мови формується з дитинства та має стійкий характер. Вона включає набір звуків, типову інтонацію, ритміку мовлення, позиції органів артикуляції. Під час вивчення іноземної мови носій іншої фонетичної системи часто проєктує рідні артикуляційні навички на нову мову, що і створює акцент.

З біологічної точки зору, індивідуальні особливості людини не мають вирішального значення для формування акценту. Визначальним чинником є ступінь фонетичної адаптації до нової мови. З точки зору біології - людина це індивід, який є неповторним. Тобто люди відрізняються один від одного, але ці відмінності не впливають на вимову. На вимову, судячи з визначення, впливає рідна мова. Коли людина говорить іноземною мовою з акцентом, це означає, що ця людина не досконало володіє іноземною мовою, якою говорить.

Доказом можливості повного подолання акценту є приклади професійних лінгвістів, акторів, перекладачів та розвідників, які опановують іноземні мови на рівні, близькому до носіїв. Такий рівень досягається завдяки інтенсивним фонетичним тренуванням, слуховому аналізу та наслідуванню носіїв мови. Однак для широкого загалу характерною є наявність помітного акценту, обумовленого як фонетичною інтерференцією, так і недостатньою практикою. Не всі люди готові приділяти тренуванням іноземної мови багато часу, тому ми можемо почути акценти в спілкуванні з іноземцями.

В світі багато мовних груп, які за географічною відстанню сильно відрізняються: наприклад, українська та польська мови є схожими, так як Україна і Польща межують одна з одною, але українська мова кардинально відрізняється від японської, так як відстань між країнами колосальна.

В англійській мові відсутній звук [и], притаманний українській, натомість англійський міжзубний звук [θ] є складним для носіїв слов'янських мов. Це призводить до частих замін: слова think [θɪŋk] і sink [sɪŋk] можуть зливатися у вимові, що викликає комунікативні труднощі - ці слова не дуже відрізняються за вимовою, хоча значення мають різні: думати і тонути відповідно.

Продовжуючи тему фонетики варто сказати, що у деяких мовах є звуки, які вимовляються інакше, або мають видозмінення. Фонетична система арабської мови містить звуки, відсутні в європейських мовах. Наприклад, звук ḥā' (ح), що вимовляється як фрикативний гортанний на видиху, або khā' (خ), подібний до хрипу. Такі звуки можуть бути складними для носіїв індоєвропейських мов. Окрім того, значна варіативність арабських діалектів ускладнює уніфікацію вимови. Варто зазначити, що арабська мова дуже широко, з точки зору географії, використовується в світі, і практично на кожну країну є свій діалект. Тобто в різних країнах, де розмовляють арабською, можуть відрізнятися слова.

Японська мова не має звука [л], і замість нього використовуються варіанти звука [р], що позначається відповідними складовими знаками хіраґани: り (рі),

れ (ре), る (ру), ろ (ро). Це спричиняє специфічне звучання японського акценту при вивченні європейських мов, зокрема англійської. При вивченні японцями інших мов, звук [л] вони можуть говорити як [р], що буде японським акцентом.

У науковому дискурсі не існує єдиної мови, яка б універсально спрощувала вивчення всіх інших. Однак в межах однієї мовної групи перехід до споріднених мов є значно легшим. Наприклад:

- французька — як основа для опанування романських мов (іспанської, італійської, португальської);
- арабська — як ключ до семітських мов (іврит, амхарська тощо).

Такий підхід дозволяє зменшити кількість фонетичних бар'єрів на шляху до оволодіння новими мовами.

Акцент є наслідком фонетичної інтерференції рідної мови при вивченні іноземної. Основну роль у його формуванні відіграє артикуляційна база, сформована в ранньому дитинстві. Попри складнощі, акцент піддається корекції за допомогою регулярної практики, тренування вимови та фокусування на фонетичних деталях. Ефективне вивчення іноземних мов передбачає також стратегічний вибір мов за мовними групами. Підсумовуючи все вищесказане, варто сказати, що акценти утворюються на основі фонетичних особливостей рідної мови і відсутності їх в іноземних мовах, які людина хоче вивчити. Акценту можна позбутися, але для цього потрібно практикувати вимову слів і стежити за своїм мовленням у комунікації з іноземцями. Мови у світі дуже різноманітні, щоб вивчити усі мови світу потрібно знати по одній мові з різних мовних груп. Тоді у вас не буде проблем з опануванням всіх мов світу.

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ЛІНГВОЦИД УКРАЇНСЬКОЇ МОВИ: ІСТОРИЧНИЙ АНАЛІЗ ЗА СТОЛІТТЯМИ

Лінгвоцид — це навмисне знищення мови як елементу культурної та національної ідентичності, потужний інструмент політичного тиску. В історії українського народу цей процес тривав протягом багатьох століть, коли державні інституції та імперії використовували мовну політику для асиміляції.

До того, як розпочалися систематичні спроби придушення української мови, формувалися самобутні мовні та культурні риси українського народу. У середньовіччі українська культура почала набувати окремих ознак, проте вже тоді сусідні держави почали впливати на мовну ситуацію в регіоні. Взаємодія з польською, литовською та московською культурами зумовила певну мовну диференціацію. Перші спроби централізованого придушення української ідентичності набирали обертів з початком епохи новітніх імперій.

У XVIII столітті, коли Російська імперія активно інтегрувала свої східні території, українські землі опинилися під впливом централізованої політики, спрямованої на уніфікацію культури та мови. За правління Петра I і Катерини II імперська влада прагнула створити єдину систему управління, де домінувала російська мова як засіб політичного, культурного та адміністративного впливу.

У цей період видавалися укази, які обмежували можливості видавництва україномовної літератури. Уже в 1720 році були видані накази, що забороняли друк книг українською мовою (за винятком деяких церковних видань), що мало на меті зменшити інформаційний простір українців та уніфікувати мовну практику в межах імперії. Ці заходи стали передвісниками подальших обмежень, які мали як політичну, так і культурну мотивацію.

Незважаючи на обмеження, саме в XVIII столітті починає формуватися базис українського національного відродження. Імперська політика спричиняла асиміляційні процеси, однак вона також стимулювала збереження української ідентичності. Виникали перші спроби систематизації мови, літератури та фольклору, що згодом послужило основою для культурного відродження у XIX столітті.

Одним із найвідоміших актів придушення української мови став Валуєвський циркуляр 1863 року, який заявляв, що «малоросійської мови» як окремої не існує, і будь-яка спроба її розвитку є небезпечною для єдності імперії. Цей документ мав на меті унеможливити розвиток української літератури та освіти, обмежуючи її використання виключно релігійною сферою.

У 1876 році Емський указ значно посилив мовну репресію, заборонивши друк будь-яких творів українською мовою, а також публічні вистави чи читання авторських творів. Ці заходи не тільки обмежували розповсюдження знань, але

й руйнували культурний потенціал українського народу, адже література та театр завжди були важливими засобами формування національної свідомості.

Попри систематичні спроби придушення, XIX століття стало періодом активного національного відродження. Письменники, поети та діячі культури, такі як Тарас Шевченко, виступали проти державної політики, створюючи твори, що розкривали трагедію ідеологічного геноциду та надихали народ на боротьбу за свою ідентичність.

Після Жовтневої революції та встановлення влади більшовиків у Росії спостерігалося певне пом'якшення ставлення до національних меншин. У 1920-х роках відбувалася політика українізації, яка сприяла розвитку української мови в освіті, культурі та державних установах. Цей період дав змогу українським інтелігентам організовувати літературні та мистецькі ініціативи.

Однак із приходом епохи сталінізму політика змінилася. У 1930-х роках розпочалися масові репресії проти української інтелігенції. Багато видатних діячів культури, письменників та науковців було арештовано, розстріляно чи заслано до таборів. Цей період відомий як «Великий терор», коли систематично знищували будь-які прояви української самобутності.

З 1940-х до 1960-х років політика радянського режиму спрямовувалася на активну русифікацію. Українська мова витіснялася з навчальних закладів, державних установ та медіа. Мовні реформи, що наближали українську до російської, призвели до втрати багатьох традиційних рис мови.

Лінгвоцид XX століття мав руйнівний вплив на розвиток української культури. Політика держави полягала не тільки в знищенні мовних норм, але й у руйнуванні національної свідомості. Проте українська мова змогла зберегти свої основи завдяки невтомним зусиллям письменників, поетів та простих людей.

Після здобуття незалежності України у 1991 році відбувся ренесанс української мови. Були прийняті закони, що сприяли розвитку національної мови в освіті, культурі та державних установах. Проте історична пам'ять про лінгвоцид залишалася болючою, і наслідки радянської політики відчуваються до сьогодні.

У XXI столітті спостерігаємо нові форми мовного тиску, особливо на тимчасово окупованих територіях України. Окупаційна влада здійснює примусове впровадження російської мови в освіту, адміністрацію та медіа, що обмежує можливості навчання українською та стирає історичну пам'ять.

Лінгвоцид української мови — це багатовекторний процес, що охоплює історичні, політичні, економічні та соціокультурні аспекти. Протягом століть державні інституції намагалися знищити українську мову, використовуючи її як засіб для асиміляції. Водночас сьогодні українська мова переживає новий етап відродження. Сучасні ініціативи сприяють її розвитку, і збереження мовної ідентичності є важливим завданням кожного покоління.

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КОМУНІКАТИВНІ НАВИЧКИ В ПРОФЕСІЙНІЙ СФЕРІ

Історія писемності часто пов'язується з діяльністю богів і культурних героїв, однак у міфологіях писемність здебільшого є частиною ширшого спектра функцій (красномовство, пам'ять, логіка, прозорливість у судочинстві, створення календаря). Різноманіття видів писемності характерне для різних етапів розвитку людства, і на кожному з них писемність відповідала потребам формування, висвітлення та розповсюдження думок. Незалежно від форми інформаційного забезпечення — чи то «складове письмо» (винахід якого відбувався в III–II тисячоліттях до н. е.), чи «звукове письмо» (розподіл слова і складів на окремі звуки, де кожному звуку відповідає свій знак), чи «розповідь у картинках» — висловлення власної думки мало свої пріоритети та недоліки. Всі ці етапи історично покращували й формували навички ефективного взаєморозуміння.

Сучасні комунікативні навички мають широкий спектр особливостей, які сприяють формуванню продуктивних взаємин у професійній сфері.

Комунікативні навички — це основа успіху в сучасному професійному середовищі. Здатність ефективно спілкуватися, передавати інформацію та отримувати зворотний зв'язок є необхідною умовою для досягнення цілей та професійного успіху. У освітньому контексті комунікація здійснюється на різних рівнях і через різні канали. З розвитком інтернет-технологій значно зросла потреба в писемному мовленні [1]. Але головним чинником просування креативної комунікативної активності є особистість. Талант та індивідуалізм притаманні всім без винятку людям. А от навчитись фокусувати свою здатність та з легкістю користуватися спеціальними робочими інструментами для отримання найвищого комунікативного результату - це вже професійна навичка.

Проте головним чинником просування креативної комунікації є особистість. Талант і індивідуальність притаманні кожній людині, але вміння ефективно застосовувати ці якості та користуватися спеціальними

інструментами для досягнення високих комунікативних результатів — це вже професійна навичка. Навчання та опанування критеріїв наукових основ педагогіки і психології спілкування, їх суті, структури, функцій, техніки - це ключ до професійного спілкування та з'ясування причин виникнення конфліктів, а також шляхів їх розв'язання, що є вершиною професійно-комунікативної діяльності.

Комунікативні вміння та навички — це складна характеристика, яка виявляється у потребі спілкуватися, готовності взаємодіяти в конкретних ситуаціях, оптимізувати комунікаційні процеси для досягнення результатів у навчальній чи професійній діяльності [2].

Опанування основ педагогіки, психології спілкування, їх структури, функцій і технік є ключем до професійного спілкування, а також до розуміння причин конфліктів і способів їх розв'язання. Це є важливою частиною професійно-комунікативної діяльності.

Навички ефективного спілкування є критичними для побудови продуктивних взаємин не тільки на роботі, а й у будь-якій іншій сфері життя. І, безперечно, варто докласти зусиль для їх вдосконалення.

Американський мільярдер Джон Рокфеллер, один із найбагатших людей світу, вважав, що вміння спілкуватися з людьми — це товар, який можна придбати за гроші, як і інші товари. «Я готовий платити більше за уміння спілкуватися, ніж за будь-який інший товар у світі», — говорив він. Таке ставлення до комунікації також підкреслює Дейл Карнегі у своїй книзі «Як завойовувати друзів і впливати на людей».

Формування комунікативної компетентності передбачає: розвиток міжособистісних стосунків у професійній сфері, опанування технологій конструктивного діалогу, вміння слухати і говорити, встановлення зворотного зв'язку, підлаштування до партнера за допомогою невербальної комунікації, а також здатність швидко реагувати і адаптуватися [3].

Фахівці з добре розвиненими комунікативними навичками користуються попитом у всіх галузях. Вміння ефективно спілкуватися допомагає уникати непорозумінь і конфліктів, швидше знаходити рішення складних питань і працювати продуктивніше. Це, в свою чергу, економить ресурси компаній і підвищує її рентабельність. Тому комунікативні навички важливі для всіх, незалежно від сфери діяльності, посади чи досвіду. Адже, працюючи, наприклад, розробником програмного забезпечення чи менеджером з продажу, необхідно вміти представити свої ідеї іншим людям.

Спілкування є важливою складовою професійної готовності до виконання як початкової, так і професійної діяльності [4]. Через спілкування люди передають знання, досвід, формують вміння та навички, погоджують і координують спільні дії.

Досвід і комунікативні навички формують набір знань і вмінь, від яких залежить психологічний клімат у колективі, його здатність швидко реагувати на непередбачені ситуації, пов'язані з виробництвом. Ці навички є вирішальними як для прийняття креативних рішень, так і для успішної взаємодії з іншими

спеціалістами. Правильно організоване спілкування забезпечує ефективний обмін інформацією та сприяє прогнозуванню результатів і ризиків.

Успішне професійне спілкування вимагає створення відповідної атмосфери, включаючи довіру, взаємоповагу та взаєморозуміння. Лише в таких умовах комунікативний процес буде сприяти досягненню поставлених цілей. Адже специфіка і складність професійного спілкування пов'язані з культурними стереотипами та різницею в мисленні і поведінці, що особливо важливо враховувати в ситуаціях професійної взаємодії [5].

У діловому спілкуванні, як і в інших видах діяльності, успіх залежить від особливостей комунікатора, якості його мовної продукції та психологічного стану отримувача цієї інформації. Комунікація можливе лише тоді, коли ідея, що існує в свідомості однієї людини, досягає свідомості іншої через засіб, який забезпечує її розуміння і використання [6].

Комунікативна культура суспільства ґрунтується на навичках кожної особистості та сприяє економічному зростанню — від окремого підприємства до міждержавних виробництв. Саме в процесі комунікації визначаються статуси речей і учасників, а отже, формуються вимоги до комунікативної культури майбутніх фахівців як основи їхнього професіоналізму [7].

Особистісні якості та компетенції дають можливість досягти успіху у професійній діяльності будь-якого напрямку. Наявність розвинених особистісних якостей, таких як презентабельність, толерантність, гнучкість, значно підвищує рівень ефективності роботи. Професійна комунікативна компетентність включає наявність професійних знань, загальної гуманітарної культури і вміння орієнтуватися в навколишньому світі [8].

Отже, комунікативна компетентність є важливою складовою професійної культури майбутніх лідерів. Формування таких навичок залежить від індивідуальних якостей, соціально-культурного і історичного досвіду особистості, що сприяє розвитку комунікативних умінь і навичок професійного спілкування майбутнього лідера. Професійна комунікативна компетентність є показником сформованості системи знань, умінь і навичок, що необхідні для ефективної професійної діяльності та реалізації лідерського потенціалу.

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ФОРМУВАННЯ КОМУНІКАТИВНИХ НАВИЧОК У ПРОФЕСІЙНОМУ СЕРЕДОВИЩІ

Комунікативні навички є основою ефективної взаємодії в будь-якому професійному середовищі. У світі, де інформація стає основним ресурсом, здатність ефективно передавати, отримувати та обробляти інформацію є важливим чинником успіху на будь-якому етапі кар'єрного розвитку. Від комунікативних навичок залежить не лише досягнення професійних цілей, а й створення здорової робочої атмосфери, сприяння розвитку колективу та прийняття обґрунтованих рішень.

Комунікація на робочому місці – це не лише обмін інформацією, а й важливий інструмент для вирішення проблем, встановлення довіри та підтримки здорових взаємозв'язків між людьми. Вміння чітко виражати свої думки, активно слухати, а також розуміти невербальні сигнали можуть суттєво вплинути на ефективність роботи команди. Дослідження вказують на те, що професіонали, які мають високий рівень комунікативних навичок, є більш успішними у своїй діяльності, краще адаптуються до змін і мають більше можливостей для кар'єрного росту.

У процесі підготовки майбутніх фахівців одним із найважливіших завдань є розвиток комунікативних навичок. Це вимагає впровадження в навчальний процес таких інструментів, як рольові ігри, дебати, командні проєкти, тренінги з управління конфліктами та ораторської майстерності. Це дозволяє студентам/слухачам не лише здобути теоретичні знання, а й відпрацювати

практичні навички, які знадобляться в реальному професійному житті, так як формування комунікативних навичок є важливим компонентом, який забезпечує обмін інформацією та формується на основі мовленнєвих дій. Професійні комунікативні навички – це вміння спілкуватися фахівців певної галузі в межах їхньої діяльності. Рівень сформованості такого виду комунікативних навичок є умовою, за якої може бути продуктивною професійна комунікація. Важливо вчасно зрозуміти і виконати завдання.

Формування комунікативної компетентності включає в себе кілька важливих компонентів:

- **Прогнозування та програмування комунікативних ситуацій** — це здатність передбачати наслідки своїх слів і дій, а також планувати комунікацію в залежності від мети і контексту (потрібно орієнтуватися на кількісний і якісний склад аудиторії), від цього залежить якою буде мова – простою чи ускладненою, потрібні будуть уточнення, пояснення чи ні.
- **Засоби спілкування** — як вербальні (слова, мова), так і невербальні (жести, міміка, постава). Особливо важливим є вміння керувати своїми невербальними сигналами, оскільки вони можуть значно змінити сприйняття вашої особи співрозмовниками. Вміння справляти враження залежить саме в першу чергу від невербальних засобів спілкування, а потім від вербальних.
- **Комунікативна культура** — розуміння та повага до культурних і соціальних особливостей партнера по комунікації, що особливо актуально в умовах глобалізації та мультикультурного середовища. Не потрібно засмічувати свою мову нелітературними словами, лайкою, жаргонізмами. Гарне мовлення завжди притягує увагу. Це здатність висловлювати свої думки так, щоб вони були зрозумілі слухачу чи читачу. Використання мовних форм в залежності від ситуації (офіційне, неформальне спілкування). Потрібно виявляти ввічливість та уважність до співрозмовника.
- **Мовленнєва компетенція** — здатність правильно і ефективно використовувати мову для досягнення комунікативних цілей, правильно, чітко та доречно висловлювати свої думки, адаптуючи мовлення до різних умов і цілей спілкування. усвідомлення мовленнєвої ситуації – що, кому, як (сказати). Мовленнєва компетенція охоплює кілька важливих складових: граматична компетенція — знання і вміння правильно застосовувати граматичні правила мови (морфологія, синтаксис); лексична компетенція — здатність вибирати правильні слова та вирази для вираження думки, зокрема залежно від контексту; фонетична компетенція — вміння правильно вимовляти звуки, інтонацію та наголос; синтаксична компетенція — здатність правильно будувати речення, дотримуючись норм синтаксису; соціокультурна компетенція — вміння враховувати соціальний контекст, культурні особливості та етикет у мовленні; прагматична компетенція — здатність використовувати мову відповідно до конкретної комунікативної мети (наприклад, для аргументації, переконання, інформування). Мовленнєва компетенція є важливим компонентом комунікативної компетенції, яка дозволяє людині ефективно взаємодіяти з іншими в різних сферах життя.

Комунікативні навички мають свою специфіку (особливість) у різних професійних сферах:

1. **Медицина:** У медичній сфері комунікативні навички стають основою для створення довірчих відносин між медичними працівниками і пацієнтами. Вміння надавати складну медичну інформацію в доступній формі, слухати пацієнта й чути його, враховувати його емоційний стан є важливими аспектами для успішної роботи. Належні комунікативні навички дозволяють не лише покращити результат лікування, але й мінімізувати стрес як у пацієнтів, так і в лікарів (лікувати словом). Важливим є також акцент на етичних аспектах медичної комунікації, зокрема на дотриманні конфіденційності та розумінні емоційних потреб пацієнтів.
2. **Бізнес і менеджмент:** У сфері бізнесу і менеджменту успіх на переговорах, в управлінні проєктами або в управлінні командою значною мірою залежить від здатності ефективно спілкуватися. Лідери, які володіють високими комунікативними навичками, здатні мотивувати команду, налагоджувати партнерські відносини та швидко реагувати на зміни ринку. Вміння чітко формулювати завдання, слухати/чути підлеглих і надавати конструктивний зворотний зв'язок дозволяє уникати конфліктів і досягати високих результатів.
3. **Освітній процес:** Вчителі, викладачі та тренери, які мають розвинуті комунікативні навички, здатні більш ефективно передавати знання, створювати атмосферу довіри та взаємоповаги в навчальному процесі. Важливими аспектами є здатність адаптувати свою мову для різних аудиторій і уміння обходити конфлікти в класі чи на лекціях. Мова вчителя/викладача має бути насамперед зрозумілою й доступною. Не потрібно вживати надскладні слова, засмічувати мову зайвою термінологією, професіоналізмами тощо. Мистецтво красномовства має бути притаманне кожному педагогічному працівнику, при цьому культуру мовлення ставимо на перше місце.

Методи покращення комунікативних навичок:

Для ефективного розвитку комунікативних навичок важливо застосовувати різноманітні методи та підходи. Серед них:

- **Практичні заняття та тренінги** — участь у тренінгах, рольових іграх, дебатах або переговорах дозволяє відточити навички спілкування в умовах реальних ситуацій.
- **Коучинг і наставництво** — робота з досвідченим наставником або коучем дозволяє зрозуміти свої слабкі місця та отримати практичні поради для вдосконалення свого мовлення.
- **Аналіз відеозаписів виступів або переговорів** — це дозволяє бачити себе зі сторони і виправляти помилки, оцінюючи свою мову, інтонацію, жести та невербальні сигнали.
- **Інтерактивні вправи на розвиток емоційного інтелекту** — ці вправи сприяють кращому розумінню емоцій інших людей та ефективному реагуванню на їхній емоційний стан.

Розвиток комунікативних навичок є невід'ємною частиною професійної підготовки. Це не лише важливий аспект для досягнення професійних

результатів, але й забезпечення гармонії в робочих стосунках. Від рівня комунікативних здібностей залежить не тільки ефективність роботи, але й комфорт у робочому середовищі, що в свою чергу сприяє особистісному росту і розвитку професіонала. Важливо, щоб заклади освіти приділяли належну увагу формуванню комунікативної компетентності майбутніх фахівців, що є основою їх подальшої професійної реалізації.

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ОСОБЛИВОСТІ ФУНКЦІОНУВАННЯ НІМЕЦЬКОЇ МОВИ В АВСТРІЇ НА СУЧАСНОМУ ЕТАПІ

Австрія країна з багатою історіє та традиціями. Вона поєднує в собі багато традицій та епох. Ця країна за свою історію була складовою багатьох імперій: Священної Римської імперії германської нації та Австро-Угорської імперії все це сприяло створенню багато культурної структури Австрії. Але сьогодні ми зосередимо свою увагу на культурній складовій цієї країни і розглянемо її з точки

зору лінгвістики. Ми з’ясуємо, які ж особливості має німецька мова в Австрії, під впливом яких чинників виникли ці особливості.

Ця тема є актуальною сьогодні, тому шо в умовах глобалізаційних процесів питання вивчення нових мов є важливою складової багатьох освітніх систем і державної політики в цілому. А вивчення мови без розглядання та розуміння її місцевих особливостей та відмінностей. Може погіршити якість вивченого матеріалу або ж поставити лінгвіста в незручне становище при виникненні певних «робочих» ситуацій.

Також вивчення цієї теми допоможе нам краще зрозуміти історію та культурно-лінгвістичні особливості цієї країни. Це дасть нам можливість скласти більш цілісну картину при подальшому дослідженні.

Спочатку варто почати з того, що лінгвістичні особливості австрійського варіанту німецької мови пов'язані з: історичними, географічними і певними політичними подіями.

1. Австрія завжди була важливою частиною імперій (Священної Римської імперії германської нації та Австро-Угорської імперії). Це, в свою чергу, породило свої певні діалекти: «Баварський: Sterz, zwicken, Austrag, Zuwaage, Nudelwalker, Schmankerl, selchen, auflassen, auswalken, fieseln, anpatzen, zuzeln.

Алеманський: Aehne, Beiz, Riebel, Kilbi, Znuene, Flaedle, Eierschwaemmle, Dreissigste, Schnorre, Schuebling, Maisaess, Nuggi.

Віденський: Schmäh, Bim, Lurch, Hacken, Haberer, hackeln.

2. Географічна складова: виникають у зв’язку з закономірним розвитком спільно верхньонімецького простору (південнонімецького, австрійського, швейцарського): Orange, Sulz, Einser, Kutteln, läuten, nützen, Masche, Leintuch, Föhre, Schlegel, Zuber, Hafner, Zins, Wagner, Stecken.

3. Міждержавний розвиток та взаємодія: Суттєвий вплив на формування й розвиток австрійської німецької мови до 18 століття мала італійська мова, оскільки Австрія і Італія мали дуже тісні культурні та економічні зв’язки.

австрійська	німецька
Akonto	Anzahlung
Baraber	Arbeiter
Bassena	Waschbecken
Bollette	Zollerklärung
Faktura	Rechnung

Латина була офіційною мовою в Австрії до початку 19 століття, тому в австрійській німецькій збереглося чимало латинських слів і словотвірних елементів:

австрійська	німецька
dirimieren	entscheiden
evident, Evideny	übersichtlich
Inquisit	Häftling
inskribieren	einschreiben» [1].

Знаючи це, ми можемо зосередити свою увагу на наступному етапі нашого дослідження. Ми можемо зосередитися на фонетичних особливостях вимови, а саме:

1. Подовження голосних: в австрійські вимові при вимові голосні звуки часто звучать більш протяжно. Наприклад слово gut (добре) вимовляється з явним подовженням [u:]

2. Загальна м'ягкість вимови і інтонації в порівнянні з «класичною» німецькою

Граматичні особливості

1. Вживання артиклів: в австрійському варіанті німецької мови деякі слова мають інший рід, а відповідно і інший артикль. Наприклад: Radio- в німецькій мові має артикль (das) тоді, як в Австрії (der)

2. Числівники та їх особливості: в австрійському варіанті німецької мови числівники мають деякі особливості. Наприклад: при усному підрахунку речей або людей нерідко додається артикль ein, навіть коли в звичайному німецькому цього робити не потрібно. Наприклад: в австрійському варіанті буде ein drei Apfel, тоді, як в німецькому drei Apfel

3. Утворення зменшувальних форм: в австрійському варіанті німецької мови для утворення зменшувальних форм використовується суфікс –erl замість класичного – chen або –lein. Наприклад: ein bisschen в Австрії може бути сказане, як bisserl

4. Відмінності у синтаксичній структурі речення: в австрійській- німецькій часто можна зустріти таку конструкцію речення: Der kaffee ist fertig geworden. (кава готова стала). Тоді, як у класичному варіанті це речення звучить так: Kaffee ist fertig.

5. Відмінність стандартних лексико-граматичних конструкцій та ідіоматичних виразів: Wie viel Uhr ist es? (Котра година?). В австрійському варіанті може звучати, як Wieviel Uhr haben wir?

Серед інших лексико-граматичних відмінностей австрійського варіанту німецької мови можна виділити:

«Перш за все, відрізняються ці два варіанти мови, граматикою та вимовою.

Важливою особливістю австрійського є поява або зникнення букви « s » у складних словах, до того ж не завжди в тих випадках, які передбачені німецькою мовною нормою.

Однією з фонетичних особливостей австрійської німецької є озвінчення приголосних p-, t-, k-.

Всі кажуть, що німецька груба у вимові, слова досить довгі та їх важко вимовляти. В той час коли австрійська німецька простіша та м'якша та милозвучніша.

В австрійській німецькій багато запозичень з слов'янських та інших європейських мов.

Серед запозичень можна виділити такі як die Marille (абрикоси), das Karfiol (цвітна капуста), das Animo (перевага) - всі вони прийшли з італійської

Відрізняються правила утворення множини: die Erlasse - die Erlässe.

В австрійському закінченні -ig, наприклад, у словах König, fertig, читається швидше як [-ık], а не як [-ıç] у німецькій мові» [2].

Проаналізувавши всю вищезазначену інформацію ми можемо зробити такі висновки: «Основним питанням дослідження є співвідношення між стандартною формою мови в Німеччині та її варіантом в Австрії. З одного боку, на систему австрійського варіанту німецької мови сильно впливає система німецької мови в Німеччині, але з іншого боку цей варіант німецької мови існує на окремій території Австрії, де він залежить від економічних, соціальних, історико-культурних факторів країни. Австрійський варіант німецької мови утворює власні варіанти лексем, що відображають особливий австрійський спосіб життя. Своєрідні економічні, історичні та культурні умови сформували таке середовище для мови, що вона почала розвиватися власним шляхом. Отже, австрійський варіант німецької мови має тісні зв’язки з системою інших мов, а також з системою німецької мови Німеччини, але розвивається власним шляхом, що зумовлено певними внутрішніми та зовнішніми чинниками.» [3]

Беручи до уваги вище приведені тезиси ми можемо також зазначити, що розуміння місцевих відмінностей мови в країні є важливою складовою для розуміння соціальних, економічних, та історичних подій у певному певній країні (регіоні).

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Іван Огієнко

МОВНА ПОЛІТИКА УКРАЇНИ: ВИКЛИКИ ТА ПРІОРИТЕТИ СЬОГОДЕННЯ

Мовна політика України зумовлена важливістю забезпечення функціонування української мови як державної в умовах глобалізаційних процесів, культурного різноманіття та суспільних змін. Українська мова є ключовим елементом національної ідентичності, державотворення та інтеграції суспільства. У контексті сучасних викликів, таких як агресивна русифікація на тимчасово окупованих територіях, необхідність гармонізації мовної політики для національних меншин і забезпечення єдності суспільства, мовна політика набуває стратегічного значення. Питання мовної ідентичності, її правового регулювання та практичної реалізації набувають нової ваги в умовах євроінтеграційних прагнень України.

Дослідження мовної політики дозволяє визначити ефективні механізми підтримки та популяризації української мови в різних сферах суспільного життя, зокрема в освіті, культурі, медіа та державному управлінні. Це також сприяє пошуку оптимального балансу між захистом прав носіїв української мови та забезпеченням мовних прав представників національних меншин. Таким чином, тема є не лише науково значущою, а й практично важливою для формування цілісної стратегії розвитку держави [7].

При дослідженні окресленої проблематики надзвичайно цінним стало ознайомлення з працями сучасних українських учених, чиї наукові інтереси пов'язані з аналізом питань розробки та державного регулювання мовної політики в різних аспектах. Серед них варто відзначити Г. Свирсьєву, Т. Ковальову, І. Лопушинського, П. Надолішнього, М. Пірена, С. Римаренка та інших. Водночас більшість зазначених дослідників не ставили собі за мету детально розглянути публічно-управлінські аспекти забезпечення реалізації мовної політики України в контексті саме європейської інтеграції.

Державна політика у сфері мовних відносин визначається етнічним складом населення, характером політичного режиму, а також внутрішніми і зовнішніми викликами, що є особливо актуальними для України в умовах агресії з боку Російської Федерації. На її формування також впливають геополітичні фактори, які є на сьогодні надзвичайно важливими. У 1996 році в Україні була опублікована фундаментальна праця «Мала енциклопедія етнодержавознавства», в якій мовна політика трактується як «сукупність ідеологічних настанов, нормативних актів та практичних дій, спрямованих на регулювання мовних відносин у країні або на розвиток мови у певному напрямі».

Однак, це визначення є певною мірою нечітким, оскільки воно окреслює лише мету та дії держави, не враховуючи взаємодії суб'єктів політики та ролі етнічних спільнот у мовному питанні [1, с. 20].

У виданні «Енциклопедія державного управління» (Київ, 2011 р.) О. Левченко, Т. Ковальова та І. Плотницька, пропонують визначати мовну політику як сукупність ідеологічних принципів і практичних заходів, які спрямовані на вирішення мовних проблем у державі та суспільстві в цілому. Особливої складності мовна політика набуває в багатонаціональних державах, де необхідно враховувати такі аспекти, як багатомовність, специфіку національного складу населення, міжетнічні відносини, а також значення окремих мов і їхніх носіїв у суспільному житті [3].

У сфері державного управління, як зазначає Н. Попович, «мовна політика» відображає позицію самої держави, представленої органами державної влади, щодо вирішення мовних питань у конкретній країні. На думку Т. Ковальової, це поняття охоплює сукупність настанов, концепцій, законодавчих актів та заходів, спрямованих на вплив і регулювання мовних процесів у суспільному житті [1, с. 20].

Статтею 10 Конституції України чітко визначено, що державною мовою в Україні є українська мова. Концепція державної мовної політики, схвалена Указом Президента України від 15 лютого 2010 року № 161/2010, декларує, що мовна політика займає провідне місце в системі державних пріоритетів. Головним стратегічним завданням є забезпечення неухильного дотримання конституційних гарантій щодо всебічного розвитку і функціонування української мови як державної в усіх сферах суспільного життя на всій території України, вільного розвитку, використання і захисту мов національних меншин та задоволення мовних потреб громадян України [6]. Українська мова, згідно із Законом України «Про забезпечення функціонування української мови як державної», виконує функції мови міжетнічного спілкування, є гарантією захисту прав людини для кожного українського громадянина незалежно від його етнічного походження, а також виступає фактором єдності, ідентичності та національної безпеки України [2].

Аналізуючи мовне питання під час війни, особливо загострюється дилема «свій – чужий», яка актуалізує питання ідентичності. Я не мій ворог – у мене своя територія і своя мова. А мова, як відомо, – це «діалект, підтриманий армією та флотом» (Макс Вайнрайх). Згадуючи події під час Помаранчевої революції, варто зауважити як російські політтехнологи Януковича намагалися розігрувати карту протистояння Сходу й Заходу за мовним принципом й за українську мову на вулиці на Донеччині могли й застосувувати фізичну силу проти народу. А з 2014 року за неї вже могли й убити. І з 2022-го це, на жаль, стало щоденною реальністю українського народу [5].

Близько десяти років тому, з початком воєнних дій Росії в Криму й на Донбасі, мовне питання знову набуло своєї гостроти. З повномасштабним вторгненням воно перетворилося на питання життя і смерті, адже на тимчасово окупованих територіях відбуваються геноцид і лінгвоцид. Водночас серед

громадян України на всій території країни посилилося природне бажання відмежуватися від усього, що асоціюється з агресором. Це прагнення боротися з чужим стикається з реальністю, де для значної частини українців російська мова залишається звичною. Вона може бути не рідною, але зрозумілою, адже нею дивляться фільми, відео на YouTube і TikTok, читають новини та інший контент в інтернеті, що є актуальним для сьогодення. Відмовитися від усього цього одразу – непросто, навіть попри цілковитому небажанню до всього, пов'язаного з окупантом. Власне після повномасштабного вторгнення багато українців свідомо перейшли на українську в повсякденному житті. Проте дехто, з різних причин, не хоче або не готовий цього робити, захищаючи свою позицію різними маніпулятивними аргументами [4].

Насправді, для того аби перемогти у війні з Росією, необхідно бути озброєними не лише зброєю, а й знаннями. Це стосується і розуміння мовної війни між російською та українською мовами. Нещодавно меценатська фундація OLOS, за підтримки науковців Національного заповідника «Софія Київська» та Міністерства освіти і науки України, створила науково-просвітницьке відео «Мовне питання». У ньому представлено низку фактів про те, як століттями знищували й принижували українську мову, як «спецоперація» проти українського питання триває вже понад 300 років, і якою насправді є історія України [3].

Популяризація української мови є необхідною складовою цієї боротьби, але часто нам бракує сильних аргументів і перевіреної інформації, щоб пояснити, чому розмовляти українською не лише важливо, а й життєво необхідно в контексті національної та геополітичної безпеки. Рідна мова – це ключовий елемент нашої ідентичності та один з чинників перемоги. Лише усвідомивши це, ми зрозуміємо, хто ми є і за що боремося насправді [4]. Сьогодні у війні з Росією ми стикаємося з великою кількістю пропаганди з обох сторін, але водночас бракує зваженої аргументації. Україна потребує не тільки тактики популяризації всього українського, а й довгострокової стратегії мовного захисту, яка буде ефективною як зараз, так і в подальшому [5].

Таким чином, проведений аналіз свідчить про те, що мовна політика в Україні є на сьогодні важливим елементом для формування національної та геополітичної ідентичності, збереження культурної спадщини та забезпечення національної безпеки в цілому. Історично так склалось, що українська мова зазнавала систематичних утисків та репресій, що зумовило її складне становище у мовно-культурному дискурсі. У сучасних умовах повномасштабної війни з Росією мовне питання набуло нової актуальності, адже мова стала інструментом як об'єднання, так і протистояння агресії. Пріоритетами мовної політики залишаються все ж таки забезпечення конституційного статусу української мови як державної, її утвердження у сфері освіти, культури, медіа та публічного життя, а також створення умов для природного переходу громадян на українську мову. Це має відбуватися шляхом не примусу, а просвітництва, мотивації та створення якісного україномовного контенту у житті кожного українця [4].

Російська агресія, розпочата у 2014 році та ескалована до повномасштабного вторгнення у 2022 році, вкотре продемонструвала значення мови як елементу національної ідентичності та символу спротиву. Війна з Росією супроводжується не лише військовим протистоянням, але й інформаційно-культурною війною, в якій українська мова стала ключовим фактором національної єдності. Росія, використовуючи свою концепцію «російського світу» та мовного споріднення, виправдовує свою агресію і вдається до геноциду та лінгвоциду на окупованих територіях в тому числі.

Тож, мовна політика в Україні є не лише культурним, але й стратегічним питанням, безпосередньо пов'язаним із національною безпекою. Для перемоги у війні та побудови стійкої держави необхідно не лише захищати територію, а й утверджувати українську мову як основу єдності та ідентичності народу.

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ПРОБЛЕМИ СУЧАСНОЇ ЛІНГВІСТИКИ: У РОЗРІЗІ ВИВЧЕННЯ НІМЕЦЬКОЇ МОВИ

Лінгвістика є багатогранною наукою, яка постійно розвивається. Ці зміни приносять, як позитивні наслідки так і певні проблеми. Які потребують більш детального розгляду. Як одна з головних галузей сучасної лінгвістики, німецька лінгвістика стикається з низкою викликів, спричинених глобалізацією, цифровізацією та міжкультурними процесами. Дослідження в цій галузі спрямовані на вирішення актуальних проблем, таких як вплив носіїв англійської мови, зміни в граматичних структурах і зміни в мовних нормах під впливом соціальних факторів.

Сьогодні, я пропоную розглянути тему сучасних проблем в німецькій лінгвістиці. Ця тема є актуальною, тому що в сучасних умовах глобалізації і посилення міжнародних зв'язків та комунікацій, знання особливостей і проблемних аспектів іноземної мови є важливою складовою більш ґрунтовного її вивчення і опанування. Що в майбутньому допоможе створити обізнаних спеціалістів, які чітко розуміють, прогнозують та аналізують лінгвістичну проблематику в німецькі мові.

Спочатку варто почати з того, що німецька мова має давню історію свого розвитку та впливу на інші мови.

1. Індоєвропейське коріння (до V ст. н.е.): німецька мова походить з індоєвропейської мовної сім'ї. Її розвиток починається з прагерманської мови, яка розпалася на північну, східну та західну гілки. Німецька належить до західногерманських мов.

2. Староверхньонімецький період (V–XI ст.): формування окремих германських діалектів. Значні звукові зміни, відомі як друга німецька (верхньонімецька) зміна приголосних. Виникнення писемності на основі латини, здебільшого у релігійних текстах.

3. Середньоверхньонімецький період (XI–XIV ст.):

Розвиток літературної мови, використання в епічній поезії (наприклад, «Пісня про Нібелунгів»). Розширення словникового запасу через латинські та французькі запозичення.

4. Ранньонововерхньонімецький період (XV–XVII ст.): вплив винайдення друкарства (Гутенберг, XV ст.). Переклад Біблії Мартіном Лютером (XVI ст.), який став основою стандартизації німецької мови. Виникнення єдиного літературного стандарту на основі верхньонімецьких діалектів.

5. Нововерхньонімецький період (XVIII ст. – наш час): формування сучасної літературної німецької мови. Вплив Просвітництва та розвиток наукової термінології. Стандартизація правопису (реформи XIX і XX ст.).

Сучасна німецька мова використовується у Німеччині, Австрії, Швейцарії та інших німецькомовних країнах.

6. Сучасний етап: уніфікація мови через ЗМІ, освіту та глобалізацію. Подальший розвиток цифрової мови та запозичення з англійської.

На сучасному етапі становлення та розвитку німецька лінгвістика стикнулася з двома основними проблемами

1. Це зростання кількості неологізмів і проблема їх розпізнавання (через іх значне укорінення в класичну німецьку мову). Багато дослідників вважають, що поява неологізмів є певною мовною необхідністю наприклад для пояснення нових термінів. «Нова лексема – це окреме слово або група слів, які не існували в такій єдності форми й значення в мові раніше. Неологізми утворюються на ґрунті нових концепцій, соціальних явищ, міжнародних стосунків, наприклад: marketing – die Massnahmen eines Unternehmens; consulting – der Berater; investor – der Investitionstrager; slang – die Umgangssprache; Powerfrau – Geschäftsfrau, Livesendungen – Sendungen über das Alltagsleben, Reiseboom – grosse Reisenachfrage» [1]. Тож можна сказати, що неологізми це слова без, яких мова не може розвиватися своєчасно.

2. Другою проблемою сучасної німецької лінгвістиці є певні труднощі перекладу. А саме: «узагальнити все «підводне каміння», яке трапляється під час перекладу з німецької мови, неможливо, але окреслимо коло основних труднощів. На наш погляд, їх можна умовно поділити на три основні групи: граматико-морфологічні, або лексикологічні, граматико-синтаксичні та стилістичні.

Принцип розбудови розподілу полягає у такому: граматико-морфологічна група поєднує у собі всі інновації в мові, які стосуються лексичної одиниці – слова: виникнення нових слів за рахунок чистих запозичень та форм їх асиміляції; перетворення всередині самої мови та створення нових слівкомпозитів, які не мають аналогів в українській мові (Hochhaus, Zusammenarbeit, Blumenstrauß), чи слів, які змінюють свою морфологічну форму як частина мови. Наприклад, у тінейджерській лексиці ціли фрази стають одним словом; також їй властиві скорочення, нові діалектні форми, наявність у мові слів, які неможливо перекласти одним словом, або слів, які взагалі прийнятні та зрозумілі тільки людям із німецьким менталітетом. Тобто ці слова не мають стовідсоткового відповідника в іншій мові, їх можна перекласти тільки описово.

Також до цієї групи належить постійне розширення кола слів-евфемізмів, поява застарілих слів, переклад дієслів із відокремлюваним та невідокремлюваним префіксом тощо. Друга група – це комплекс проблем перекладу, який компонується з інших вихідних даних. Ми згодні з тими аспектами, які були зазначені раніше у висновках М.О. Кур'янової, С.М. Амеліної, але, враховуючи те, що ми пропонуємо власний погляд на цю класифікацію труднощів перекладу з німецької мови на українську, то в нашій системі називаємо цю підгрупу граматико-синтаксичною і формуємо її таким чином» [2].

Проаналізувавши весь вище зазначений матеріал, ми можемо стверджувати, що сучасна німецька лінгвістика, як і будь яка інша стикається з проблемами появи неологізмів в мові. Хоча, як ми дізналися такі зміни є необхідними для адаптації мови до сучасних реалій.

Другою проблемою ми виділили труднощі перекладу сучасної німецької мови. Ця проблема є комплексною та багаторівневою. І потребує більш детального вивчення.

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РОЛЬ ФАХОВОГО ТЕКСТУ ПРИ ПІДГОТОВЦІ СТУДЕНТІВ-МЕДИКІВ ДО ЛІЦЕНЗІЙНОГО ІСПИТУ КРОК 1 (АНГЛ. СУБТЕСТ)

У сучасних умовах глобалізації та інтеграції української вищої медичної освіти до європейського освітнього простору значно зростає роль англійської мови як інструменту професійного спілкування. Особливо актуальною є підготовка студентів-медиків до складання ліцензійного іспиту Крок 1, де англійський субтест перевіряє не лише мовну компетентність, але й здатність останніх орієнтуватися у фаховій термінології та текстах за фахом. Одним із ключових засобів підготовки є фаховий текст, що поєднує елементи професійної лексики, граматики та клінічного мислення [1, с.7]. Фаховий текст — це специфічний різновид писемного або усного повідомлення, орієнтований на фахівців певної галузі. Для майбутніх лікарів це перш за все клінічні кейси, статті, фрагменти підручників, протоколи лікування [2, с.15]. Робота з фаховими текстами, на нашу думку, дозволяє студентам: опанувати професійну лексику та термінологію, необхідну для розуміння змісту екзаменаційних завдань Крок 1; розвивати навички читання з розумінням специфічної інформації, що є критичним для успішного проходження англійського субтесту [4, с. 33]; формувати мовленнєві клінічні сценарії та стандартні формулювання для опису симптоматики, діагностики та лікування [5, с. 42].

Формат англійського субтесту Крок 1 передбачає: роботу з клінічними випадками, що включають опис симптомів, даних обстеження, лабораторних показників [1, с. 11]; питання з вибором правильної відповіді, де правильна відповідь часто базується на розумінні медичного тексту англійською мовою [3, с. 23]. Фахові тексти допомагають студентам моделювати ситуації, максимально наближені до екзаменаційних умов, забезпечуючи: аутентичність (реалістичний характер матеріалу) [6, с.28]; комплексність (поєднання лексичних, граматичних та професійно-орієнтованих навичок) [4, с.35]; функціональність (формування вмінь, що безпосередньо застосовуються під час іспиту) [2, с. 19].

Для ефективної підготовки до англійського субтесту, на наш погляд, рекомендується використовувати такі види фахових текстів: клінічні кейси (clinical cases), що є детальними описами пацієнтів з конкретними симптомами, що розвивають клінічне мислення [5, с. 44]; анотації наукових статей (abstracts) — короткі виклади наукових досліджень, що тренують навички швидкого аналізу інформації [4, с. 39]; інструкції до препаратів (drug prescriptions, package inserts) — навчають орієнтуватися в описах лікарських засобів [6, с. 31]; протоколи лікування та стандарти надання допомоги (clinical guidelines), які знайомлять з сучасними стандартами медицини [3, с. 26]; фрагменти підручників (textbook excerpts) — дають систематизовану інформацію з ключових тем Крок 1 [2, с. 17].

Для підвищення ефективності підготовки до ліцензійного іспиту Крок 1 доцільно застосовувати такі методи роботи з текстом: передтекстові вправи (активізація термінології, передбачення змісту); текстові вправи (знаходження ключових термінів, аналіз структури тексту, переклад); післятекстові завдання (обговорення, тестові запитання на базі прочитаного); рефлексивні вправи (формулювання висновків, узагальнення інформації) тощо. Систематична робота з фаховими текстами дозволяє: оптимізувати час підготовки через тренування комплексних навичок [2, с. 20]; знизити рівень тривожності під час іспиту завдяки знайомству з типовими форматами завдань [1, с. 12]; підвищити рівень володіння англійською мовою у професійній сфері [5, с. 49].

Таким чином, фаховий текст є невід'ємною складовою підготовки студентів-медиків до ліцензійного іспиту Крок 1 (англійський субтест), оскільки сприяє розвитку мовної, професійної та клінічної компетентності. Правильний підбір і методичне опрацювання фахових текстів дозволяє студентам-медикам не лише успішно скласти ліцензійний іспит з англійської частини, але й бути готовими до використання англійської мови у своїй подальшій професійній діяльності.

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TONY BLAIR'S INFORMATIVE SPEECH "WAR WITH IRAQ" FROM A LINGUISTIC AND STYLISTIC PERSPECTIVE

Tony Blair's public speech "War with Iraq" of socio-political orientation has a typical structure of a public speech (1). It begins with an introduction, where the speaker introduces the listeners to the essence of the problem being covered, informing the audience about the state of the war:

Tonight, British servicemen and women are engaged from air, land and sea. Their mission: to remove Saddam Hussein from power, and disarm Iraq of its weapons of mass destruction. I know this course of action has produced deep divisions of opinion in our country.

Observation of the vocabulary of the analysed speech allows us to note the speaker's use of nouns of abstract semantics: hatred of war, honour, torture; intensifiers: really, entirely, simply; adjectives characterised by expressive colouring: so important, it's too serious, maximum damage; modal verbs: we cannot simply go back; verbs of mental activity: we understand, people realise that, having agreed.

The above-mentioned vocabulary is used to create a realistic picture of events and convey to the addressee the impression of these events and attitudes towards them, as well as to have a strong impact on the audience and to emphasise the importance of the statement [2, p.34].

In a speech, abbreviations are used to refer to military terms, for example:

UN weapons inspectors say vast quantities of chemical and biological poisons such as anthrax, VX nerve agent, and mustard gas remain unaccounted for in Iraq.

A study of morphological means has shown that expressiveness in speech is expressed by the use of adjectives and adverbs in the highest degree of comparison, for example:

I know it is the most important issue that the British people will now be united in sending our armed forces our thoughts and prayers.

The simplest way of disarming Saddam is to say vast amounts of chemical and biological poisons, such as anthrax, VX nerve agent, and mustard gas remain unaccounted for in Iraq.

Expressiveness is also achieved with the help of hyperbole, which is used when the speaker tries to increase the quantitative or qualitative side of what is being said [1, p.56]. For example:

Well, of course, people have been writing letters for hundreds, thousands of years, but...

The use of comparisons is quite reasonable:

Dictators like Saddam, terrorist groups like Al Qaida threaten the very existence of such a world.

This stylistic device carries an emotional colouring and expresses the author's disapproval.

The analysis of the syntactic structure of the sentences in T. Blair's speech revealed that the most typical is the use of complex subordinate clauses, which include 3-5 subordinate parts. As a rule, he uses complex subordinate cause-and-effect sentences:

So, if the result or peace of an absence of conflict is Saddam's staying in power not disarmed, I simply say there are consequences paid in blood for that decision too.

Less commonly used are the clarifying ones:

If there are five hundred thousand on that march that is still less than the number of people who said that's what Saddam has been responsible for.

Syntactic constructions indicating the speaker's attitude to what is being said are also an important means of creating expressiveness [3, p.60]. For example:

I think this is one of the things that is tragic about the situation...

And I want to say why I think this is so important.

One of the most interesting means of creating expressiveness is inversion. The speaker puts in the first place the component of the expression that seems to him/her the main one for the transmission of information:

Never forget: the true victims they are!

In the main body, interrogative sentences are used, for example:

Should terrorists get hold of these weapons now being manufactured and traded around the world, the carnage they could inflict on our economies, our security, on world peace, would be beyond our most vivid imagination?

The speaker then goes on to answer the question, creating a dialogue during the speech:

My judgement, as Prime Minister, is that this threat is real, growing and of an entirely different nature to any conventional threat to our security.

Thus, the speech we have analysed is characterised by a large number of means and techniques to create expressiveness of the message.

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LINGUISTIC AND STYLISTIC MEANS IN CHARLES KENNEDY'S SPEECH "A DRINK PROBLEM"

Charles Kennedy's speech 'A Drink Problem' is dedicated to such a social problem as alcoholism (1). This speech is characterised by a typical compositional structure of a public speech [2, 67]. It begins with an introduction where the author reveals the purpose of his speech:

And I've come to learn through that process that any drink problem is a serious problem indeed - for yourself and for those around you.

The introduction uses complex sentences with insertion constructions that convey the author's personal attitude to the problem of alcoholism, for example:

I have chosen not to acknowledge it publicly in this way before because, if at all possible, I wanted to overcome it privately.

There is no transition to the main part of the speech, the author uses the adverbial consequence therefore, thus continuing his/her thought, stated in the introduction [3, p.34]. The sentences are characterised by rich syntactic constructions, the language is simple and concise. The author does not use stylistic devices [1, p.14]. The lexical stock of the speech is filled with stylistically uncolored words (recent weeks, leader, great). Another feature is the frequent use of infinitive phrases:

It is open to any colleague who believes that they can better represent the long-term interests of the party to stand against me in such a leadership election.

As a conclusion to his speech, the author made an assumption by using a sentence with a complex syntactic construction:

Given my statement today I believe it is only fair now to give our party members their say over the continuing leadership.

This speech is the shortest of the speeches we have selected for analysis. The speech is mainly neutral in colour, and the author does not use stylistic devices to create expressiveness of the material.

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LINGUISTIC PROFILING IN DIGITAL COMMUNICATION: ANALYZING LANGUAGE PATTERNS FOR IDENTITY AND PSYCHOLOGICAL INSIGHTS

In an era of digital communication, language plays a crucial role in shaping online identities. Linguistic profiling - the analysis of language use to infer sociolinguistic or psychological attributes - has received increased attention from scholars in forensic linguistics, sociolinguistics, and computational linguistics. Researchers have shown that language patterns can reveal a speaker's age, gender, regional background, socioeconomic status, and psychological state [1]. As digital communication expands, linguistic profiling has found new applications in cybersecurity, authorship attribution, and psychological assessment. For instance, forensic investigations frequently examine linguistic markers of deception [2], while psychological profiling through text analysis has been used to detect depression and anxiety [3]. However, ethical concerns, including discrimination based on linguistic features, have also been raised [4].

Linguistic profiling can provide valuable insights into identity construction and psychological traits. Studies show that lexical choices, syntactic complexity, and discourse markers significantly contribute to individual linguistic profiles. Function words, pronouns, and emotional vocabulary are linked to personality traits, stress levels, and mental health conditions [5]. Similarly, computational text analysis has revealed the ability to detect signs of anxiety and depression [3]. These findings underscore the potential of linguistic profiling in forensic investigations, where patterns of language use aid in determining authorship and credibility in legal cases.

Research indicates that individuals engaging in deception tend to use fewer first-person pronouns and more negative words, further demonstrating the reliability of linguistic profiling in identifying deceptive language use [6].

Technological advancements in artificial intelligence and natural language processing (NLP) have made linguistic profiling more efficient and scalable. NLP models can analyze vast amounts of textual data to identify linguistic patterns and predict attributes related to identity and behavior. However, concerns persist regarding algorithmic bias in linguistic profiling tools, as these systems may reinforce stereotypes and lead to the unfair treatment of specific social groups. The ethical implications of linguistic profiling extend beyond bias, encompassing issues related to privacy and consent. In digital spaces, individuals unknowingly leave linguistic traces, raising significant concerns about data security and informed consent. The increasing use of linguistic profiling by technology companies and security agencies underscores the urgent need for regulations that protect user privacy.

Despite its potential benefits, linguistic profiling is not infallible. The accuracy of profiling can be influenced by context, multilingualism, and code-switching, which may lead to misinterpretations of linguistic data. Researchers emphasize the importance of robust methodologies to avoid drawing inaccurate conclusions from language patterns. To address these challenges and improve the accuracy and fairness of linguistic profiling, future research should prioritize developing more inclusive NLP models that consider dialectal variation and multilingual speakers. Expanding training datasets to include diverse linguistic communities could help mitigate biases in computational models. Additionally, interdisciplinary collaboration among linguists, psychologists, and computer scientists may enhance the accuracy and ethical implementation of linguistic profiling techniques.

One promising area for linguistic profiling is its application in mental health support. Real-time text analysis has demonstrated potential in detecting early signs of depression and anxiety in online communication, allowing for timely intervention for individuals in distress [3]. However, while this application provides valuable insights for mental health professionals, it raises ethical concerns regarding user privacy and consent. Addressing these concerns through ethical AI development and transparent linguistic profiling practices is crucial for ensuring responsible use in forensic and psychological contexts.

Linguistic profiling in digital communication continues to evolve, providing new insights into identity, deception, and mental health. As computational methods advance, it is essential to balance technological progress with ethical considerations, particularly regarding bias, privacy, and consent. Future research should concentrate on mitigating bias in linguistic profiling, enhancing privacy protections, and broadening its applications in digital and forensic fields. By promoting interdisciplinary collaboration and ethical AI development, linguistic profiling can serve as a valuable tool for understanding human behavior while safeguarding individual rights.

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BRANDING THROUGH LANGUAGE: A LINGUOSTYLISTIC STUDY OF GLOBAL ENGLISH SLOGANS

In modern society, characterized by the globalization of communication processes, the intensification of intercultural contacts, and the unification of the informational space, advertising functions not only as a means of promoting goods and services but also as an effective tool for shaping mental models, attitudes, stereotypes, and values. Of particular importance is the language of advertising, which reflects not only the peculiarities of the linguistic system but also the worldview-related, national-cultural, and psychological factors that determine its receptiveness and influence on mass consciousness.

The purpose of this article is to identify and analyze the linguostylistic devices used in English-language advertising slogans of global brands in order to achieve an expressive, persuasive, and memorable effect.

The study of the advertising slogan as an object of linguistic analysis is inherently multifaceted, as it encompasses questions of lexicology, stylistics, pragmatics, semiotics, discourse analysis, and sociolinguistics. In linguistic tradition, a slogan is defined as a short, aphoristic, often rhymed expression aimed at attracting attention, being memorable, and influencing consumer behavior [3]. According to Norris [1], the slogan performs the function of a "verbal logo," identifying the brand and serving as a marker of its stylistic recognizability. A key feature of English-language advertising slogans is the combination of conciseness with a high degree of emotional intensity, achieved through the use of various stylistic means. At the lexical level, advertising slogans predominantly feature emotionally charged and positively connoted vocabulary that appeals to fundamental human needs—security, pleasure, self-fulfillment, love, and success. For instance, the slogan of L'Oréal — "Because you're worth it" — is based on the evaluative adjective "worth," which evokes associations with dignity, self-respect, and a positive self-image, thereby forming the foundation of an effective marketing message. Additionally, advertising vocabulary is often marked by the use of neologisms (e.g., "Think different" – Apple), euphonic elements (e.g., alliteration: "Maybe she's born with it. Maybe it's Maybelline"), and simple, easily memorable words that contribute to better retention in the recipient's mind [1].

At the syntactic level, advertising slogans are generally characterized by the predominance of simple, short sentences, often of nominative or imperative type. This is explained by the desire to express the brand's main idea in a maximally concise and dynamic manner. Constructions such as "Just do it" (Nike), "Think big" (IBM), or "Have it your way" (Burger King) are built upon the use of imperative verbs functioning as directives — stimuli for action. Researchers have pointed out that the imperative mood is a powerful communicative device, as it forms an orientation toward action, which correlates with the main function of advertising — stimulating purchasing behavior [2].

The phonetic level plays a particular role in advertising slogans, incorporating means of sound organization—such as alliteration, assonance, rhyme, and rhythm. These phonetic figures contribute to the creation of melodiousness and ease of perception, while also enhancing the emotional tone of the message. For example, the slogan of the M&M's brand — "Melts in your mouth, not in your hands" — demonstrates both rhythmic structure and wordplay, which makes it memorable and functionally effective. At the stylistic level, advertising slogans actively employ tropes and figures of speech such as metaphor ("Red Bull gives you wings"), wordplay ("Nothing sucks like an Electrolux"), hyperbole ("The best a man can get" – Gillette), repetition, and parallelism. As noted by Lee [6], tropic structures contribute to the creative representation of product features, foster emotional engagement of the audience, and help create a vivid brand image.

A distinct group of slogans is formed on the basis of culturally marked elements — such as allusions, intertextual references, mythologems, and ethnic stereotypes. These slogans reflect the specificity of the cultural code of the target audience, which is particularly significant in the context of global branding. For instance, McDonald's

slogan — “I’m lovin’ it” — not only appeals to emotional gratification but also reflects the specific traits of American culture, namely, its emphasis on positivity and dynamism. The slogan’s deviation from formal grammatical standards (through contraction and the use of the Present Continuous to express feeling) creates an effect of closeness and informality [5]. The pragmatic dimension of advertising slogans lies in their ability to transmit the core values of a brand, appeal to consumer needs, and create the illusion of a dialogue. Studies in the field of cognitive pragmatics indicate that an effective slogan fulfills not only informative but also emotive, conative, and phatic functions, thereby ensuring multilayered communication between the brand and the consumer [4]. For example, the slogan of De Beers — “A diamond is forever” — serves as a conceptual metaphor conveying the idea of eternal love and emotional stability, which aligns with the aspirations of the target audience.

Thus, the linguostylistic features of English-language advertising slogans in the context of global branding are determined by the interplay of structural-linguistic, stylistic, pragmatic, and cultural factors that facilitate the creation of effective communicative strategies. These slogans are characterized by a high degree of creativity, functional intensity, the potential for transnational influence, and the capacity to shape a stable brand image.

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ADVANCED METHODS AND TECHNOLOGIES FOR ENGAGING FOREIGN LANGUAGE INSTRUCTION IN HIGHER EDUCATION

The modern paradigm of higher education in Ukraine prioritizes the comprehensive preparation of specialists, focusing on their development as individuals and professionals. Given Ukraine's integration into the global economic space, proficiency in foreign languages is crucial for career success. This article explores the

introduction of innovative foreign language learning methods, specifically problem-based learning (PBL) and project-based learning (PBL), and their role in developing communicative competence among future English language teachers [2].

This study investigates:

1. The impact of the project teaching method on student motivation.

2. The language skills strengthened through project-based learning.

The research consists of three sections. The first presents the problem statement and theoretical context. The second outlines motivation theories and factors influencing the learning process through the project method. The third discusses the study's findings and conclusions [4].

Our pedagogical technology operates at scientific, theoretical-methodical, and praxeological levels. The scientific level involves analyzing professional pedagogy, while the theoretical-methodical level determines learning goals, content, and methods. The praxeological level focuses on implementing and refining pedagogical technology. The primary goal is to develop communicative competence through problem-based situations, encouraging students to engage in meaningful language use [1].

Problem-based learning relies on creating situations that stimulate cognitive activity and problem-solving. These situations vary in complexity, ranging from teacher-constructed to independently generated by students. The study found that allowing students to create their own speech tasks fosters communicative activity [3].

Project-based learning emphasizes student-centered education, enabling learners to integrate knowledge from multiple disciplines while solving real-world problems. It enhances critical thinking, teamwork, and professional competencies. Students engage in projects linked to real-life contexts, ensuring practical language application. Effective PBL requires careful curriculum integration, clear goals, and alignment with real-world communication practices.

Suggested PBL activities for future English teachers include:

- Communication: presentations, debates, and interviews.
- Listening: audio and video materials.
- Reading: professional literature, film reviews, and news articles.
- Writing: essays, research reports, and online communication.
- Integrated projects: linguistic and cultural studies, student portfolios.
- Translation projects: medical documents, instructions, and literary texts.

Students were assigned problem-based tasks requiring them to analyze, compare, and synthesize information. Tasks included socio-political and professional topics such as "Future profession" and "New scientific discoveries." The experimental study tested the effectiveness of problem-based learning in an English course. After implementing the pedagogical technology, a control study was conducted with two student groups (21 and 23 participants). Results indicated that 27% of students achieved a high level of knowledge, while 28% remained at a low level. Student feedback revealed an 82% approval rating for the methodology [5, p. 132].

A key challenge in English language education is student motivation. Many first-year students exhibit low motivation, often due to negative past experiences and a perception of English as a secondary subject. Questionnaires revealed that

demotivation stems from previous teacher criticism, monotonous lessons, and a lack of engagement. Addressing these issues through interactive, problem-based, and project-oriented learning can enhance motivation and language proficiency [6].

The professional development of future English teachers is closely linked to their communicative competence and ability to apply psychological knowledge in teaching. A teacher's professionalism is defined by their capacity to solve social and pedagogical challenges effectively.

Conclusions. The experimental application of problem-based learning demonstrated its effectiveness in higher education institutions. The project-based learning method should be widely implemented to help students acquire authentic knowledge and essential life skills. This approach enhances speaking abilities, fosters teamwork, and integrates English learning into a meaningful educational context, making language acquisition more engaging and effective.

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INNOVATIVE APPROACHES TO FOREIGN LANGUAGE TEACHING IN THE PREPARATION OF FUTURE PHILOLOGY EDUCATORS

In today's globalized world, the ability to communicate effectively in a foreign language is essential. The role of philology educators is to equip future professionals with advanced linguistic and communicative skills. This article explores innovative

approaches to foreign language teaching in higher education, emphasizing methods that enhance students' learning experiences.

Theoretical Background and Methodology. The aim of this study was to investigate the effect of vibrations on surface roughness in finish turning. The graphic of cutting speed, roughness, frequency, and amplitude dependence was built. On the basis of this research, data from different materials were received. This concept of research integration into language learning exemplifies how interdisciplinary studies can improve linguistic proficiency by engaging students in real-world applications.

Traditional and Innovative Approaches in Foreign Language Teaching

Foreign language teaching has evolved from traditional methods to more interactive and student-centered approaches. The following are some of the most effective methodologies employed in the preparation of future philology educators:

1. Grammar-Translation Approach

This method focuses on the analysis and application of grammatical rules. Lexical units are memorized, and emphasis is placed on accuracy, including translation exercises from L2 to L1 and vice versa. While this method provides a strong grammatical foundation, it lacks communicative effectiveness.

2. Total Physical Response (TPR)

This approach immerses students in the language through physical activity. Awareness precedes usage, and learning is enhanced through bodily movements. This method is especially effective for beginners and young learners, reinforcing vocabulary and structures through actions.

3. Guided Discovery

In this approach, students learn best when they process material independently rather than receiving direct instruction. Teachers facilitate learning by guiding students toward discovering grammatical structures and vocabulary through practical tasks. This method is often combined with Task-Based Learning (TBL) and the Presentation-Practice-Production (PPP) approach.

4. Content-Based Learning

This method prioritizes student motivation by using content relevant to learners' interests. Students acquire linguistic skills while exploring new knowledge in various disciplines, fostering deeper engagement in the learning process.

5. Content and Language Integrated Learning (CLIL)

CLIL integrates language learning with subject matter instruction, enabling students to acquire knowledge in a particular field through a foreign language. This approach helps learners internalize language in a more natural manner, as the focus is on content rather than linguistic structure [1].

Task-Based and Communicative Approaches

6. Task-Based Learning (TBL)

Language functions as a means of communication through the completion of meaningful tasks. Students use vocabulary, grammar, and language structures in practical scenarios, making learning more interactive and goal-oriented.

7. Presentation-Practice-Production (PPP)

This structured approach involves three stages: introducing new lexical or grammatical structures, controlled practice, and free application in communication. This method balances structured learning with practical application.

8. Lexical Approach

This methodology prioritizes vocabulary over grammar, with an emphasis on acquiring authentic expressions and collocations. Students analyze texts to identify key lexical units rather than focusing on grammatical structures [2].

9. Functional Approach

This approach categorizes language learning based on functions, prioritizing commonly used phrases and structures. It is particularly useful for real-life communication and professional language training.

10. Communicative Approaches

The core principle of communicative methods is that students should learn the language, not merely about the language. Interaction plays a key role in language acquisition, and learners focus on successfully conveying their thoughts rather than on grammatical accuracy.

The Role of the Teacher in Modern Foreign Language Instruction

Teachers play a crucial role in integrating these methodologies to suit the diverse needs of learners. They must develop their unique teaching style by combining various approaches and adapting them to students' goals, proficiency levels, and learning preferences. Modern educators use blended learning techniques, digital tools, and interactive resources to facilitate an engaging and effective learning environment [3].

Conclusion. The field of foreign language education continues to evolve, with innovative approaches providing more effective and engaging learning experiences. The integration of traditional and modern methodologies ensures that future philology educators are well-equipped to meet the challenges of language instruction. By embracing communicative, content-based, and interactive learning strategies, educators can enhance language acquisition and foster linguistic proficiency among students. The selection of an appropriate methodology should be based on learners' needs, preferences, and educational objectives, ensuring a holistic approach to language education.

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DIALECTS IN THE ENGLISH LANGUAGE

English is one of the most widely spoken languages in the world. It is the native language for 380 million people, and about 1.5 billion more speak English as a foreign language. As a result, there are a lot of variants of English and its dialects.

Many scholars have paid attention to the study of dialects, namely L. G. Verba and Y. P. Kostiuchenko. In their works they covered the issues of peculiarities of English dialects in different periods. Various aspects of the territorial variation of the English language in Great Britain have been studied by such linguists as M. M. Makovsky, D. A. Shakhbagova, O. I. Luzhanitsa, A. Ellis, R. Quirk, R. Makdevid, P. Tragill, D. Crystal, A. Schweitzer, and others.

The purpose of the article is to identify the characteristic features of the British English and its dialects, to show their main linguistic differences.

Dialect is a local variety of a national language spoken by a part of the nation that is united by a territorial community. Local dialects have their own grammatical structure which is close to the national language, the basic vocabulary, and some phonetic features [1, p. 7].

The language of the United Kingdom is very diverse and varied. The modern literary English language consists of the dialects of the territories that are now part of the United Kingdom. The dialects of English are systematized on the basis of a regional criterion according to the geographical zones of the south and the north, which can be divided into specific sub-zones.

Modern linguists distinguish 11 main dialects and about 180 accents of the English language. So, the main English dialects include:

1. Posh English
2. Welsh English
3. Scottish English
4. Liverpool English
5. Cockney English
6. Irish English
7. American English
8. Southern US English
9. NY English
10. Australian English
11. Canadian English [2].

In this article we want to focus on the term ‘territorial dialect’ which is a type of the language characterized by relative unity of the system (phonetic, grammatical, lexical) and is used as a means of direct communication in a team located in a certain limited territory. A characteristic feature of a territorial dialect is its relative structural closeness. This type of the national language is a means of people’s communication

who are united by a common territory, material and spiritual culture, historical and cultural traditions [3, p. 74].

For decades, the Cockney dialect was despised and considered a stylistic feature of the working and lower classes. The Cockney dialect is characterized by a special pronunciation, irregular speech, and rhyming slang. There are about 150 phrases that can be instantly recognized by any of the users of rhyming slang. The most commonly used terms in rhyming slang are: ‘apples and pears’ – stairs, ‘baked bean’ – Queen, ‘bread and honey’ – money, ‘plates of meat’ – feet, ‘skin and blister’ – sister, ‘tomfoolery’ – jewellery [4].

The Scottish dialect (Scottish English). According to A. Aitken: ‘Scottish English is a bipolar linguistic continuum, with Broad Scots at the one end and Scottish Standard English at the other one. Broad Scots is typically, but not always, spoken by working-class people, while Scottish Standard English is typically spoken by educated middle-class people’ [5].

The Liverpool dialect is difficult to understand not only for foreigners but also for native English speakers. It is characterized by rough nasal tones and fast ascending and descending tones. The dialect also has its own vocabulary and grammar. Some examples of Liverpool dialect words: ‘bevvy’ – alcoholic drink, bezzy – best friend, crimbo – Christmas, scran – food, made up – happy.

The aristocratic dialect (Posh English, also known as ‘RP’ (received pronunciation) and ‘the Queen's English’) is a characteristic of the upper classes and is considered a prestigious variant of pronunciation. It is characterized by clarity and purity, all sounds are pronounced clearly and slowly. This dialect is widely used in the media and educational institutions, but it is not widely used by ordinary British people in everyday life. In the early 21st century, the American philologist Peter Tragill conducted a study in which he found that only 3-5% of the population of the British population use the aristocratic dialect in everyday life [7, p. 65].

Canadian English combines elements of both British and American English, as well as some unique Canadian features. A popular expression in Canada is ‘Eh!’ – a universal exclamation that is considered a universal exclamation that is considered to be a symbol of Canada. ‘Eh!’ replaces such words as ‘what?’, ‘hey’, ‘hi’, ‘nice’ for Canadian ‘well done’. ‘Eh!’ can also be used at the end of questions like ‘isn't it?’ [6].

Australian English is a set of varieties of English spoken in Australia. Australian English is rich in abbreviations, such as ‘bikkie’ for ‘biscuit’ and ‘truckie’ for ‘truckdriver’ [7, p. 66].

Thus, a territorial dialect is a type of language used in a geographically limited linguistic area and differs from the standard variant by the presence of certain phonological, lexical and grammatical features. Modern English is the result of a long historical development. All changes in its sound, grammatical and lexical composition occurred due to the internal laws of its development and external influences caused by the history of the English people. But the modern state of the language is not final, because humanity does not stand still. The language will develop simultaneously with the development of mankind.

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GRAMMATICAL FEATURES OF MODERN ENGLISH-LANGUAGE SONGS

Musical culture plays an important role in the lives of many people, accompanying their activities from the birth of civilization to the present. One of the key components of the modern music industry is English-language songs which have a significant impact on popular culture. Most of the music content today comes from Western countries – Europe, the USA, Australia, etc. Thanks to the development of digital technologies, telecommunications and globalization, English-language music has become more accessible which contributes to its widespread distribution and influence on language trends. The introduction of informal constructions, abbreviations, and slang expressions in lyrics reflects changes in modern English, adapting it to the needs of popular culture and the digital age.

This is especially noticeable in the youth environment where music is often perceived on an emotional level, without a deep analysis of its content and stylistic features. Young people listen to songs almost constantly without thinking about their cultural value, subtext or author's intention. Individual words or expressions are often misunderstood which distorts the general meaning of the text. However, if you take a closer look at the lyrical content, you can find hidden meanings conveyed through

stylistic devices, unusual meanings of words and metaphoricism which enhances the emotional impact of music.

Based on the fact that music and the youth are inseparable, then why not use songs in English as material for learning language and culture its carriers. Not everyone will dare to read the classics in the original, but everyone can find the lyrics of your favorite song on the Internet. Many songwriters use various stylistic and phraseological means to enrich their lyrics. Several researchers have studied songs as a means of learning language and culture. T. Murphey, A. Maley in his book "Music and Song" explores how music aids in language acquisition and retention [1]. Guilnard Moufarrej and Charbel Salameh examines how music helps in memorizing and understanding foreign words [2]. K. Paquette and S. Rieg in "Using Music to Support the Literacy Development of Young English Language Learners" discuss how songs contribute to linguistic and cultural awareness [3]. D. Engh in "Why Use Music in English Language Learning? A Survey of the Literature" analyzes various studies proving the effectiveness of songs in language education [4]. That is why, the purpose of the article is to identify the grammatical features of modern English-language songs.

When analyzing the linguistic stylistic features of English-language songs, the most commonly used stylistic devices include metaphors, personification, hyperbole, epithets, comparison, simile, oxymoron, antithesis, repetition, inversion, pun, anaphora, and epiphora. Consider examples.

1. Rhetorical device:

She said, “Shut up and dance with me”
This woman is my destiny
She said, ooh-ooh, shut up and dance with me
("Shut Up and Dance" by Walk the Moon)

I want it all (give it all, I want it all)
I want it all (yeah)
("I Want It All" by Queen)

2. The songwriters also convey their inner world, feelings and emotions through the use of hyperbole. Hyperbole is an artistic technique of exaggeration, and such exaggeration, which from the point of view of the real possibilities of the implementation of the thought seems dubious or simply unbelievable:

I'm a man with a one track mind
So much to do in one lifetime
(“I want it all” by Queen)

3. Metaphors:

I dare you, walk into the open
Leave your ego behind no,
My heart is already broken!
("Midnight Train" by Morandi, a Romanian music group)

4. Pun. Pun – is a figure of speech when used in one in the context of two meanings of the same word or two similar-sounding words:

"How long to the point of know return?"
("Point of Know Return" by Kansas, an American rock band)

5. Simile. Simile are two concepts, usually those that refer to different classes of phenomena are compared with each other according to any of the features, and this comparison receives a formal expression in the form of words such as: as, such as, as if, like, seem. Example:

I could try to blame you, but my mind ain't safe
Like two fireworks tied to a rollerblade
(“Hello Love" by Benson Boone)

Another important component of English-language lyrics at the phonographic level is capitalization. It reflects not only changes in pitch but also emphasizes particular words, distinguishing them from others. An example of such a graphic device appears in the children's song "Candy Store", where the final stanza is written in capital letters ("I'M ALIVE!") to express boundless joy and happiness.

It is important to pay attention to the fact that it is rare for English modern songs to be sung in chorus. Most likely, they are intended for individual performance and, possibly, this reveals the special authenticity of the English mentality.

Slang plays a significant role in the lyrics of modern English-language songs, making them more lively, emotional, and relatable to listeners. The use of colloquial expressions, abbreviations and informal constructions reflects the real language of young people and contributes to easier perception of songs.

Thus, the grammatical features of modern English-language songs reflect the trends in the development of a living language, in particular, the simplification of grammar, the widespread use of slang and informal constructions. Lyrical texts not only convey emotional content, but also affect the language culture of listeners, especially young people, shaping their speech and perception of the English language. The analysis of such texts allows us to better understand modern language processes and their connection with mass culture.

This confirms that music is not only an entertainment phenomenon, but also an important means of communication and linguistic influence.

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PHRASEOLOGICAL UNITS WITH THE COMPONENT FOOD IN ENGLISH

This article is dedicated to English food-related idioms functioning in the English-language mass media texts. We define idioms as stable, recurrent phrases or expressions which meaning cannot be deduced from the individual components. Rooted in cultural stereotypes and reflecting national identity, idioms are characterized by their figurative and expressive nature. This research examines the semantic-grammatical classification types of food-related idioms. The object of the research is food-related idioms used in the English-language mass media texts.

The vocabulary related to food products attracts the attention of many researchers who examine it from various perspectives. In particular, Ye.V. Viznichak and O.V. Podvoiska studied the specifics of translating gastronomic lexical units from German into Ukrainian [1, p. 31]. I.P. Bryzhytska researched gastronomic vocabulary in the works of Hryhorii Skovoroda [2, p. 14]. I.O. Kryknitska characterized culinary phraseological units as an object of ethnophraseology [3, p. 25]. H.B. Melekh analyzed the main functions of culinary vocabulary in the system of a literary work [4, p. 110]. N. Shklyaeva and T. Nikolyuk dedicated their research to the vocabulary denoting culinary products in the folklore of Western Polissia and the western part of Volyn [5, p. 25].

The article focuses on the study of phraseological units with food component in the contexts. Phraseological units are an important part of the English language. They make speech more expressive and reflect the culture and traditions of native speakers. One interesting group of such expressions includes phrases with the component food. Studying food-related idioms is useful because they are common in everyday speech, books, and media.

Recent studies in the field of English phraseology confirm the significance of food-related components in the formation of stable expressions that reflect cultural characteristics, historical context, and the mentality of native speakers. We have examined the connection between idioms containing the component “food” and their metaphorical meanings, noting that such expressions are often related to human emotions, character traits, and social relationships (e.g., “piece of cake” – щось легке, “spill the beans” – розрити секрет, “big cheese” – важлива персона, “bread and butter” – засоби до існування).

Phraseological units have different nominative structures (they can be phrases, sentences, or even microtexts). Therefore, phraseologists aiming to classify these structures distinguished a separate field within phraseology – paremiology. The object of its analysis includes proverbs, sayings, tongue twisters, riddles, incantations, and winged expressions.

As it is known, full phraseological equivalence refers to equal imagery, structural and grammatical composition, as well as the coincidence of the conceptual-logical, expressive-emotional, and functional-stylistic meaning of phraseological units in the compared languages [6, p. 63]. Absolute equivalents are not very common due to grammatical differences between English and Ukrainian, as well as certain variations in lexical composition within phraseological units that are nearly identical in meaning and structure. It should be noted that the source of many phraseological equivalents with the component "food" is not only the Holy Scripture, ancient history, and mythology but also the similarity of different nations' views on food, particularly staple foods such as bread, salt, meat, and others. Big cheese – велика цяця, велике цабе; break the egg in one's pocket – вставляти палиці в колеса; butter wouldn't melt in one's mouth – і мухи не скривдить; to go nuts, to go bananas – з глузду з'їхати, з ума спасти, звихнутися розумом. As we can see, the "food" component is not always present in phraseological analogs: as nutty as a fruitcake – макітра не в порядку, не вистачає клепки (crazy, not right in the head). Sometimes, the equivalent in the target language contains the name of a different food product: ложка дьогтю в бочці меду – bug in the butter (a small flaw that spoils something good).

To conclude, food-related idioms enhance speech and reflect culture. Full equivalence between English and Ukrainian expressions is rare, and sometimes the food component changes. Studying these idioms helps understand linguistic and cultural connections.

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ENGLISH AS A GLOBAL LANGUAGE

Today English serves as an international medium of communication in the fields of science, business, politics and culture. Its global spread is driven by historical and economic factors which raises an important question: is English displacing national languages, endangering linguistic diversity? This question is of both scientific and practical importance as it relates to the preservation of the cultural identity of peoples and the effectiveness of international communication.

The problem of the influence of English on national languages has been the subject of many studies. In particular, David Crystal in his work ‘English as a Global Language’ emphasises the role of English as a language of global interaction while recognising the risks for smaller languages [2]. Robert Phillipson in his work ‘Linguistic Imperialism’ considers the process of spreading English as a form of neocolonialism [5]. David Graddol in ‘English Next’ analyses the future of English and its impact on other languages [4]. In addition, Brauchler and Schneider, in their book ‘Language Policy in the Digital Age’, explore the role of digital technologies in preserving linguistic diversity [1].

However, the question of the balance between the use of English and the preservation of national languages remains open. In today's context there is a growing need to study the mechanisms of coexistence between the global language and language traditions.

The purpose of the article is to analyse the impact of English on national languages and identify measures to preserve linguistic diversity. The main objectives are: 1) to study the main factors of the spread of English; 2) to identify threats to national languages; 3) to outline the prospects for preserving linguistic identity in a globalised world.

English gained the status of a global language thanks to the colonial expansion of the British Empire and later the economic dominance of the United States. In the twenty-first century its position is being strengthened by information technology and digitalisation, as more than 50% of Internet content is created in English. In addition, international organisations such as the UN, the EU, and the IMF use English as a working language. David Graddol analyses the impact of digital technologies on the spread of English and predicts its growing role in the future [4].

The intensive use of English in science, business, and education is helping to reduce the role of national languages. For example, in many countries universities are introducing English-language instruction which can lead to a decrease in students' motivation to learn their native language. According to UNESCO, almost 40% of the world's languages are in danger of extinction, and globalisation is one of the factors behind this process [5]. Robert Phillipson in his work ‘Linguistic Imperialism’ emphasises that English is an instrument of cultural hegemony that displaces less

developed languages and forces people to adapt to the English-speaking environment [5].

Despite the risks, English provides effective international communication and access to global knowledge. The following measures are necessary to preserve linguistic diversity:

- Legislative regulation of the status of national languages [6].
- Use of technology for digitalisation of native languages [1].
- Educational programmes to support multilingualism [3].

English plays an important role in global communication, but its spread poses a threat to linguistic diversity. It is important to implement strategies that promote the preservation of national languages without rejecting the benefits of global communication. Further research could be aimed at analysing the effectiveness of language policies in different countries and assessing the impact of digital technologies on maintaining linguistic identity.

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THE PLAY AS THE LEADING ACTIVITY OF PRESCHOOLERS' LEARNING

Play is a natural and leading activity of preschool children which makes it an extremely effective teaching method, in particular when learning English. The use of game methods contributes not only to the learning of new material, but also to the development of communication skills, cognitive activity and creativity of children.

Playful activities help children to adapt to a foreign language environment, to feel the need to learn a foreign language and motivate this activity. The teacher should create situations that stimulate the child's active cognitive activity, ensuring effective learning. The game promotes the development of such qualities as collectivism, activity, discipline, observation and attentiveness.

Many scientists have discovered the role and functions of the game at the lessons of English at the kindergarten. T. Marchenko has believed that children's games are necessary for the emergence of a desire in children to communicate with other children [1]. I. Boiko considers that a pleasant and lively atmosphere plays an important role in learning English. To create such an environment, you need to diversify the learning process and play interesting games in class [2]. The most popular theory in the 20s and 30s of the last century was the theory of C. Gross, in which he first analyzed the importance of play for the child's mental development. In the works of the famous psychologist D. Elkonin, the question that it is the reality surrounding the child that influences the role-playing game is one of the most important ones [3].

In the methodology of preschool education there are different approaches to the classification of games. The following classification of games for teaching preschoolers the English language is proposed:

1) by the number of participants (individually, in pairs, collectively, in a group, in a subgroup);

2) by the nature and form of behaviour of the participants (games-manipulations with objects (with natural objects, games, etc.); games related to movements, physical actions; games-competitions (in pairs, groups, teams); role-playing games based on real or obvious situations (At the doctor’s. In the store);

3) by the purpose and tasks of learning.

According to the purpose and task, games are divided into:

. language (phonetic, lexical, grammatical);

b) speech (development of listening, speaking);

c) communicative (formation of communication skills);

d) receptive, reproductive, productive (creative) [4].

Such a classification of games is convenient for constructing a concept and its analysis. However, each game can be attributed to different types. For example, the game "We are receiving guests" is group, role-playing, communicative, productive, and a game-manipulation with all objects.

This classification of games allows the teacher to organize classes in a structured way, and practical examples demonstrate how to combine learning with play. Thus, the game is an important pedagogical tool in working with preschoolers.

A component of a didactic game is a game-based didactic exercise. An exercise is a specially organized performance of individual operations, actions to provide possession of them or improve them in educational conditions. Rights in teaching the English language are not a separate element of the lesson, an organic part of the game activity of the teacher and children.

The organization of work with the introduction of four phases in its implementation:

1) setting the task;
2) showing the sample;
3) performing the task;
4) the evaluation phase.

All exercises in an English lesson of preschoolers are game-based. Let us consider some examples of games for kindergarteners.

Simon says. Simon says.

A very popular game in the United States among younger students. Such games for children in the English classroom are so exciting that students want to spend as much time as possible playing them, even to the detriment of the main lessons.

How to play "Simon says":

A student chosen to play the role of Simon stands in front of the class. Then Simon says a sentence in English, and the rest of the class does the task. For example: Simon says put your hand on the left shoulder of your classmate. To catch players out, you can sometimes omit the phrase "Simon says". In this case, the person who performs the action is out of the game. The last person left wins.

Help the Stanger

Teacher: Children, we have a newcomer to visit us. He is also learning English, but he often confuses the names of objects and numbers. Let's help him to remember everything correctly.

Example: Stranger: This is a ball.

Student: No, this is not a ball. This is a table.

Stranger: This is a chair.

Student: This is not a chair. This is a table.

Now help Dumbfounder get ready for school.

Students name all the items that need to be put in the backpack.

This is a pencil.

This is a book.

This is a pen. etc.

To conclude, the play is an effective form of teaching preschoolers, especially in learning English. Using a play as the main method of teaching English in preschool education allows the teacher to create favourable conditions for natural and effective language acquisition, while simultaneously developing the personal qualities and abilities of children. The games develop vocabulary by correctly naming objects, making up sentences, improving grammar skills, and motivate children to learn.

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GRAMMAR THROUGH GAMIFICATION WITH DUOLINGO

Learning foreign languages has always been relevant, and with the development of digital technologies, new approaches to learning have emerged. One of these methods is gamification, which is actively used in mobile language learning apps. Modern students and adults are increasingly turning to interactive platforms that offer learning playfully, making the process of learning more interesting and effective.

Research on gamification in English grammar instruction highlights its ability to enhance learner motivation, engagement, and comprehension. Duolingo, a widely used gamified language-learning application, incorporates features such as points, badges, progress tracking, and immediate feedback, which foster intrinsic motivation and create an interactive learning environment [1;2]. These game-like elements make grammar instruction more dynamic, enabling students to practice language structures in a low-stress context that encourages active participation and collaboration [2].

Quasi-experimental studies have demonstrated the effectiveness of Duolingo in improving grammar comprehension. For instance, one study focusing on mastering the simple present tense among seventh-grade students showed a significant improvement in post-test scores compared to pre-test results, affirming Duolingo's role in enhancing grammar mastery through multiple-choice and translation exercises [4]. Similarly, findings indicate that Duolingo's user-friendly design, repetition-based practice, and gamification mechanics reduce grammatical errors and support knowledge retention [1; 4].

The researcher's practical experience with Duolingo suggests that while the app effectively reinforces grammar through repetition and contextualized exercises, it lacks explicit grammatical explanations. Users engaging with the platform for language maintenance or new language acquisition often encounter grammar concepts presented solely through example sentences without accompanying theoretical overviews. For instance, in the section covering the present continuous tense, learners are provided with fully formed example sentences and tasked with inserting missing verbs, yet no concise summary of the tense's structure or usage is offered. This implicit learning approach may benefit users who prefer minimal theoretical instruction; however, it can also hinder those who require explicit grammatical rules to fully grasp new structures.

Consequently, while Duolingo's gamified approach enhances engagement and practice, supplementing its methodology with additional grammatical explanations could further support learners in developing a deeper understanding of language structures.

Gamified tools like Duolingo also cater well to digital-native students, making grammar learning enjoyable and motivating. By integrating technology into the learning process, Duolingo addresses contemporary educational needs and encourages self-directed learning, particularly during remote learning situations such as the COVID-19 pandemic [1;3]. However, challenges remain, including the need for teachers to align gamified activities with learning objectives and to provide additional grammatical explanations where necessary [2;4].

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SOCIAL SATIRE IN THE MOIST VON LIPWIG CYCLE BY TERRY PRATCHETT: CRITICS AND METHODOLOGY

This paper explores how social satire critiques bureaucracy and the economic system in Terry Pratchett's Moist von Lipwig novels, a cycle inside *the Discworld* series. Pratchett employs humor, irony, and exaggeration to expose the absurdities of governance and capitalism, using fantasy as a lens through which real-world issues are scrutinized. By analyzing Moist von Lipwig cycle, this study will reveal the structural flaws within bureaucratic and economic systems, highlight the role of satire in challenging social norms, and demonstrate that Pratchett's work transcends comedy to provide a nuanced reflection on contemporary socioeconomic realities.

There is a large body of literature analyzing Terry Pratchett's work, particularly in relation to satire. Several scholars have examined his use of humor as a form of social criticism. For instance, Kjellberg's "Comedy Gold: How Humor is Used as Social Criticism in Terry Pratchett's *Making Money*" (2014) [7] explores the role of humor in critiquing economic systems, analyzing how Pratchett satirizes financial institutions and monetary policies. Britton's "Thoughtful Laughter: Fantasy and Satire as Social Commentary in Terry Pratchett's *Discworld*" (2018) [1] broadens the scope, investigating satire as a tool for social critique within the entire series. More recently, Dahlbacka's "Authenticity in Terry Pratchett's *Discworld*" (2023) [2] delves into how Pratchett balances fantasy elements with sociopolitical commentary, underscoring the interplay between imaginative storytelling and real-world critique. While these studies provide valuable insights, they do not specifically address the interplay of satire and regime criticism in the Moist von Lipwig novels, leaving a significant gap in existing scholarship.

To fill this gap, this research applies discourse analysis inspired by Norman Fairclough's sociolinguistic methods [3], which examine the relationship between language, power, and ideology. Additionally, close reading techniques influenced by Gérard Genette's narrative theory [5] are employed to dissect Pratchett's structural and stylistic choices. Linda Hutcheon's work on irony and parody [6] further supports the analysis of Pratchett's satirical techniques, providing a framework for understanding how humor functions as a subversive mechanism in his narratives.

The theoretical foundation of this research draws from multiple perspectives on power and institutions. Michel Foucault's theory of power offers insights into how authority operates within bureaucratic structures, revealing how power is both maintained and challenged through discourse [4]. Max Weber's analysis of bureaucracy [9] provides a lens through which to examine the inefficiencies and absurdities that Pratchett highlights in his depiction of government institutions. Karl Marx's critique of capitalism [8] informs the analysis of economic structures in the novels, helping to deconstruct Pratchett's portrayal of financial corruption and corporate greed.

While Pratchett's broader critique of power and institutions has been widely discussed, the unique role of satire in criticizing bureaucracy and capitalism in the Moist von Lipwig novels remains relatively unexplored. This study aims to position these novels within the larger discourse on satire and governance, demonstrating how Pratchett's work engages with contemporary economic and political debates.

Ultimately, this paper argues that fantasy literature should not be dismissed as mere escapism, but rather recognized as a powerful medium for social critique. Through his satirical treatment of bureaucracy and capitalism, Pratchett challenges dominant socioeconomic structures, encouraging readers to reflect on the absurdities and contradictions within their own societies. By framing Discworld as a site of critical engagement, this study highlights the enduring relevance of Pratchett's satire and its contribution to discussions on governance, economic policy, and institutional reform.

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PRINCIPLE AND ANALYSIS OF THE BAR MENU TRANSLATION IN ZHYTOMYR

In today's globalized world, a high-quality restaurant menu translation is a crucial element in the tourism and hospitality industry. A correct translation enhances clarity for international visitors, improves the establishment's reputation, and helps avoid communication misunderstandings. Conversely, poor translations can lead to confusion, humorous situations, or even legal issues, especially in cases of incorrect labeling of allergens or cooking methods. That is why our research aims to study the general overview of the bars, existing in the city of Zhytomyr, which seems to be rather topical as the city is located in the centre of Ukraine, close to its capital, and has numerous foreign visitors, arriving both for business and for pleasure. The study covers fifteen bars' menus and represents the analyses along with suggestions for improvement.

A study of 15 establishments in Zhytomyr revealed that only 4 had English bar menus, and of those, only 2 were without errors. The 'Choice' program offers a paid machine translation service, enabling all establishments to provide accurate English menus. This is particularly important given the current influx of foreign nationals into the city, as many staff members lack foreign language skills

We suggest some examples to illustrate our typology menu translation errors:

Grammar & Consistency: when translating a menu into English, grammatical mistakes, incorrect use of articles, and inconsistency in terminology are common issues. These errors affect the overall perception of the menu, making it confusing for English-speaking guests. Grammatical mistakes can distort the meaning or make the text sound unnatural. Articles are often missing or misused, which makes the text harder to understand. See Table 1 below:

Table 1. "Grammar & Consistency"

Incorrect	Correct	Comment
on the basis of rum with a berry-strawberry taste and noticeable sourness	A rum-based drink with a pronounced berry-strawberry flavor and noticeable sourness	"A rum-based drink" is more natural and fluent.
Tincture based on blackcurrant extract, with a pleasant sourness	A tincture based on blackcurrant extract, with a pleasant sourness	"A" is missing, which is a grammatical error. In English, most singular countable nouns require an article.

Another issue is the consistency in naming within a single menu, which includes avoiding mixing British and American English on a menu that can appear unprofessional. For example, a menu might contain "Whiskey Sour," which uses the American spelling "whiskey," alongside "Light Pilsner (Spirit of the Czech Republic)," which employs British-style wording without American phrasing. To maintain stylistic consistency, it's better to choose one language variation and adhere to it throughout the menu. For instance, if using American English, "Light Pilsner" could be changed to "Light Lager" for better alignment. Correcting grammatical mistakes, using articles properly, and ensuring consistency in terminology will make the menu appear more professional and easier for international guests to understand.

Clarity and Readability in Drink Menus: Issues stem from overly literal translations that disregard context, or from lengthy descriptions that overwhelm the reader. Also, menu descriptions should be concise and informative at the same time. One more issue can arise from the usage of unnecessary or unclear words in descriptions. Some drinks are traditional to Ukrainian cuisine, but their names may be incomprehensible to foreigners. We have to consider the influence of culture on translation perception, because some drink names may be perceived differently depending on the cultural context. See Table 2 below:

Table 2 “Clarity and Readability in Drink Menus”

Incorrect	Correct	Comment
Tincture on cherry fruits, tart, aromatic	A tart and aromatic cherry-infused tincture	English does not use the preposition "on" in this context. The correct option sounds clearer to native speakers
Beer prepared on the basis of wheat malt, with light acidity and a citrus aftertaste	A wheat beer with a hint of citrus and refreshing acidity	The original description contains unnecessary words and is overloaded with a complex structure.
Spotykach	Traditional Ukrainian spiced liqueur (Spotykach) made with berries and aromatic herbs.	Use of specific terms without explanation. Without explaining what Spotykach is, a foreign guest will not understand what kind of drink it is. Adding a brief description makes the name clearer.
Infusion based on blackcurrant extract, with a pleasant sourness	A blackcurrant-infused drink with a pleasantly tart flavor	The word "infusion" can be associated with tea or herbal infusions, which does not always correspond to the context of an alcoholic beverage. Using "blackcurrant-infused drink" makes

		the description more accurate and appealing.

Clear and well-adapted drink descriptions make the menu more understandable, attractive, and aligned with international standards.

International Menu Formatting: a well-structured international menu should follow global standards, using standardized terminology and clear formatting. Here we provide the key principles for a clear menu, which include:

- Clarity & simplicity – concise, informative descriptions.
- Consistent structure – logical section order (beverages, appetizers, etc.).
- Standardized Names & Terms.
- Familiar formats – liquid volumes in milliliters (ml), dish weights in grams (g).
- Using internationally recognized names prevents confusion:
  Alcoholic drinks – "liqueur" (not "tincture"), "brandy" (not "grape vodka").
  Coffee names – "Espresso," "Americano," "Latte" (no literal translations).
  Ingredient clarity – e.g., "Uzvar – traditional Ukrainian dried fruit drink."

Also, it is better to mark the menus, which differ by region like “Europe” – structured sections (e.g., separate hot & cold beverages), “the USA” – branding emphasis, simple names, or “Asia” – beverage images, cultural highlights (e.g., traditional teas).

Incorrect translations can lead to a loss of customers (Bassnett & Lefevere, Translation, History and Culture, 1990 – [11, p.11-15]). Confusing or absurd dish descriptions can drive away potential customers, especially foreigners. Mistaken orders lead to disappointment and negative feedback. Lost customers reduce profits, and menu corrections add costs. Negative reviews and viral translation errors can harm the restaurant’s reputation. Menu errors suggest unprofessionalism and negligence. Poor translation may be seen as disrespectful to international guests. Incorrect translations can strip dishes of their cultural uniqueness (Venuti L. , The Translator's Invisibility. A History of Translation, 1995 – [12, p.18-22]). Mislabeling allergens can pose health risks, making the restaurant legally responsible. Customers may sue for incorrect ingredient descriptions. Violating food labeling laws can lead to fines and penalties. To prevent these consequences, use professional translators and native speakers. Adapt translations to cultural expectations. Ensure clear descriptions and verify allergen details.

We aim to improve the general situation with the bar menu translation in our city, that is why we suggest a few translation recommendations, which include following:

- Professional language service providers, use specialists in gastronomy and native speakers with cultural expertise.
- Localization principles, demand collaboration with native speakers and specialists for cultural adaptation.
- Use of appropriate linguistic software and AI tools for quality checks and consistency.
- Testing to validate translations with customer surveys and native speaker focus groups.

The study allows us to conclude, that menu translation errors commonly appear in three main areas: grammar and consistency, clarity and readability, and international menu formatting. Regarding grammar and consistency, mistakes like incorrect articles, plural forms, tenses, and inaccurate phrase translations are frequent. For example, using "fresh juice" when "fresh juices" is intended can cause confusion. Clarity and readability issues stem from overly literal translations that disregard context, or from lengthy descriptions that overwhelm the reader. Finally, international menu formatting errors involve failing to adhere to global standards, omitting explanations for traditional dishes, and using incorrect culinary terminology.

Accurate menu translation is vital for restaurants catering to international customers. Translation literature stresses the importance of context, cultural nuances, and adaptation to the target audience. Errors can distort meaning and negatively impact customer perception. Avoiding these common mistakes enhances service quality and creates a positive impression.

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DERIVATION AS THE METHOD OF TERM FORMATION IN THE FIELD OF IT

The field of Information Technology (IT) has undergone rapid evolution, leading to the continuous formation of new terminological units. Among the various methods of term formation, derivation plays a crucial role [1, p. 250]. This paper explores the significance of derivation as a linguistic process in IT terminology, analyzing its mechanisms and impact on the development of specialized vocabulary. By examining common derivational patterns, this study highlights how affixation contributes to the creation of IT-related terms [2, p. 145].

The advancement of Information Technology has led to the emergence of numerous technical terms, necessitating efficient methods for their formation. One of the most prominent methods is derivation, a process by which new words are formed by adding affixes (prefixes and suffixes) to base words [3, p. 75]. This linguistic phenomenon not only enriches the lexicon of IT but also ensures consistency and systematic expansion of terminology. Understanding derivational processes is essential for linguists, IT professionals, and translators who deal with technical texts.

Affixation in IT Terminology

Affixation (the addition of prefixes and suffixes to root words) is a prevalent method of term formation in IT. The following are examples of common derivational patterns found in IT terminology:

Prefixation

Prefixes are added to the beginning of a root word to modify its meaning. In IT, prefixes often indicate repetition, negation, direction, or intensity. Examples include:

- **Reboot** (*re-* meaning "again" + *boot*): To restart a computer.
- **Download** (*down-* indicating movement + *load*): To transfer data from a remote system.
- **Upload** (*up-* indicating movement + *load*): To transfer data to a remote system.
- **Uninstall** (*un-* meaning "reverse action" + *install*): To remove a program from a system.
- **Decode** (*de-* meaning "reverse process" + *code*): To convert data back to its original form.
- **Encrypt** (*en-* meaning "cause to be" + *crypt* from Greek *kryptos*, "hidden"): To secure data.

Suffixation

Suffixes are added to the end of a root word, often changing its grammatical category or meaning. In IT, suffixes frequently denote functions, states, or agent nouns. Examples include:

- **Wireless** (*wire* + *-less* meaning "without"): Referring to technology that does not use physical cables.
- **Readable** (*read* + *-able* meaning "capable of"): Data that can be read by a system or user.
- **Processor** (*process* + *-or* meaning "one who performs"): A device that processes data.
- **Executable** (*execute* + *-able* meaning "capable of being executed"): A file that can be run by a computer.
- **Networking** (*network* + *-ing* indicating an ongoing process): The practice of connecting computers.
- **Automation** (*automate* + *-ion* forming a noun): The process of reducing human intervention in operations.

Impact of Derivation on IT Terminology

The use of derivation as one of the methods of term formation in IT terminology has significant implications:

- **Standardization** – The systematic formation of terms ensures uniformity in IT communication.
- **Globalization** – Derived terms are easily adaptable across languages, facilitating international collaboration.
- **Clarity and Precision** – Newly formed terms provide precise meanings, reducing ambiguity in technical contexts.

Conclusion

Derivation serves as one of the fundamental methods of term formation in IT, enabling the creation of meaningful and systematic vocabulary. Through affixation, IT terminology continues to expand, adapting to the rapid technological advancements. Understanding the mechanisms of derivation enhances linguistic comprehension and contributes to effective communication in the digital age.

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THE APPROACHES TO TRANSLATION IN THE VIDEO GAME INDUSTRY

The study explores the role of language in the video game industry, focusing on localization methods and their impact on user experience. Using case studies, it analyzes translation techniques and cultural adaptation. The paper highlights the means of audience engagement and concludes with recommendations for effective linguistic practices.

The global video game industry continues to expand, reaching audiences from diverse linguistic and cultural backgrounds. Localization plays a crucial role in making video games accessible and enjoyable for international players. Beyond direct translation, localization involves cultural adaptation, ensuring that content resonates with target audiences while preserving the game's core narrative and mechanics. This paper investigates various translation techniques, the challenges of localization, and their broader implications for the industry.

Localization is a process that goes beyond translating text; it involves adapting the game's content to fit the linguistic, cultural, and even legal requirements of different markets. Unlike straightforward translation, localization considers idiomatic expressions, humor, cultural references, and user interface adjustments to create a seamless gaming experience. Effective localization enhances a game's commercial success and player immersion.

Alberto Fernández Costales (2012) [1, p.385–408] offers an in-depth analysis of translation strategies employed in video game localization. He examines video game localization through translation, focusing on the strategies tailored to different genres and textual typologies of video games. Video games continue to evolve their adaptation presents a significant challenge for translators.

Francesca Sorrentino (2023) [2] provides a practical overview of the distinction between localization and translation in her blog post. Sorrentino emphasizes that video game localization involves translating and adapting content for different linguistic and cultural contexts. Developers play a crucial role in this process by providing reference materials, such as lore descriptions, character profiles, and gameplay mechanics, which facilitate the translators' work. The choice of target languages is pivotal, as it directly influences the game's market reach and player base. Developers often decide on initial localization languages based on market research and anticipated demand, with the flexibility to expand to additional languages as the game gains popularity.

Paul Gorry's article (2021) [3] serves as an introductory guide to video game localization. It outlines the process, highlighting stages such as text translation, voice-over adaptation, and cultural adjustments. Localization not only enhances a game's commercial success but also broadens its appeal across diverse audiences. While localizers can offer guidance on language selection based on industry experience,

developers ultimately determine the scope of localization based on budget considerations and strategic goals. This process underscores the importance of aligning linguistic adaptation with cultural resonance to maximize engagement and sales in target markets.

These sources complement each other by addressing different aspects of video game localization. The collection of references effectively highlights the nature of video game localization and translation studies with cultural and technical considerations.

This study highlights the significance of localization in the video game industry, emphasizing the need for cultural sensitivity and high-quality translation. Proper localization can greatly enhance player satisfaction and market reach, making it a vital aspect of game development. Future advancements in AI and machine learning may improve localization efficiency, but human oversight will remain essential to maintain cultural authenticity and engagement.

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ERRORS IN ZHYTOMYR RESTAURANTS' MENU TRANSLATION: LINGO-CULTURAL APPROACH

A correct menu translation is a crucial component of a successful restaurant business, especially in the era of globalization. However, errors in English menu translations are a widespread phenomenon that can lead to awkward situations, loss of customers, or even legal issues (Venuti L. The Translator's Invisibility: A History of Translation. – London: Routledge, 1995. – 353 p).

This article examines the main causes of such errors, their consequences, and possible ways to correct them. We have studied the main course menus of fifteen Zhytomyr restaurants. The research is important for our city because we have many international visitors arriving to support Ukraine and to enjoy our beautiful nature (Nezdoyminov, S., Iaromenko, S., Bedradina, G. Safety and Quality of Restaurant Service as Factor of

Restoring Tourist Mobility in the Gastronomic Tourism Destination of Ukraine.. *Almatourism-Journal of Tourism, Culture and Territorial Development*. 2023. T. 13 : 24. 117–137 p.).

We regard the causes of errors in menu translation, discuss the consequences of incorrect translation along with examples of common errors, and conclude with suggestions on the ways to fix the situation (Li, S. A corpus-based multimodal approach to the translation of restaurant menus. *Perspectives*. 2019. T. 27 : 1. C. 1–19).

During our research, we have found the following causes of errors in menu translation: use of automatic translators without editing, literal translation without considering the context, lack of knowledge of culinary terminology, absence of professional translators or native speakers, and use of outdated or inappropriate dictionaries. For the study, 15 establishments were selected, and in total, about 30 establishments in the city were examined. While conducting the research, we found only 4 restaurants with English-language bar menus: “Pleasantville BBQ Pub”, “Mario Pizza”, “Shultz V2.0”, and “Dim Trybelya.” Of these four, only two have menus without errors.

Many restaurants rely on automatic translation tools without proper editing, leading to unnatural or incorrect phrasing. Literal translations, which do not consider the cultural and linguistic context, often distort the intended meaning of dish names. A lack of knowledge of culinary terminology can also result in inaccurate translations, as many local dishes require precise descriptions that generic translations fail to capture. Additionally, the absence of professional translators or native speakers in the translation process increases the likelihood of mistakes. Finally, the use of outdated or inappropriate dictionaries may lead to the inclusion of archaic or misleading terms, further complicating the menu’s readability and accuracy.

As most scholars indicate, incorrect menu translation can lead to serious consequences, starting from comic situations that cause misunderstandings or laughter, to reputation risks due to loss of trust from foreign guests (House, J. Translation Quality Assessment: Past and Present.. *London: Routledge*. 2015. 171-230 p).

The most serious consequences can be: possible allergic reactions due to incorrectly translated ingredients, a decline in the establishment's reputation and negative online reviews and legal risks in cases of misleading customers (Newmark, *A Textbook of Translation*, Prentice Hall, 1988, p. 1–292; Baker, *In Other Words: A Coursebook on Translation*, Routledge, 2018, p. 1–370)

Comical mistranslations may amuse customers but also cause confusion and misunderstandings, making it difficult for foreign guests to navigate the menu. Such errors can result in a loss of trust, as diners may question the restaurant’s professionalism and attention to detail (Karaban, *Translation of English Scientific and Technical Literature*, Nova Knyha, 2004, p. 383–473)

Moreover, incorrect ingredient descriptions can pose serious health risks, leading to potential allergic reactions or dietary restrictions being overlooked. A poorly translated menu can also harm a restaurant’s reputation, with dissatisfied customers leaving

negative reviews online, deterring future patrons (Nida & Taber, *The Theory and Practice of Translation*, Brill, 1982, p. 22–50)

In extreme cases, misleading translations may even lead to legal repercussions if customers feel deceived about what they ordered. Addressing these issues is essential to maintaining a restaurant's credibility and ensuring a positive dining experience for all guests.

We suggest some examples of common errors: "Борщ з пампушками" translated as *Borscht with slippers* instead of *Borscht with garlic buns*. "Оселедець під шубою" translated as *Herring under a fur coat* instead of *Dressed herring*. "Курка в соусі" was translated as *Chicken in sauce*, which is too general, instead of *Chicken with creamy garlic sauce*.

Many restaurants make critical translation mistakes that result in confusion or unintended humor. For example, the Ukrainian dish **"Борщ з пампушками"** has been mistakenly translated as *Borscht with slippers* instead of the correct *Borscht with garlic buns*, completely altering the meaning. Similarly, **"Оселедець під шубою"** has been translated too literally as *Herring under a fur coat* rather than the more accurate *Dressed herring*, which better conveys the dish's culinary context. Another common mistake is translating **"Курка в соусі"** as *Chicken in sauce,* which is too vague and does not provide enough detail for the dish's description. A better translation would be *Chicken with creamy garlic sauce*, specifying the type of sauce and making the dish more appealing to English-speaking customers. Such errors highlight the need for careful and culturally appropriate translations.

After having conducted our research, we suggest the following ways, able to fix the situation. First of all, the restaurants should consider the possibility of hiring professional translators and editors. Also, if possible, it would be efficient to consult with native speakers. The most important option is checking terminology in authoritative sources, in particular, using high-quality bilingual dictionaries and specialized resources. We would also advise the owners and/or managers testing the translation with native speakers before printing.

To avoid translation errors in restaurant menus, several effective strategies can be implemented. First and foremost, hiring professional translators and editors ensures accuracy and cultural appropriateness. Consulting with native speakers further refines the translations, making them more natural and appealing. Additionally, verifying terminology in authoritative sources helps prevent inaccuracies, especially in culinary descriptions. Before finalizing the menu, testing the translation with native speakers allows for feedback and necessary adjustments. Lastly, using high-quality bilingual dictionaries and specialized resources guarantees precise and up-to-date language use, reducing the likelihood of outdated or misleading terms. By following these measures, restaurants can enhance their international reputation and provide a seamless dining experience for all guests.

A high-quality menu translation is an essential component of a restaurant's positive impression. Carelessness in translation can lead to negative consequences, whereas a professional approach can enhance the establishment's prestige, attract foreign guests, and ensure a comfortable perception of dishes.

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TRANSLATION TRANSFORMATIONS AND TRANSLATION STUDIES IN CHINA

The main **aim of translation** is to achieve adequacy.

Adequate translation is defined as a translation rendered at a necessary and sufficient level to convey the invariant content plane respecting the relevant expression plane, meaning following the norms of the language.

Adequacy is the rendering of the semantic content of the source text and its full functional-stylistic correspondence.

In order to achieve adequacy translators use different translation transformations. Each of them is represented by different language level units.

Formal transformations involve changes in linguistic form during the translation process under the condition that the semantic content of the source text is retained. At the phonetic level, they first of all include phonographic transformations (such as):

1. transcription as 'a phonemic conversion of the source lexical unit using the phonemes of the target language';
2. transliteration as 'a letter-by-letter conversion of the source lexical unit using the alphabet of the target language';
3. conventional phonographic substitution; and
4. a combination of the transformations mentioned above.

Unsuccessful and incorrect results of transformations are considered as translation errors. Nevertheless, the usage of the prosodic pattern (rhythmic-melodic pattern) change of the verse through formal transformation is acceptable in poetic translation.

At the word-formation level, formal transformations are represented by:

1. derivational calquing (as a morpheme-by-morpheme translation of units),
2. word constituent inversion.

The lexical level of linguistic form changes during the translation process is primarily represented by target language equivalents with identical semantic content (dictionary equivalents with the same contextually actualized sememic composition).

At the morphological level, formal transformations are represented by:

1. categorial substitution with retained semantic content of the linguistic units (e.g., changes in translation affecting gender, case, verb voice (active to passive), or degree of comparison),
2. part-of-speech substitution,
3. substitution of morphological means with lexical ones retaining the same semantic content,
4. elimination or occurrence of transposition of grammatical number, tense, manner of action, etc., compared to the source text during the translation process.

At the syntactic level, formal transformations are represented by substitution of phrases by single words and vice versa, of syntactic relations within phrases and sentences, involving anaphora and ellipsis, and sentence combining and splitting without changing the semantic content. The omission and addition of linguistic units and constructions can also be formal transformations, if they do not change the semantic content of the target text fragments.

Conversely, **formal-semantic** transformations involve changes in linguistic form and semantic content changes, conditioned by the specific characteristics of the source and target language systems and contextual and pragmatic factors. At the phonetic level, such transformations are mostly represented in poetic texts by the change in prosodic structure(rhythmic-melodic structure) of the verse, leading to modification of the text's conceptual plane. At the lexical level the second type of transformation has two planes, where the meaning of linguistic units is represented: the denotative and the connotative. Within the denotative plane, which manifests the conceptual-logical core of meaning, during the translation process this type of transformation is presented by lexical equivalents of lexemes that in the target

language, activate a sememic set non-identical to the one of the source unit, when actualized by the communication context.

At the morphological level, formal-semantic transformations can be divided into: categorial substitutions involving semantic change (e.g., changes in grammatical number, aspect, manner of action, degree of comparison, voice, tense, person; loss or emergence in target equivalents of the category of collectivity, etc.), part-of-speech substitutions accompanied by semantic modification, substitution of grammatical means with lexical means involving semantic change, etc.

At the syntactic level formal-semantic transformations are substitution of words by phrases and vice versa, involving semantic modification, phrases, sentences or inter-sentential relations restructuring, as well as omission, permutation and addition of sentence or text elements, which also determine the semantic change.

Formal-semantic transformations **with a pragmatic component** involve changes in linguistic form and semantic content of textual units or fragments, in order to balance the pragmatic effect of the translation on the target reader.

- Figurative
- Phraseological
- Conceptual
- Megatextual
- Translation is the best mean for explanation and understanding between people from different parts of China, thus it serves to establish order and peace in the country.
- Chinese translated Buddhist sutras from Sanskrit (148 - 1127).
- As European missionaries, travelers, and merchants started arriving in China, the acquaintance process with Chinese philosophy, history, and literature has begun (mid-17th century).
- The level of translation theory was limited to debates about how the sutras should be translated: literally or by meaning.
- Year 1894 - Ma Jianzhong suggested retaining both the semantic content and the spirit of the source text, attempting to achieve a high degree of their unity during the translation process.
- Yan Fu’s translator's foreword to J. Huxley's book “Evolution (The Modern Synthesis)” stated: "There are three difficulties in translation: accuracy, norm, and style."
- Yan Fu suggested 3 standards for good translation: 信 (xìn) - faithfulness, 達 (dá) - expressiveness, 雅 (yǎ) - elegance.
- Qu Qiubai also expressed other translation ideas. He wrote that the translation should accurately and fully convey to the Chinese reader the semantic content of the source text, so that the ideas that the Chinese reader receives correspond to the ideas of the English, Russian, Japanese, French reader from reading the source text. In his opinion it is also necessary to write in báihuà, the colloquial language, which is spoken by the Chinese.

- Su Ling, with whom Qu Qiubai had a discussion about translation, also expressed some interesting thoughts. He wrote: "Any translation must simultaneously take into account two aspects: it must, of course, be understandable and preserve the ‘appearance’ of the source text. But this retaining often comes into conflict with understanding, because it looks unusual to everyone. To make the source text pleasing to the eye, you only need to change its clothes, but you should not shorten its nose or cut out its eyes".
- Acknowledging that it is quite challenging to build a clear line between literal and word-for-word translation on the one hand, and semantic and free translation on the other, Lin Yutang suggested differentiating two translation levels: 'individual Chinese characters (words) level translation' and 'sentence-level translation'.
- Hú Shì is known as the initiator of the introduction of báihuà into the formal business style, and its recognition as a written literary language.
- Yuen Ren Chao is a well-known expert in the field of linguistics, author of the great work “A Grammar of Spoken Chinese”.
- Since 1957, China has been working on machine translation. In 1958 for the first time, an experiment was successfully carried out to translate 20 sentences from Russian into Chinese on a conventional Chinese-made digital machine.
- In the 70s and 80s of the 20th century - Chinese translation studies went through a period of self-awareness, the 90s were a period of global adjustment of the accumulated knowledge, borrowing and exchange of experience, and now the stage of comprehensive construction and gradual movement towards maturity has begun.

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GENDER PECULIARITIES OF CHINESE COMMUNICATION

Discourse is to be understood as the violence we do to things - at least as a certain practice we impose on them.

Gender is seen as one of the parameters by which the social identity of the speaker is constructed in communication.

V. Labov refuted the hypothesis that differences in language use by men and women are naturally determined. There is only a greater or lesser probability that one option will be preferred by women and another by men. The preference depends on the social group, social expectations and other social, not natural, factors.

Under the influence of society's different requirements for men and women, they develop different motives for behaviour, different strategies and tactics of communication.

The language behaviour of men is usually aimed at achieving and maintaining independence and high status.

Society expects women to be non-conflictual, compliant, and emotional.

Trends in male and female speech

- Women tend to include topics in the course of conversation that are generated by the circumstances of communication or the actions of the speakers;
- Men have a harder time switching to extraneous topics, getting carried away by the topic under discussion and not responding to unrelated remarks;
- Women are more likely to be influenced by the factor of "personal life" in their speech, giving examples of specific cases from the experience of their acquaintances;
- Men's speech is characterised by greater terminology, a desire for precise nominalisation, and a greater influence of the "profession" factor;
- A characteristic feature of women's speech is the intensification of positive assessments;
- Men are more likely to express a negative assessment using stylistically reduced and invective vocabulary: (invective vocabulary (Latin invectiva - swearing) - offensive words, curses, swearing, verbal or non-verbal (indecent gestures, postures) substitute for physical aggression, a kind of emotional release that people resort to during strong psychological stress).

The issue of cross-gender voice imitation

T.V. Gomon believes: "To come to a conclusion about the fact of imitation of the speech of a person of the other sex, it is necessary to establish which set of classification features (identification characteristics) of female and male speech is bright, frequent and easy to imitate, and which features are more difficult to imitate,

which is due to the deep processes of speech generation and cannot be hidden, disguised"

Deep features of women's written language:

Lexical and grammatical level:

- use of abbreviations, abbreviations and approximate designations;
- a tendency to hyperbolic expression: frequent use of emotionally evaluative words and interjections;
- use of euphemisms;
- special emotionally coloured words, adjectives denoting shades of colour, such as pistachio;
- language clichés of politeness;
- avoidance of neologisms.

我纵不欲死,**病魔亦将**缠我至于死呵!**死神**还不降临我,实在等不得了!这时我努力爬下床来,**抖**战的两腿,**使我自己惊异**!这时窗子外面, **射**进一缕寒光来,**湖面上**银花闪烁,**我**晓得那湖底下朱红色的珊瑚床,**已**为我豫备好了!**云母石的枕**头 ;**碧**绿青苔泥的被褥,**件件都整理了**! … …**我回去吧**!**唉**!亲爱的母亲!**嫂嫂**! KY… … **再**见吧!

（庐隐«**或人的悲哀**»）

Deep features of male written language

Lexical and grammatical level:

- a tendency towards precision, terminology, and the use of professional jargon;
- active use of professional knowledge outside the sphere of professional communication;
- the tendency to use expressive, stylistically reduced means; the uniformity of lexical means of reproducing emotions;
- use of stylistically neutral evaluative vocabulary, neutral adjectives and abstract nouns;
- use of neologisms and newspaper clichés

大爷(**回**头望)：…**一**说来了“**大前**门”，**得**，**那**队就排到马路上来**了**，还拐几个弯儿。一个人限购两盒。您眼看排到了，售货员一掉脸，走了。您再问，答理都不答理你。这就叫“为顾客服务”**？装装**门面！那“**大前**门”**其**实都从大后门走啦！就跟这坐车一样，您这不是规规矩矩排着队，他一出溜，前面去了，朝司机一招手，前门开了。人家是“**关系**户”，**哼**，**尽**这词儿。等您赶过去，它扑哧又关上了。这就叫“为乘客服务”，**您**还不干瞪眼？谁都看着，就是没治！(**朝台**侧一望)**得**，**来人了**，**您**头里站着，我排您后面，待会儿车一来，就乱套了，谁力气大，谁抢先占座儿，就这风气！

(**高行健** «车站»)

Deep features of women's written language

Syntactic level:

- sentences and texts are extended, detailed and expressive;
- frequent use of inversion;
- use of exclamatory and interrogative (rhetorical) sentences;
- use of modal constructions expressing different degrees of probability and uncertainty**看来**, 说**不定**, **也**许,**在我看来**;
- the prevalence of simple and compound sentences;
- "incomplete" sentences, ellipsis;
- excessive repetitions;
- use of clichéd book vocabulary;
- frequent use of punctuation marks;
- emotional colouring of the language.

但这仅仅是昙花一般的遇合,这是谁支配的命运?**我**对于这命运,应当低头,还是应当反抗到底? … …**人**们给我的嘴脸太难看,**我是否有勇气承受下去**?难道是我的错吗?为了爱情,**而**爱一个有地位、有妻子的男人,**是罪**恶呢,还是灾殃? **唉**,还是一些我到死也难解的迷哟!

（庐隐 «**一个情**妇的日记»）

Deep features of male written language

Syntactic level:

- the advantage of using complex sentences;
- "logicality" of statements;
- individual sentences and texts are laconic, substantive and less dynamic;
- uniformity of techniques for conveying an emotional state;
- use of introductory words with the meaning of a statement 显**然**, **当然**, **自然** ;
- Inconsistency of punctuation marks with the emotional intensity of the speech

大爷：这是站队扶手用的，不是座儿。
愣小子：坐坐怕什么？又不是麻秆扎的。
大爷：你没看见这栏杆都歪了吗？
愣小子：我坐歪的？
大爷：都坐上去摇晃，能不歪吗？
愣小子：这是你家的？
大爷：就因为是公家的，我才管！
愣小子：你贫什么？回家去，跟你老娘们臭贫去吧！(摇晃得更加厉害)
大爷(**耐着性子**，**好不容易没**发作，转身对沉默的人)：**您瞧瞧**……
(**高行健** «车站»)

We can conclude that gender differences in Chinese communication exist and can be traced at different levels of speech.

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HOW TO WRITE AN ENGAGING BLOG POST: TIPS FOR CAPTURING READERS' ATTENTION

In the digital era, blogging has become a powerful tool for sharing ideas, opinions, and experiences. However, capturing and maintaining readers' attention requires strategic writing techniques. This paper explores key methods for creating engaging blog posts, focusing on structure, tone, content, and audience interaction [5]. The following guidelines outline effective approaches to ensure a blog post is both captivating and reader-friendly.

1. Structuring the Blog Post

A well-organised structure is crucial in guiding the reader through a post. According to Clark and Mayer (2016), clarity and coherence in digital writing directly influence reader retention [1]. A typical blog post structure includes an attention-grabbing headline, a concise introduction, a logically ordered body, and a strong conclusion. The introduction should outline the purpose of the post and hook the reader with a question, statistic, or anecdote. Subheadings and bullet points help break up the text and improve readability.

Example:

Instead of writing a long paragraph on travel tips, use:

Top 3 Budget Travel Tricks

• Use local transport apps

• Stay in hostels or short-term rentals
• Eat at local markets

2. Adopting the Right Tone and Language

The tone should suit the target audience. A personal, conversational style is often effective in blog writing, fostering a sense of connection (Klems, 2020) [2]. However, clarity should not be sacrificed for informality. Using active voice and vivid, accessible language helps communicate ideas effectively.

Example: Instead of: "The city was visited by many tourists,"Write: "Thousands of tourists explored the city every summer."

3. Creating Value-Driven Content

Content should be relevant, informative, or entertaining to the target audience. Writers ought to identify their readers' needs and address them directly. Incorporating personal experiences, practical advice, or case studies enhances authenticity and builds trust. A successful blog post typically answers a question or solves a specific problem [4].

4. Engaging the Reader

Interaction significantly boosts engagement. Bloggers are encouraged to include calls to action (CTAs), pose questions, or invite comments. Visual elements—such as images, videos, or infographics—also enhance engagement by appealing to visual learners [3].

Example CTA: "What are your top productivity tips? Share them in the comments below!"

Thus**,** writing a captivating blog post involves more than expressing ideas; it requires an understanding of structure, tone, value, and engagement. By applying these strategies, writers can create content that not only attracts attention but retains readers and encourages interaction.

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LES GASTRONYMES DANS LES EXPRESSIONS IDIOMATIQUES (À PARTIR DES LANGUES FRANÇAISE, ANGLAISE ET UKRAINIENNE)

Les expressions idiomatiques sont une partie intégrante du discours qui reflète la vision du monde, sa perception par les représentants de différentes cultures et peuples. Elles naissent des expériences de vie des gens, de leur quotidien, et décrivent certains phénomènes ou événements. Elles portent un sens profond, bien que les éléments individuels d'une expression idiomatique puissent paraître dénués de sens. Les gastronymes, ou termes liés à l'alimentation, sont profondément enracinés dans la vision du monde des peuples et se sont naturellement introduits dans les idiomatismes, permettant ainsi de comprendre certains phénomènes culturels.

En ce qui concerne la France et la culture française, on peut constater que de nombreuses expressions idiomatiques contenant des gastronymes sont liées aux plats traditionnels. Par exemple, une étude de 1000 expressions idiomatiques françaises a montré qu'environ 11 % d'entre elles comportent des éléments gastronomiques. Les plus fréquents sont : le pain, le vin, le poisson, le beurre et les œufs. Quelques exemples :

- Mettre du beurre dans les épinards – améliorer sa situation financière.
- Avoir du pain sur la planche – avoir beaucoup de travail.
- Noyer le poisson – esquiver un sujet (litt. « noyer le poisson »).
- C'est la fin des haricots – c'est la fin de tout (litt. « c'est la fin des haricots »).
- Refiler la patate chaude – refiler une responsabilité (litt. « passer la patate chaude »).

Cela montre combien la mentalité française est liée à la gastronomie. Les expressions culinaires reflètent les valeurs de la vie des Français et leur manière unique de percevoir le monde [2, pp. 2-4].

En revanche, les Anglais, historiquement plus pragmatiques, utilisent des expressions idiomatiques gastronomiques liées au quotidien, aux relations sociales et à l'économie. Pour ce peuple, où la nourriture est souvent perçue simplement comme une nécessité biologique, les mots alimentaires fréquents sont : pain, beurre, viande, thé, œufs. Même si certains termes sont les mêmes qu'en français, leur usage contextuel diffère, illustrant la différence entre les cultures. Par exemple :

- Bread and butter – source principale de revenu, besoins essentiels.
- Butter someone up – flatter quelqu'un pour en tirer profit.
- Not for all the tea in China – jamais de la vie (le thé est associé à la culture britannique).
- To bring home the bacon – réussir, gagner sa vie.
- A piece of cake – quelque chose de très facile.
- Not my cup of tea – ce n'est pas dans mes goûts.

Ces expressions sont étroitement liées au mode de vie britannique : pragmatique et toujours pressé [1, pp. 172-174].

En ce qui concerne les expressions idiomatiques ukrainiennes, elles ont principalement une origine agraire. Le peuple ukrainien, connu pour son travail agricole et ses terres fertiles, a ancré dans sa langue des symboles forts, notamment le pain, qui est un symbole de vie et d'abondance. Par exemple :

- Gagner son pain – gagner sa vie.
- Avoir son pain – vivre dans l'aisance.
- Vivre de pain et d'eau – vivre dans la pauvreté

D'autres produits typiques apparaissent également : le lard, le sel, la soupe au bortsch, le miel, la bouillie, etc., tous symbolisant la dure réalité de la vie paysanne ukrainienne. Exemples :

- Manger sans sel – vivre un échec.
- Faire bouillir la bouillie – créer des problèmes.
- Mettre du sel sur la plaie – remuer le couteau dans la plaie.

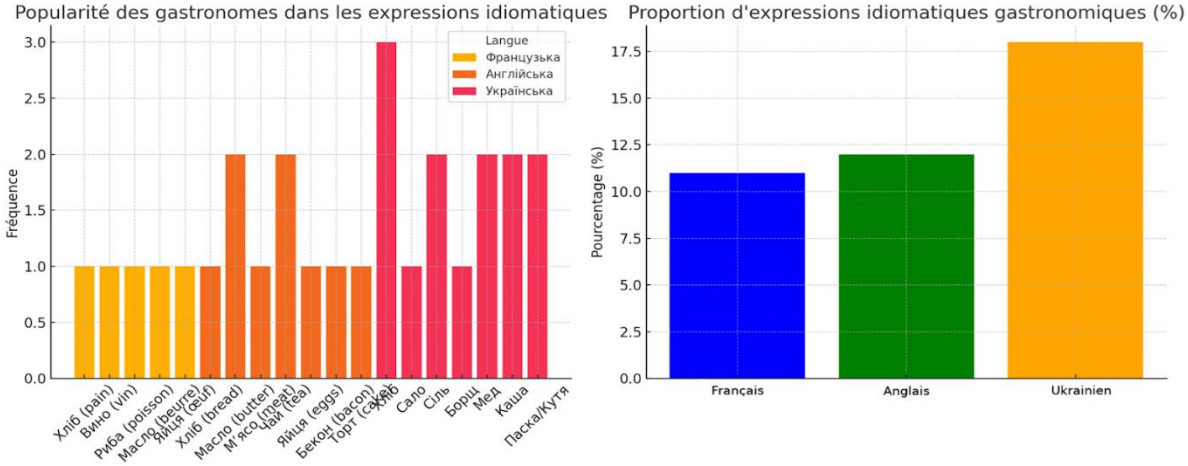
La religion a aussi influencé les idiomatismes gastronomiques :

- Faire des paskas – travailler pour autrui.
- Kutia riche – symbole d'une année prospère.
- Accueillir comme avec du miel pour Maccabée – accueillir avec chaleur.

En conclusion, les idiomatismes gastronomiques ukrainiens reflètent la simplicité, la gentillesse et la lourde histoire du peuple ukrainien [3, pp. 2-5].

Selon des recherches :

- En français, environ 11 % des idiomatismes contiennent des gastronomes.
- En anglais, ce chiffre est estimé à 10–12 %.
- En ukrainien, il pourrait atteindre 15–20 %.



(Fig. 1) Diagrammes de fréquence et de pourcentage des gastronomes dans les expressions idiomatiques.

Conclusion : dans chaque culture, les gastronomes présents dans les expressions idiomatiques reflètent l'histoire, les coutumes et les traditions du peuple. Ils nous permettent d'entrevoir le monde à travers les yeux d'autres cultures

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LES PROCÉDÉS STYLISTIQUES D'EXPRESSION DE L'ÉMOTIVITÉ DANS LE DISCOURS POLITIQUE (SUR LE MATÉRIAU DES DISCOURS ÉLECTORAUX DE MARINE LE PEN ET EMMANUEL MACRON)

Le discours politique est un instrument fort qui permet de rallier les électeurs, de les motiver et d'établir un lien émotionnel entre les dirigeants et leur auditoire. En France les campagnes présidentielles de Marine Le Pen et d'Emmanuel Macron mettent en lumière des approches rhétoriques divergentes, s'appuyant sur des techniques stylistiques destinées à véhiculer l'émotion.

Cette problématique a déjà été étudiée par d'autres chercheurs, comme O.V. Semenova, qui examine la métaphore dans le discours politique français dans son ouvrage *Metaphor in French political discourse* [7], ou Tarek Abdel-Naïm Assem avec son étude *Analyse de quelques éléments linguistiques dans les discours politiques d'Emmanuel Macron (Étude énonciative)* [1]. Fabienne Baider a également abordé ce sujet dans son article *La parole inversée ? Marine Le Pen et son identité-ressource langagière*, en étudiant l'utilisation du langage par Marine Le Pen dans ses discours politiques [3]. Ces recherches ont établi les fondations pour une analyse plus étendue des techniques stylistiques dans le discours politique.

Dans le cadre de cette recherche, mon objectif est d'élargir ces connaissances en me focalisant sur les discours politiques de Marine Le Pen et Emmanuel Macron. Ceci afin de déchiffrer comment ils exploitent des tactiques stylistiques pour provoquer des émotions et accroître leur impact sur le public.

L'analyse portera sur leurs discours électoraux, notamment le débat télévisé entre M. Emmanuel Macron, président de la République, et Mme Marine Le Pen, députée du Rassemblement national, candidats à l'élection présidentielle, le 20 avril 2022 [4], qui met en avant leurs stratégies discursives dans un échange direct, ainsi que la déclaration de M. Emmanuel Macron, président de la République, candidat à l'élection présidentielle 2022 [5], sur le bilan de son quinquennat et ses propositions économiques et sociales, La Défense, le 2 avril 2022, où il expose ses réalisations et sa vision pour l'avenir.

L'utilisation de l'anaphore dans le discours politique

L'anaphore, c'est une technique qu'on utilise en rhétorique qui consiste à répéter un mot ou un groupe de mots plusieurs fois. Le but ? Mettre l'accent sur quelque chose, insister, ou créer un effet de répétition agréable à l'oreille [7].

Dans ses discours de campagne, Emmanuel Macron utilise souvent l'anaphore pour montrer à quel point il est déterminé et pour toucher les émotions des gens. Par exemple, quand il répète "Je ne me résoudrai jamais" dans son discours du 2 avril 2022, il montre qu'il ne renoncera jamais face aux défis. Cette répétition donne une impression de force et de confiance, ce qui crée un lien émotionnel avec ceux qui l'écoutent. L'anaphore permet aussi de structurer le discours et de bien faire passer les idées importantes. Quand Macron dit "Nous devons agir… Nous devons avancer… Nous devons bâtir…", ces répétitions donnent du rythme à son discours, ce qui aide les électeurs à se souvenir de ce qu'il dit et à se sentir concernés.

Marine Le Pen, elle aussi, utilise l'anaphore pour insister sur ses idées principales et les graver dans la mémoire des auditeurs. Dans le débat télévisé, elle a beaucoup utilisé "Je serai" pour énumérer les rôles qu'elle voulait avoir si elle était élue : "Je serai la présidente du quotidien.", "Je serai la présidente de la justice.", "Je serai la présidente de la fraternité nationale.", "Je serai la présidente de la paix civile." Elle a aussi utilisé des répétitions comme "je veux", "je vais" ou "le peuple français" pour mettre en avant son programme et montrer qu'elle est proche du peuple : "Le peuple français, je le connais bien.", "Je l'ai vu souffrir.", "Je l'ai vu s'inquiéter.". Cette technique lui permet non seulement d'organiser son discours, mais aussi de donner l'impression qu'elle est personnellement engagée et qu'elle comprend les gens.

L'emploi de la métaphore dans le discours politique

À l'origine, la métaphore est une figure de rhétorique, c'est-à-dire une façon d'utiliser les mots de manière créative. Elle consiste à utiliser un mot ou une expression dans un sens différent de son sens habituel pour créer une image ou une comparaison [3].

Emmanuel Macron utilise souvent des métaphores qui évoquent la lumière, le progrès et l'avenir. Par exemple, quand il parle de "La flamme de la République qui ne s'éteindra jamais", il utilise l'image de la flamme pour symboliser l'espoir et la continuité des valeurs républicaines. Ces images sont inspirantes et donnent une vision optimiste du futur. Macron utilise aussi des métaphores pour parler des défis mondiaux, comme les "grands dérèglements" (climatique, économique, sanitaire). Ces images permettent de donner une dimension plus large aux problèmes et de mobiliser les gens pour les surmonter ensemble. Dans un de ses discours, il dit : "Nous pouvons être cette puissance de rêve", ce qui montre son ambition de construire une France forte et unie, capable de transformer les défis en opportunités.

Marine Le Pen fait aussi appel à des métaphores fortes pour rendre ses discours plus percutants et provoquer des réactions émotionnelles chez son auditoire. Un exemple marquant est sa référence aux « prédateurs d'en haut et d'en bas ». Cette métaphore symbolise les injustices et inégalités sociales. Elle oppose les élites, qu'elle considère déconnectées des réalités du peuple, à une population plus fragile, tout en mettant l'accent sur la notion de combat et de protection. Elle emploie aussi des

expressions telles que « renaissance démocratique » et « concorde restaurée » pour évoquer un futur collectif positif et mobilisateur. Ces métaphores véhiculent l'espoir de renouveau et un retour aux valeurs essentielles communes à tous les Français, engendrant un sentiment d'unité et d'appartenance.

L'utilisation des références historiques et culturelles

Emmanuel Macron utilise des personnages historiques pour créer un lien émotionnel avec son public et mettre en avant l'identité française. Dans ses discours, il parle de personnalités comme Simone Veil, Joséphine Baker et Arnaud Beltrame. Ces figures représentent des valeurs comme le courage, l'égalité et la capacité à surmonter les difficultés.

Par exemple, Simone Veil est présentée comme un symbole de force et de défense des droits humains, en particulier les droits des femmes et l'idéal européen. Joséphine Baker est mise en avant pour son engagement dans la Résistance française et sa lutte pour l'égalité. Arnaud Beltrame, un gendarme décédé lors d'une attaque terroriste en 2018, est présenté comme un héros moderne, qui montre l'esprit de sacrifice et le dévouement à la protection des citoyens.

Marine Le Pen, de son côté, utilise l'histoire et la culture françaises pour renforcer son discours nationaliste et identitaire. Elle fait référence à des figures historiques pour illustrer ce qu'elle dit, notamment en parlant du général de Gaulle comme un exemple de résistance nationale et de défense de l'indépendance de la France. Elle oppose cette vision aux élites, qu'elle accuse de vouloir affaiblir la souveraineté du pays au profit de l'Europe, en affirmant que "les Français doivent rester maîtres de leur destin".

L'interaction avec l'auditoire dans le discours politique

Emmanuel Macron cherche à impliquer directement son public en posant des questions comme : "Est-ce que vous ressentez cette énergie ?" ou "Est-ce que vous êtes prêts à agir ensemble ?". Ces questions, souvent posées à des moments clés de ses discours, permettent non seulement de capter l'attention de l'auditoire, mais aussi de susciter une réaction émotionnelle. Elles renforcent l'idée que le public est un acteur important dans la réalisation des projets dont il parle. Par exemple, quand il demande : "Est-ce que vous êtes prêts à bâtir une France forte dans une Europe qui protège ?", il mobilise une vision collective en associant l'engagement de chacun à un objectif national.

En racontant des histoires de personnes ordinaires, comme des enseignants ou des soignants, Macron rend ses propos plus humains et crée un lien émotionnel avec différents groupes de personnes. Par exemple, il parle de "cette infirmière qui n'a pas compté ses heures pendant la crise sanitaire" ou de "cet agriculteur qui continue à croire en la terre malgré les défis climatiques". Ces exemples concrets donnent vie aux problèmes abordés dans son discours, en établissant une connexion entre les expériences personnelles des citoyens et les solutions proposées par son programme. De plus, ces références renforcent l'impression qu'il est vraiment engagé et qu'il comprend les réalités vécues par des personnes de différentes catégories sociales.

Marine Le Pen, de son côté, s'adresse directement aux citoyens français, en insistant sur ses expériences personnelles et ses échanges avec eux. Pendant le débat

du 20 avril 2022, elle utilise des expressions comme "Je connais bien le peuple français" et "Je l'ai vu souffrir", en essayant de créer un lien émotionnel avec son public. Elle met en avant des histoires personnelles de Français rencontrés pendant sa campagne, ce qui l'aide à rendre son discours plus personnel et à susciter de l'empathie.

Conclusion

Dans le discours politique, l'émotion constitue un levier fondamental de persuasion. Emmanuel Macron et Marine Le Pen en usent consciemment, recourant à des procédés tels que l'anaphore, la métaphore et une rhétorique travaillée pour capter l'attention de l'électorat. L'analyse de leurs discours révèle des approches stylistiques différentes mais efficaces, reflétant leurs orientations politiques. Macron privilégie un ton optimiste, mobilisant des images de lumière, de mouvement et de progrès, ainsi que des références historiques valorisantes pour susciter l'espoir et la cohésion. Le Pen, quant à elle, adopte un discours plus combatif, opposant peuple et élites, et employant des métaphores de lutte pour défendre l'identité nationale. Leur style oratoire diffère également : Macron s'exprime avec énergie et ouverture, tandis que Le Pen adopte un ton plus posé et autoritaire. En somme, chacun utilise le langage comme un instrument stratégique d'influence, adapté à sa vision politique et à son public cible.

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PARTICULARITÉS DE LA VERBALISATION DE L'IMAGE DE L'UKRAINE DANS LA PRESSE FRANÇAISE

Dans le monde moderne, les médias sont l'un des outils les plus influents pour façonner l'opinion et la conscience publiques. La presse ne se contente pas d'informer, elle façonne également la perception de certains pays, événements ou phénomènes par le grand public. L'image de l'Ukraine dans l'espace médiatique français est intéressante en raison de la situation géopolitique difficile de ces dernières années et de la participation active de la France au soutien matériel et politique de l'Ukraine. Par conséquent, la verbalisation de l'image de l'Ukraine dans la presse française reflète largement l'attitude de la société française à l'égard de l'Ukraine, ainsi que les problèmes et les défis du peuple ukrainien.

La question de la verbalisation de l'image de l'Ukraine a déjà été examinée par des universitaires. En particulier, V. Lazarenko analyse les caractéristiques stylistiques de l'image médiatique de l'Ukraine dans la presse occidentale, soulignant la tendance à héroïser et en même temps à victimiser le peuple ukrainien. Dans sa recherche, O. Kondratenko souligne le changement de ton des médias français à l'égard de l'Ukraine après 2014 - de neutre et descriptif à chargé d'émotion.

Dans son article « Notre monde vu de Kiev », publié dans Le Monde, le chercheur français Jean-Pierre Page souligne le rôle du contexte historique dans la formation de l'image moderne de l'Ukraine dans le domaine de l'information en France. Les conclusions de ces études montrent une évolution progressive du discours - d'une image périphérique et secondaire de l'Ukraine à un objet médiatique central au vocabulaire émotionnellement coloré.

Dans notre analyse, nous avons examiné des articles des journaux français Le Monde, Libération, Le Figaro et Courrier International publiés en 2022-2025. Lorsque nous avons étudié ces documents, nous avons accordé une attention maximale aux adjectifs et aux adverbes car ces parties du discours ont la plus grande coloration émotionnelle, ce qui montre l'attitude directe de l'auteur à l'égard de l'image de l'Ukraine qu'il transmet à ses lecteurs, ce qui crée une opinion publique générale sur

certaines situations. En conclusion, nous avons identifié trois points clés qui reflètent clairement les récits généraux des auteurs français:

L'Ukraine victime d'une agression. Souvent, les articles sont dominés par des lexèmes dénotant la douleur, la souffrance et la lutte du peuple ukrainien, dont la société française se soucie («martyrisée», «résistante», «courage du peuple ukrainien»).

L'Ukraine, sujet d'une résistance héroïque: des métaphores militaires complimentées sont utilisées pour montrer le côté du conflit pris par le peuple français et l'attitude envers l'Ukraine en tant que « héros » plutôt qu'agresseur («bouclier de l'Europe», «armée invincible», «volonté indomptable»).

Ukraine européenne: l'accent mis sur l'intégrité avec l'Occident et l'Union européenne, qui a également été exprimé à plusieurs reprises par les représentants politiques officiels français («valeurs démocratiques», «aspiration européenne», «solidarité avec Kyiv»).

Pour résumer les détails trouvés, le discours français se caractérise par l'hybridité et la dualité de l'image: L'Ukraine est présentée simultanément comme un État victime et comme un symbole d'invincibilité. Ce récit est verbalisé par des constructions autonymiques et des épithètes à connotation émotionnelle. Dans la rhétorique des titres, l'inversion syntaxique est souvent utilisée pour renforcer l'expressivité, ce qui accroît l'intérêt des Français pour les problèmes de l'Ukraine, augmente leur loyauté et rapproche moralement l'Ukraine de l'Union européenne et du monde occidental («Une Ukraine debout sous les bombes», «Kiev ne cède rien»).

Les ressources médiatiques françaises verbalisent l'Ukraine comme un allié important, comme un pays injustement traité et comme un pays qui a besoin d'aide malgré son héroïsme. Un élément important de cette politique est de ne pas être vain. Aujourd'hui, la France est l'un des alliés les plus proches et les plus influents de l'Ukraine, prête à défendre nos intérêts non seulement contre l'agresseur, mais aussi contre les politiques injustes du dirigeant américain.

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VOCABULAIRE ÉTRANGER EN FRANÇAIS MODERNE

Comme toutes les langues du monde, le français a été influencé par d'autres cultures linguistiques, ce qui a conduit à son enrichissement lexical. On sait que la langue française a commencé à emprunter du vocabulaire étranger au latin au IXe siècle, et ce processus ne s'arrête pas aujourd'hui. Tout au long de son histoire, la langue française a emprunté des milliers de mots à d'autres langues : latin (avarice, charité, méditation, nature, passion), arabe (algèbre, chiffre, azimut), italien (appartement, cabine, capuchon), allemand (nouilles, valse, zigzag), anglais (comité, budget, session, club, shopping, pull-over), ukrainien (tzar, steppe)[1].

En général, environ 13 à 14 % du vocabulaire du français moderne est d'origine étrangère, soit environ 8 600 mots sur 60 000 utilisés dans le langage courant. Les langues donneuses de ces emprunts sont les suivantes : anglais, italien, arabe, espagnol, allemand, persan et sanskrit, langues slaves. art et cuisine, les anglicismes sont statistiquement les plus courants en politique, en économie, en finance, en droit et dans le sport [1]. Les articles des magazines *L'Officiel* et *Le Parisien* consacrés à des sujets militaires ou politiques utilisent souvent des mots étrangers (principalement des anglicismes) adaptés au système linguistique français. L'exemple de l'article *«Ukraine: les chemins de fer visés par une cyberattaque d'ampleur «à plusieurs niveaux»*» du magazine *Le Parisien* illustre ce processus: «Dimanche, la compagnie a fait état d'une panne massive de ses serveurs avant de déclarer lundi que celle-ci était due à une cyberattaque». Les systèmes en ligne d'Ukrzaliznytsia ont subi une cyberattaque ciblée de grande ampleur», a indiqué le groupe dans un communiqué, ajoutant qu'elle collaborait avec le «département cyber» des services de sécurité ukrainiens (SBU) pour trouver une solution» [3]. Le mot «cyberattaque» est un exemple d'anglicisme. Le préfixe «cyber» vient de l'anglais «cybernetics» ou «cyberspace» associé au français «attaque». Il est pleinement intégré à la langue française, notamment dans des contextes techniques et militaires, mais est sans aucun doute d'origine anglaise. «Cyber» est l'abréviation de «cybersécurité» ou «cyberdéfense», tirée directement de l'anglais. Le français peut utiliser «service de cybersécurité», mais «département cyber» imite le nom anglais du département (par exemple «cyber department»), ce qui démontre l'impact mondial du jargon technique. Le dernier exemple est le mot «serviteurs», qui appartient en partie à des anglicismes. Il vient de l'anglais «server» (c'est-à-dire de «serve»), mais a été francisé dans l'orthographe et la prononciation.

Ces exemples témoignent de l'influence active de la langue anglaise sur le vocabulaire français moderne et de son intégration ultérieure dans la norme linguistique.

En apprenant le français, en lisant des textes ou en regardant des films, on peut tomber sur beaucoup de vocabulaire sans même se rendre compte qu'il a été emprunté à une autre langue. Par exemple, le mot «chocolat» a été emprunté à la langue nationale des Mayas d'Amérique centrale. De l'italien, la langue française a pris le mot «pizza», et du grec - «démocratie». Si l'on prend en compte le français moderne, les exemples les plus courants d'utilisation de mots étrangers sont : l'utilisation du mot «café», qui vient de la langue arabe «qahwa» ; le mot «chèque», qui trouve ses racines dans le latin écrit, mais qui a été emprunté à la langue anglaise; le mot «cinéma», qui vient de l'anglais «cinema», mais le concept lui-même est d'origine grecque - «kinēma», qui signifie «mouvement»; Le mot «bureau», qui vient du grec «býros», qui signifie «table». Ce mot est entré dans la langue française par le latin et est ensuite devenu couramment utilisé pour désigner un lieu de travail ou un bureau. Grâce à l'exemple, on peut conclure que tous les mots étrangers subissent une certaine transformation avant d'être empruntés [2].

Les mots étrangers passent par un processus d'adaptation, modifiant leur structure phonétique, morphologique et sémantique conformément aux normes de la langue française. Au cours de ce processus, ils peuvent perdre ou changer certains sons, acquérir de nouveaux suffixes ou terminaisons, et changer de sens en fonction du contexte. Par exemple, le mot espagnol *el ordenador* est devenu *l'ordinateur* en français, démontrant l'adaptation phonétique et le changement d'article conformément aux règles de la langue française. I. Arnold a proposé de classer les emprunts en fonction de leur assimilation. Ainsi, trois groupes sont distingués :

1. Les tokens entièrement assimilés représentent environ 20 % de tous les emprunts. Exemple de mots : partenariat, partenaire, compétitivité, ciné, gène, électricité. La plupart des emprunts sont des anglicismes, qui ont été assimilés dans tous les systèmes de la langue.

2. Les lexèmes empruntés partiellement assimilés constituent le groupe le plus nombreux, qui comprend un peu plus de la moitié de tous les mots empruntés. Ce groupe comprend les emprunts qui n'ont pas été assimilés : phonétiquement, graphiquement, lexicalement, grammaticalement. Exemples de mots : yacht, timing, blizzard, bonus, métro, caméra, médias, mass media, gentleman.

3. Les emprunts non assimilés, qui ont conservé leur aspect phonétique, graphique, lexical et grammatical, représentent environ 25 %. Ce groupe comprend : les linguistismes étrangers (eye-liner, coca-cola, flash-back, dandy, tweet) et les barbarismes (software, hardware, coaching, new-look) [1].

L'utilisation et l'emprunt plus fréquents de nouveaux mots étrangers sont associés au développement rapide et complet de la société. Les principaux facteurs qui obligent la société à utiliser des mots étrangers sont les technologies de l'information, les médias de masse, la musique, le cinéma. Par exemple : WiFi - en français, ce mot est adapté comme «le WiFi» ou «la connexion WiFi». Bien que «WiFi» soit une abréviation anglaise (Wireless Fidelity). Selfie — adapté en «un selfie». (Ils ont pris

un selfie devant la Tour Eiffel.). L'anglais a également un impact significatif, qui est devenu une langue internationale et s'est intégré à d'autres langues. Un exemple frappant de l'utilisation de mots étrangers, en particulier d'anglicismes aujourd'hui, sont les adolescents. Ils sont des utilisateurs actifs d'Internet, où ils créent des dictionnaires d'argot et de jargon, en utilisant des mots d'origine étrangère. Par exemple : le toubib – docteur, boom – vacances étudiantes annuelles, il est looke – il a l'air à la mode, speeder – se dépêcher, top – à la mode, flipper – c'est flippant (creepy), être cool – être calme, driver – chauffeur de taxi (taxi driver), kids – enfants (children) [2].

Par conséquent, l'emprunt de mots étrangers est un processus naturel et intégral de l'évolution de la langue française, qui se poursuit depuis des siècles et reflète sa capacité à s'adapter aux changements de la société, de la technologie et de la culture. Des termes latins du Moyen Âge aux anglicismes modernes, le français fait preuve de souplesse et d'ouverture aux influences extérieures. Ce processus montre que le langage ne s'immobilise pas : il absorbe de nouveaux éléments, les adapte à ses normes et conserve ainsi sa pertinence, devenant ainsi un miroir de l'échange culturel et du progrès humain.

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ANALYSE DES PARTICULARITÉS DE L'ARGOT DANS LES ŒUVRES D'INTERPRÈTES FRANCOPHONES CONTEMPORAINS

L'argot est un sous-système linguistique presque ouvert composé d'unités lexicales et phraséologiques non normatives, stylistiquement réduites, qui remplissent des fonctions expressives, évaluatives (généralement négatives) et d'euphémisme. Il s'agit de l'environnement linguistique de la communication orale d'un grand nombre de

personnes, qui diffère de la norme linguistique. L'argot a tendance à emprunter des unités de l'argot et du jargon, en définissant et en élargissant métaphoriquement leur signification.

L'argot est apparu historiquement dans divers groupes sociaux fermés (commerçants, artisans, prisonniers, étudiants en bursak, soldats et communautés en ligne) en tant que vocabulaire émotionnellement coloré d'un style bas et familial. L'argot est un vocabulaire informel, vivant et extrêmement dynamique.

Dans l'ensemble, l'argot présente différentes typologies en fonction de son utilisateur (jeunes, personnes de certaines professions) et du rôle qu'il joue dans le discours (expression émotionnelle, euphémisme ou code). Cette étude se concentre sur la fonction de l'argot, en particulier sur son rôle émotionnel et expressif et sur l'utilisation de l'argot des jeunes dans les chansons.

Aujourd'hui, l'argot est un moyen de se familiariser avec les tendances sociales contemporaines. En l'utilisant, les chansons deviennent vivantes et soutiennent le développement de la langue.

L'objectif de l'étude est d'analyser les particularités de l'argot dans les œuvres des musiciens francophones contemporains. L'intérêt de l'étude réside dans la détermination du rôle de l'argot dans la vie moderne, en particulier dans la chanson.

Les objets de l'étude sont les chansons d'artistes francophones célèbres tels que Stromae, Aya Nakamura et PNL, dont les paroles ont été analysées en fonction des fonctions de l'argot dans la langue et la culture modernes :

1. L'argot permet aux paroles d'acquérir une couleur émotionnelle vive et de sonner de manière extrêmement naturelle.

2. L'utilisation créative et de qualité de l'argot crée un style original et unique pour l'interprète.

3. Lorsque les interprètes utilisent l'argot dans leurs chansons, ils soulignent leur identité et, bien sûr, leur appartenance à un groupe social ou culturel particulier.

4. L'argot aide les chansons à paraître modernes et les rend plus proches du jeune public.

Exemples d'utilisation de l'argot dans les œuvres d'artistes francophones :

Aya Nakamura : La chanteuse se distingue par ses combinaisons particulières de différents argots : africain, arabe et français. Ces techniques enrichissent et décorent grandement les textes, sans pour autant compliquer la perception des chansons. De plus, l'utilisation de mots issus de la culture des jeunes (djéjé - (argent)) est obligatoire dans les chansons de la chanteuse.

Stromae : Les œuvres de cet artiste contemporain francophone présentent une combinaison unique et très réussie d'argot et de style formel, qui rapproche l'interprète et le public. L'auteur utilise diverses abréviations (« t'es » au lieu de « tu es »), des changements grammaticaux (en utilisant « nous » au lieu de « on », en omettant la particule « ne » dans les négations), ce qui est une caractéristique phonétique de l'argot. Lorsqu'elle est utilisée, elle simplifie ou raccourcit des expressions ou des constructions familières et correctes.

PNL : Le duo se distingue par l'utilisation particulière d'accents et d'intonations appropriés, qui peuvent immédiatement indiquer un groupe social spécifique (« J'suis dans l'binks... », où « Binks » est un mot argotique pour désigner un quartier).

Conclusions : L'argot est un aspect très important de la culture de toute langue, y compris du français. Il remplit des fonctions extrêmement importantes qui influencent le développement de la langue et l'amélioration des compétences linguistiques, tout en aidant les interprètes musicaux à mettre en valeur leurs caractéristiques individuelles. Comme l'a montré l'étude, les musiciens tentent souvent de souligner leur proximité avec le jeune public en utilisant certaines expressions argotiques. Il est également très courant que les interprètes essaient de montrer qu'ils appartiennent à certains groupes sociaux afin de trouver des auditeurs parmi les personnes qui sont plus proches d'eux.

On peut clairement conclure que l'argot est un outil puissant pour les interprètes de musique, car il leur permet d'élargir leur public et d'acquérir une meilleure compréhension de la langue.

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GENDER DIFFERENCE IN THE INFORMATION DELIVERY STYLE OF SCHOLARLY WORKS

Gender difference is a distinction between male and female representatives in all aspects of human life. It has been studied since the Aristotel Era. Gender differences are found in multiple sciences.

Frequently the works that examined gender in writing didn't possess a strong theoretical basis. Research papers on women's spoken language, for example, identify a cluster of stylistic features that are stereotypically associated with women's speech [3]. The features are qualifiers, hedges, intensifiers, tag questions, extremely polite language and other devices that may blunt the force of firm statements. However it was stated that women naturally have more verbal aptitude than men due to male's nature of being less socialized [5]. So, the clear difference remains doubtful.

To Donald Rubin and Kathryn Greene [5], women's oral speech is weaker than a men's one. In their research, the term 'powerless language' is included, with a left note that it is mainly common for women. However it is said to show the opposite results in the written language.

In her book, Deborah Tannen defined that men are involved more in 'report talk', focusing on the exchange of information, while women mainly revolve about 'rapport talk', attempting to find social bonds [6]. Biber and Burges supplemented the point with a suggestion that females use 'involved' style and males - 'informative' style [2].

Jozefien Piersoul and Freek Van de Velde have drawn the light onto male writing performance characteristics, providing that men have a tendency to use references more often to quantities and locations. They also tend to use more prepositional phrases, and more articles [7].

A comparative analysis upon the representatives of both genders has been provided. "Gender Gap in Natural Language Processing Research: Disparities in Authorship and Citations" by Saif M. Mohammad (2020) was taken as an example of a research conducted by a male representative [4]. This study dwells on gender disparities in NLP research, concluding that women make up only 29% of first authors and 25% of last authors. It is stated that female first authors get fewer citations, even when accounting for experience and research area. Mohammad fixes on a quantitative analysis to assess authorship and citations. The study does not regard any linguistic characteristics.

The research written by female representatives "Do They Write Differently? Exploring Gendered Linguistic Differences in Academic Writings of Saudi Writers" by Sadia Ali and Ebtesam Abdulhaleem (2024) [1] investigates linguistic differences between male and female academic writing. The authors use multidimensional analysis to explore the lexical and grammatical choice of genders. Findings provide that male writers tend to use more informational and non-argumentative language, while female writers use more narrative and descriptive language. As to the methodology, Ali and Abdulhaleem conduct a corpus-based analysis of research papers half of which are written by males and another half are by females, to analyze linguistic features and find a difference.

Altogether it brings a conclusion that male scholars often engage in quantitative studies, while female scholars may utilize discourse-based approaches.

Regarding the lexis choice, the male author uses general technical terminology related to authorship and citation analysis (e.g., "demographic analysis," "citation disparities"). The author also maintains an objective tone and avoids interpretative language. As opposed to that, the female authors use more narrow-field linguistic and

discourse analysis terminology (e.g., "lexico-grammatical features," "narrative discourse"). Their papers also involve more descriptive language, with adjectives and hedging expressions (e.g., "noticeable differences suggest...").

To refer to the grammar, the male author has a frequent use of passive voice (e.g., "This percentage has not improved since the mid-2000s"), making the writing more formal and impersonal. The paper of the author also includes complex sentence structures to present detailed findings. The female scholars include active voice sentences, making them more direct (e.g., "The findings suggest that male research writers use more explicit language"). The author also tends to use hedging expressions (e.g., "suggest," "indicate," "may") that create a more interpretative tone.

To draw a conclusion, the two studies largely differ regarding the lexical and grammatical choices. It lightens their goals and methodology. After the analysis, it was found that gender directly influences linguistic and stylistic choices in academic works. Male authors tend to use quantitative approaches with technical terminology as mainly preferred. They also were noticed to omit the usage of personal references and direct questions to keep an objective tone throughout their academic work. On the contrary, female authors prefer qualitative methodologies with their work maintaining rather descriptive language, active voice and hedging expressions to give a nuanced view. These conclusions pave the gist, and it is that men deliver statistical and factual works, while women go for interpretative and reader-oriented ones. Both gender representatives end up with eminent and profound discourse.

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REMOTE WORK IN THE FIELD OF INFORMATION TECHNOLOGY: CHALLENGES FOR PSYCHOLOGICAL WELL-BEING

The transition to remote work has become a massive phenomenon in the software industry, opening up new opportunities and at the same time creating a number of challenges for the psychological well-being of professionals. The lack of a clear distinction between professional and personal spheres, increased cognitive load, social isolation, and lack of physical activity are just some of the problems faced by programmers, testers, DevOps engineers, and other IT professionals. The thesis discusses the main psychological risks of remote work, their consequences, and ways to overcome them to preserve the mental health of IT professionals.

In today's reality, remote work has become a standard in many software development companies. A large number of IT companies, such as Google, Microsoft, Amazon, and startups, have fully or partially switched to a remote work model. On the one hand, this gives specialists the opportunity to have a flexible schedule, save travel time, and enjoy working from home. On the other hand, such work is accompanied by a number of challenges that can negatively affect psychological well-being.

One of the main challenges is social isolation. Working in an office facilitates informal communication, exchange of experience, and quick resolution of work issues. In a remote format, these opportunities are significantly limited. For example, programmers at GitLab, a company that works entirely remotely, often report feeling lonely and lacking in face-to-face communication. The loss of informal meetings around the coffee machine, team discussions in the corridors, or at lunch can lead to a decrease in employee engagement and a deterioration in their psycho-emotional state. Another factor is the blurring of boundaries between work and personal life. The absence of a clear schedule means that employees are constantly in work mode, which leads to overwork and emotional exhaustion. For example, a study conducted by Buffer in 2022 showed that 27% of remote workers have difficulty disconnecting from work at the end of the day.

High cognitive load is another challenge faced by software development professionals. Constant concentration on complex technical tasks, large amounts of information to be processed, and the need to work with code can lead to “cognitive burnout”. Lack of physical activity is another factor that affects psychological health. Remote work often means a sedentary lifestyle: employees can spend 8-10 hours in front of a screen without breaks for physical activity. This leads to posture problems, sleep disturbances, and decreased energy levels.

To prevent these challenges, there are effective strategies developed within the framework of the Kristina Maslach model. The main ones are:

- optimization of the workload - setting clear boundaries for the working day, limiting overtime, and taking rest breaks;

- support from colleagues and management - organizing regular online meetings, creating platforms for informal communication, such as Slack channels for discussions;

- professional development - participation in trainings, webinars, and exchange of experience helps to maintain motivation and avoid stagnation;

- dealing with stress - mindfulness practice, meditation, time management techniques (Pomodoro method, GTD) help reduce anxiety and improve concentration.

An important role in the study of the mental health of professionals is played by the work of I. Varnavska, who analyzes the factors of stress resistance and adaptability in professional activities, in particular in conditions of increased cognitive load. The author emphasizes the importance of building stress tolerance as one of the key factors in maintaining the psycho-emotional state of professionals working in the dynamic and rapidly changing conditions of the IT sector.

Thus, remote work in software has both advantages and significant psychological challenges. Implementing effective stress management strategies, optimizing workflow, and maintaining social connections will help IT professionals maintain mental health and high productivity.

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DEVELOPING CRITICAL THINKING SKILLS IN EFL THROUGH AUTHENTIC MATERIALS

Living in the 21st century means we have to deal with loads of information, where it can be hard to separate facts from misinformation. To succeed in all spheres of life, young people need to develop critical thinking skills, which are essential for making informed decisions. These skills need to be practiced and improved throughout their lives. One way to help learners build these skills is by using authentic materials in English as a Foreign Language (EFL) lessons by bringing real-world content into

the classroom. Teachers can create activities that not only help students improve their English but also teach them how to think critically—something they can use in all areas of life.

Authentic materials, like newspapers, magazines, brochures, and advertisements, connect what students learn in class to real-life situations. These materials show learners how English is used in everyday contexts and introduce them to different cultural aspects. Lessons based on authentic materials are often more interesting for students because they feel more connected to the real world. Critical thinking tasks encourage students to think deeply about what they're reading while also improving their language skills.

This paper will explore how using authentic materials in EFL classrooms can help students develop critical thinking skills. It will look at the benefits of these materials, such as increasing student motivation and participation, as well as encouraging higher-level thinking. This study aims to show how authentic materials can play a key role in helping students become better thinkers who are ready to face the challenges of today's complex world.

The ability to analyse information, compare it and highlight the truth is part of critical thinking. Elder and Paul consider that it is the ability to *take charge of one's own thinking* and identify criteria and standards for analysing it. Moreover, they develop framework of critical thinking which is called the Paul-Elder framework. It contains such points as analysis of thinking, evaluation of thinking and improvement of thinking.[1]

Thornbury defines authentic materials as resources *created for real-world communication rather than pedagogical purposes*, such as menus, advertisements, or news articles. Unlike traditional textbooks that explicitly teach grammar or vocabulary, these materials put learners in unmodified linguistic contexts. Their primary aim is to replicate the natural English-speaking environment, encouraging learners to analyse cultural nuances, infer meaning, and develop problem-solving strategies used by native speakers. [2, p.21]

Why is critical thinking important? The answer is simple, those who can think critically are able to understand themselves better than others and have fewer chances of being influenced by manipulation. Among wide range of advantages can be also highlighted such as: creative approach to problem-solving; distinguish the truth among lies; better decision-making. Nowadays people are surrounded by various sources of information. Some contains the truth and others try to manipulate. So, teachers should develop students' critical thinking to help them successfully exist in modern world.

Authentic materials have benefits for developing practical skills as well as for motivation. Such materials can be exposed to learners during speaking, grammar or reading lessons. Including learning materials from native speaking environment has a positive effect on oral language development (learners hear how native speakers speak and see the way they pronounce every word); reading skills and learning new words (authentic materials represent context of the word as well as the way it can be used in real world); writing proficiency (the more they absorb the information the more they develop skills to use it in different forms). [3]

But it is equally important that they boost students' motivation. No one will argue that when you understand native speakers in your L2 it increases your motivation. So, it is a great decision to involve these learning materials as early as possible in order to draw students' attention to learning. As a result, when students have motivation, they avoid just memorizing tasks or do something only for a higher mark. While you are interested in learning you analyze the information, estimate it and decide whether it is true or not. These actions mean that you develop critical thinking for small task and then will use it in every day life.[5]

However, not every piece of news, article or video is appropriate for classroom studying. There are three different categories of authentic materials, peculiarities in how to choose it and present. The first authentic listening materials (they include TV news, films or their parts, songs etc.) are everything you can use to improve listening skills. Second, authentic visual materials (pictures, traffic signs etc.) are good to introduce the word with a picture that explains the meaning. Last, authentic printed materials (for example, magazines, menu, tickets etc.) are perfect for analyzing reading tasks, comparative tasks and so on. [6]

When we know what kind of learning materials can be taken from native environment, we should be able to choose the right materials. While looking for it, we should consider the following questions: What is language proficiency level of students? What grammar, functional language or vocabulary do we want to teach? What topics are interesting to students? Apart from these more general questions, we should pay attention to other features. Texts must be challenging enough for students to encourage them instead of stopping. When some authentic materials are chosen, it is time to think about a range of tasks that can be created for it.

What is important to consider is the way we present these materials. Critical thinking can be boosted when students are attracted by the presentation. A teacher shouldn't use pure text, it decreases not only motivation and desire to do something, but number of tasks students can do. If authentic material doesn't have pictures, diagrams or eye-catching titles, you should create it. It is crucial since pictures can be used as a lead-in. When a picture relates to the text, a teacher might ask students to think about the idea of a text. Tasks like this one not only activate students' schemata but make them think critically and analyze the piece of information they have. [7,8]

For example, the activity 'Think Pair Share' helps students come up with their own questions based on the text. Make pairs or groups in the class and ask the students to discuss the questions together. This activity drives student engagement and supports higher-order thinking skills among students. [9]

The paper draws attention to the benefits of authentic materials in enhancing student motivation, engagement, and higher-order thinking. Tasks like predicting headlines and analyzing content allow learners to practice critical thinking while improving their language skills. Drawing on frameworks such as Elder and Paul's model of critical thinking, the study emphasizes how these resources can help teachers promote problem-solving strategies. Effective presentation techniques, such as incorporating visuals or interactive tasks, are shown to boost motivation and activate students' critical thinking processes.

By integrating authentic materials into EFL lessons, teachers can help students develop skills that are not only essential for language learning but also applicable to everyday life challenges in a complex information-driven world.

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EXPLORING BENEFITS OF USING DIGITAL FLASHCARDS IN EFL CLASSROOM

This paper examines the effectiveness of digital flashcard applications in developing essential language skills in English as a Foreign Language (EFL) contexts. While traditional flashcards have long been recognized as effective learning aids for drill and practice [3, p.142], their digital versions can be more helpful because of multimedia integration and real-time progress tracking. This research investigates how platforms such as Anki, Quizlet, and Brainscape contribute to vocabulary learning.

In today's digitally influenced language classroom, language teachers must continuously evaluate and adapt methodological approaches to meet evolving pedagogical demands. Digital flashcard applications represent a technological

evolution of a time-tested learning methodology. These platforms have outgrown the limitations of traditional paper flashcards by incorporating multimedia elements, adaptive algorithms, and collaborative features that enhance their effectiveness across diverse learning contexts.

The present study explores how these digital tools can be purposefully integrated into EFL instruction to support not only language acquisition but also broader cognitive skill development.

Flashcards are used to help in memorisation and the retention of factual knowledge. They are distinguished by their simplicity. They consist of a prompt on one side and a matching answer or definition on the other. They work particularly well in areas like vocabulary acquisition, that need rote learning, whether they are presented physically or as part of online learning environments. [4]

Fashcards' instructional usefulness lies in active recall, a cognitive process that includes recovering information from memory. It has been demonstrated to improve long-term retention more effectively than passive review. When paired with spaced repetition—a technique that arranges study sessions at progressively longer intervals to counteract memory loss—this practice is much more effective. This strategy is demonstrated by the Leitner system, which arranges cards according to the learner's level of familiarity with the subject matter to guarantee that challenging topic is covered more frequently. [1, p.75]

The use of flashcards has grown beyond the usual paper format as technology has advanced. Digital programs like Anki, Quizlet, and Brainscape can be customised and used for interactive learning experience.

In addition to individual study, flashcards are also used as interactive and collaborative classroom activities. Teachers use them for quick assessments, group competitions, making learning more dynamic and fun.

Research has shown better results when flashcards are combined with spaced repetition techniques. In Leitner system, cards that are answered incorrectly are cycled back for more frequent review, while those answered correctly progress to less frequent sessions. This adaptive scheduling has been validated by studies that show improved long-term retention when such methods are applied. [5]

The evolution from traditional paper flashcards to digital has significantly expanded their utility. Platforms like Quizlet, Brainscape, and Anki can include multimedia resources—images, audio, and video—to create a richer and more engaging learning experience. These tools can change review frequencies based on individual performance information. For example, Quizlet permits learners to self-assess their confidence in an answer, so that cards which demand greater effort for recall are reviewed more frequently. Such digital innovations reinforce active recall and spaced repetition as well as provide valuable feedback. This makes learning a more personalized and efficient process. [6]

In classroom environments, flashcards can be used for collaborative learning and interactive teaching. They can be used for oral quizzes, establishing group contests, and even run student-led review sessions. Such practices help break complex or abstract topics into smaller, digestible components, making them more accessible. For

instance, Literacy Minnesota provides practical suggestions for using flashcards in group activities, which help foster an atmosphere of cooperative learning and make abstract ideas easier to grasp. [7]

By engaging in self-testing, students become more aware of their strengths and weaknesses, and focus on areas that need additional practice. This self-assessment process is crucial for developing efficient study habits and be more autonomous. [2, p.142]

In summary, the success of flashcards as a learning tool lies in their simplicity, versatility, and strong grounding in cognitive science. Whether paper or digital, flashcards use the power of active recall and spaced repetition to improve both short-term and long-term memorization. The fact that hey can be tailored to individual learning needs, both independent and collaborative learning, makes them exttremely useful in EFL classrooms to achieve optimal learning outcomes.

Despite promising results there can be some technical barriers for students with limited digital literacy.

For EFL teachers, these findings suggest several practical implications:

- Student-generated content maximizes cognitive engagement and personalization
- Collaborative activities built around digital flashcard sets extend learning beyond individual memorization
- Explicit training in metacognitive strategies maximizes the educational value of these applications

Digital flashcard applications represent powerful methodological tools for developing both language proficiency and broader cognitive skills in EFL contexts. Their effectiveness stems from the integration of established learning principles—active recall and spaced repetition — with technological enhancements that personalize and enrich the learning experience.

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CRYPTOCURRENCY AS MOTIVATION IN LEARNING ENGLISH

The Use of Cryptocurrency as a Motivational Tool in English Language Learning: Integrating Financial Innovation into Educational Technol. In an era characterized by rapid digital transformation, the pursuit of effective motivational strategies within education is more crucial than ever. One particularly promising approach involves leveraging based on the contemporary perception of cryptocurrency not only as a financial innovation but also as a tool for achieving personal goals and enhancing social engagement.

Integrating crypto-based rewards into English language learning applications offers learners tangible outcomes for their efforts. Each completed task or module results in the accumulation of tokens, which users can exchange for fiat currency or redeem for various benefits. This structure enhances the perceived value of the learning process by aligning educational achievement with financial reward.

The proposed model offers several key advantages:

1. **Clear Visualization of Progress**: Learning becomes measurable through statistical tracking of improvements in grammar, vocabulary, listening comprehension, and speaking. The token-based system eliminates the sense of wasted time by converting educational progress into quantifiable financial gains, thereby encouraging sustained engagement.
2. **Social Engagement**: Incorporating collaborative and competitive features—such as group challenges, leaderboards, and shared accomplishments—cultivates a sense of community. This social dynamic reinforces motivation through both individual and collective performance incentives.
3. **Integration of Modern Technology**: The use of React Native, specifically through the Expo.js platform, enables the development of cross-platform mobile applications for iOS and Android with minimal overhead. Complementary use of React for web applications and Electron.js for desktop platforms ensures broad accessibility and user reach.
4. **Consistent Technological Stack**: The adoption of JavaScript/TypeScript across all layers of the application architecture promotes seamless communication between system components, thereby optimizing developer efficiency and reducing complexity in ongoing development and maintenance.
5. **Block chain Infrastructure**: The Solana block chain is particularly well suited for this application due to its high transaction throughput and efficient token management. The backend architecture built with Node.js and supported by frameworks such as Nest.js or Next.js, offers the scalability and robustness required for handling growing user demand.

This framework represents a synthesis of gamified learning and digital finance, providing learners not only with linguistic proficiency but also with a foundational

understanding of emerging financial technologies. Such exposure is especially valuable in a knowledge-based economy, where technological literacy is a key competitive advantage.

In conclusion, the incorporation of cryptocurrency as a motivational component in English language learning exemplifies a forward-looking approach aligned with the evolving demands of contemporary society. This model promotes measurable educational outcomes while fostering familiarity with block chain-based systems. By building upon a robust technical foundation—encompassing React Native, Expo.js, Solana, Node.js, and modern web frameworks—the initiative offers a scalable and engaging learning environment that empowers users to advance their language skills while gaining insight into the digital financial ecosystem.

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CANADIAN ENGLISH AS A LINGUISTIC BRIDGE BETWEEN BRITISH AND AMERICAN ENGLISH

Canadian English occupies a special place in the language world. Of course, it's like British and American English in many respects, but it's also different, having been shaped by history, culture and just plain facts of sharing a border with the United States.

Instead of being some sort of ideal blend of the two, it is actually a thing in itself - shaped by a blend of traditions, but moving in its own direction. [1]

Canada's colonial past has left a lasting influence on its language. British colonizers brought their English, and then there was an influx of loyalists from the United States during the American Revolution to bring some American presence. Trade, popular culture, and just general life eventually reinforced American language habits. This dual heritage has resulted in a hybrid linguistic identity that borrows aspects of both dialects but develops distinctive features that make Canadian English stand out from its peers. [1,2]

Perhaps the most glaring evidence of this linguistic hybridization is the spelling conventions employed by Canadian English. It retains British spellings such as "colour" instead of "color," "centre" instead of "center," and "theatre" instead of "theater," and adopts American forms such as "analyze" instead of "analyse" and "defense" instead of "defence." More than a coincidence, it is a tribute to Canada's historical relationship with Britain, and to the mundane tug of the United States. Relative to British or American English, Canadian spelling is more of a balancing act than a collection of hard-and-fast rules. [1,3]

Linguistic choices are another intriguing mix. Some words are the same as British English, such as 'holiday' (as used in preference to 'vacation'), 'petrol' (as used in preference to 'gasoline') and 'post' (as used in preference to 'mail'). But Canadian English also contains some American vocabulary, with such words as 'truck' instead of 'lorry', 'apartment' instead of 'flat' and 'elevator' instead of 'lift'. Next come purely Canadian words, such as 'loonie' for a one-dollar coin or 'toque' for a winter cap. These are not curiosities, but rather point to the fact that Canadian English is not just a daughter of British or American English, but has its own cultural and linguistic identity. [3,4]

In terms of pronunciation, Canadian English is overwhelmingly North American with a mouth accent (i.e., they vocalize the 'r' in words at the end). And of course, there's the familiar Canadian accent, where words like 'about' and 'house' are used differently, with a higher vowel sound for those words than American or British English. Accents vary geographically throughout the country as well, such as in Newfoundland, where the locals have their own speech pattern, reflecting the country's diverse linguistic background. [5]

Canadian English continues to evolve against the backdrop of globalisation and digital communication. Both slang language and general usage are shaped strongly by American media, but policy on language and cultural action encourage the employment of Canadian English in schools and government departments so that Canada can sustain its linguistic identity.

Thus, Canadian English is a typical example of the way a language develops under multiple influences but becomes nationally unique. It will be interesting to watch how it comes to change as it adjusts to new influences and yet remains apart from other uses of English.

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CONTEMPORARY RESEARCH IN THE FIELD OF HUMANITIES

Introduction

The aim of this study was to explore the contemporary trends and developments in the field of humanities and to analyze how these trends influence our understanding of the world. Humanities are a vital area of knowledge that helps us understand the complexities of human experience, culture, and society. Over the years, these disciplines have provided profound insights into how individuals, communities, and societies function, shaping the world in which we live.

In the modern era, characterized by rapid technological advancements, globalization, and shifting social dynamics, humanities research faces new challenges but also significant opportunities. As the world becomes more interconnected, the study of human culture, history, and identity continues to evolve, incorporating new methodologies, frameworks, and technologies. This paper examines some of the most pressing trends in contemporary humanities, with a particular focus on how interdisciplinary approaches, digital tools, and critical perspectives are reshaping the field.

The study seeks to provide a deeper understanding of the role of humanities in contemporary society. It will address the intersection of humanities with other academic disciplines and explore how these shifts are not only transforming academic research but also influencing social debates, cultural preservation, and global conversations about justice, identity, and equality.

Contemporary Trends in Humanities

1. Interdisciplinarity in Humanities

One of the most notable trends in contemporary humanities research is the growing emphasis on interdisciplinarity. Scholars are increasingly recognizing that the complexity of human experience cannot be fully understood through a single disciplinary lens. As a result, there is a significant push toward integrating methods and approaches from various fields such as history, sociology, anthropology, philosophy, and literature to address complex issues from multiple angles. This collaboration allows for a deeper and more comprehensive understanding of cultural and social phenomena, providing richer and more nuanced interpretations of key topics [2].

For instance, interdisciplinary approaches are becoming more common in the study of cultural expressions, where researchers may combine sociological methods with historical analysis or even psychological insights. This cross-pollination of ideas fosters creativity and offers new ways to analyze and interpret both contemporary and historical issues. By merging various disciplinary perspectives, researchers are able to approach questions of identity, power, and social dynamics in ways that might not have been possible if viewed solely through the lens of one discipline.

2. Digital Humanities: Revolutionizing Research

In the digital age, the advent of new technologies has dramatically transformed the way research in the humanities is conducted. Digital humanities refers to the use of computational tools and methods to study cultural artifacts, texts, and historical documents. These technologies provide innovative ways to analyze vast amounts of data, which would otherwise be impossible to process manually. Through digital tools, scholars are able to uncover patterns, trends, and insights that might otherwise remain hidden in large corpora of texts or historical records.

Digital humanities encompass a variety of methods, including text mining, digital archiving, data visualization, and the creation of online platforms for the dissemination of research. Scholars now have the ability to create interactive maps, digital libraries, and online exhibitions that not only preserve cultural heritage but also make it accessible to a broader audience. These digital archives offer unprecedented opportunities for scholars and the general public alike to engage with historical, literary, and cultural materials in dynamic ways [4].

Moreover, digital humanities have expanded the scope of research by providing access to global data and encouraging collaboration between scholars across borders. This field has become indispensable for those seeking to conduct large-scale research projects or explore cross-cultural comparisons.

3. Globalization and Intercultural Studies: A New Era of Understanding

Another significant trend in contemporary humanities research is the increasing focus on globalization and intercultural studies. Globalization, as a multifaceted process that connects societies around the world through economic, technological, and cultural exchanges, has sparked a renewed interest in understanding how cultures interact, blend, and sometimes clash. Researchers are exploring the impacts of globalization on local traditions, identities, and cultural practices, as well as the effects of cultural exchange on social values and norms.

Intercultural studies examine the ways in which different cultural groups coexist and influence one another, with a particular emphasis on the complexities of cultural integration and the challenges of maintaining cultural diversity in an interconnected world. Scholars in this field explore issues such as the migration of people, the spread of ideas and ideologies, and the role of media in shaping perceptions of other cultures.

Furthermore, intercultural studies are increasingly concerned with questions of power and representation, examining how dominant cultures shape the narratives around marginalized or minority groups. These studies are important for understanding the dynamics of cultural change and the ways in which cultural exchange can foster mutual understanding, or, conversely, lead to conflict [5].

4. Critical Studies: Challenging Established Norms

Critical studies, such as feminist theory, postcolonial studies, and queer theory, continue to be a central part of contemporary humanities research. These approaches challenge conventional narratives about history, politics, culture, and identity, offering fresh perspectives on the social structures and power dynamics that shape our world. Critical theories emphasize the need to examine the intersections of race, gender, class, and sexuality, questioning how these categories affect people's lived experiences.

Feminist theory, for example, critiques traditional views of gender roles and challenges the patriarchy's influence on culture, politics, and society. Postcolonial studies explore the lingering effects of colonialism on former colonies, highlighting issues of race, identity, and power in the aftermath of empire. Queer theory, meanwhile, seeks to deconstruct heteronormative ideas of gender and sexuality, advocating for more inclusive and diverse understandings of identity.

These critical perspectives continue to provide valuable tools for examining social inequality, injustice, and the structures that perpetuate discrimination. By questioning established norms and exploring alternative viewpoints, scholars in these fields contribute to a broader and more inclusive understanding of human society.

5. Memory and Trauma Studies: Understanding the Past to Heal the Future

Memory and trauma studies have gained increasing significance in recent decades, particularly in the context of post-conflict societies and historical injustices. This area of research focuses on how individuals and communities remember and process traumatic events, and how these memories shape collective identities and influence social relations in the present.

Scholars examine how societies deal with the legacies of violence, war, genocide, and other forms of collective trauma. They explore the role of memory in healing, reconciliation, and social reconstruction, asking how societies can come to terms with the past and move forward. Memory and trauma studies also investigate the role of historical memory in shaping national identities and political discourse [3].

This field has profound implications for addressing contemporary social issues, particularly in countries that have experienced conflict, authoritarian regimes, or historical oppression. By understanding how trauma is transmitted through generations, researchers can better advocate for policies that promote social healing and justice.

Impact on Society

Contemporary research in the humanities has a profound impact on society, as it provides insights into the complexities of human experience and offers critical perspectives on the challenges of the modern world. Some key contributions include:

1. **Promoting Social Understanding and Cultural Awareness**: Humanities research fosters a deeper understanding of cultural and social processes, shedding light on the ways in which societies function, evolve, and interact with one another.
2. **Addressing Social Injustice**: By examining issues of inequality and injustice, humanities research provides the tools to identify and challenge systemic problems, contributing to the promotion of social change and human rights.
3. **Fostering Critical Thinking and Dialogue**: Humanities encourage critical thinking by challenging assumptions and promoting dialogue across cultural, political, and intellectual boundaries. These disciplines foster intellectual openness and encourage meaningful discussions about important social and ethical issues.
4. **Preserving and Interpreting Cultural Heritage**: Humanities play a vital role in the preservation and interpretation of cultural heritage, ensuring that the stories, traditions, and knowledge of past generations are passed down to future ones [1].

Conclusion

Humanities continue to evolve, adapting to the challenges and opportunities presented by an ever-changing world. Contemporary research in the humanities is not only essential for understanding human history and culture but also for addressing some of the most pressing issues of our time, such as social inequality, global conflicts, and environmental crises. As the field grows and diversifies, it remains a powerful tool for fostering critical thinking, intercultural dialogue, and social justice.

By embracing new methodologies, such as interdisciplinary approaches, digital technologies, and critical theory, humanities research remains relevant and valuable in understanding the complexities of our globalized world. These disciplines will continue to shape the way we understand ourselves, each other, and the world around us.

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TRANSLATING ENGLISH IDIOMS INTO UKRAINIAN: CHALLENGES AND STRATEGIES

Idioms are an essential part of any language, enriching communication with imagery, expressiveness, and cultural nuance. They serve not only to embellish speech but also to encapsulate collective experiences, wisdom, and humor.

Idioms are stable expressions that can be phrases or even whole sentences. They also describe a person's character, emotion, action, attitude to any topic, etc. Their use enriches speech, shows the depth of the language itself. It is important to remember that phraseological units should be perceived as a whole, because the meaning may not coincide with the meaning of the words included in them [1, p. 5].

However, for Ukrainian learners of English, idioms often present a significant linguistic and cultural barrier. Translating idioms is not merely a matter of substituting words; it is a complex interpretive task that demands creativity, cultural insight, and linguistic precision. For instance, idioms featuring animal components often reflect cultural perceptions of those animals, which may differ between English and Ukrainian. For instance: 'let the cat out of the bag' (to reveal a secret) does not have a direct Ukrainian equivalent. A possible translation is 'випустити кота з мішка', but it may require additional context to convey the intended meaning effectively; 'hold your horses' (wait a moment) can be translated as 'притримай коней', which is quite close to the original, but the usage may differ culturally.

Even professional translators recognize that idioms are not exactly a piece of cake to render into another language. While some idioms may be relatively easy to handle, they are only a drop in the bucket compared to the vast number of expressions that pose serious difficulties due to their figurative meanings. Machine translation engines, which often rely on literal word-for-word processing, typically fail to convey the intended sense, leading to confusion or absurdity in the translated text.

Literal translation of idioms can result in several issues:

- Loss of meaning: when translated word-for-word, an idiom may become meaningless or misleading, thus failing to convey the original idea.

- Loss of imagery: idioms often rely on vivid metaphors or cultural references. A literal translation may strip away this imagery, weakening the phrase's emotional or rhetorical impact.
- Loss of usefulness: an inaccurately translated idiom may distort the meaning of the entire text, which confuses the reader and undermines communication.

Given these challenges, translators must adopt strategies that ensure idioms are interpreted and rendered effectively in the target language.

There are several methods used to translate English idioms into Ukrainian, each suited to different contexts and idiomatic structures.

1. Finding the equivalent

This method involves using an established Ukrainian idiom that shares both meaning and form with the English source. Such idioms often stem from shared cultural or literary traditions, such as classical mythology, historical texts, or the Bible (Augean stables – авгієві стайні, a labour of Sisyphus – сізіфова праця, to cross the Rubicon – перейти Рубікон, the golden calf – золотий телець).

This approach retains the idiom's original components and expressive power, assuming an equivalent exists in both languages.

2. Using a calque (loan translation)

In this strategy, the idiom is translated by preserving the original structure and meaning as closely as possible, even if some elements differ. While these translations might diverge slightly in imagery or syntax, they maintain the core metaphorical meaning (to make a long story short – сказати коротко, as pale as paper – блідий мов стіна, one's own flesh and bone – рідна кровинка, a voice in the wilderness – глас волаючого в пустелі).

This technique is particularly useful for idioms with partial overlap in meaning or cultural familiarity.

3. Using an Analog

Many English idioms have close analogs in Ukrainian, particularly when both languages express similar concepts through different cultural lenses. These equivalents often come in the form of proverbs or sayings and convey similar connotative meanings (he that mischief hatches, mischief catches – хто іншому яму копає, сам у неї потрапляє, there is no use crying over spilt milk – що з воза впало, те пропало, don't teach your grandmother to suck eggs – яйця курку не вчать, don't cross the bridge before you come to it – не кажи гоп, доки не перескочиш). Here, the translator selects the best match based on style, register, and tone.

4. Contextual Substitution

Sometimes, idioms are too culturally specific or abstract to be translated directly or even analogously. In such cases, translators may resort to contextual substitution—replacing the idiom with an expression or phrase that matches the context and emotional tone of the original (kind words butter no parsnips – годувати байками солов'я, to make a cat's paw of someone – чужими руками жар вигрібати, more power to your elbow – ні пуху, ні луски).

This method preserves communicative intent while sacrificing literal equivalence.

5. Descriptive Translation

When none of the above strategies suffice, descriptive translation is used. This involves paraphrasing the idiom to convey its full meaning, often with more words or detailed explanation (out of the clear blue sky – раптом, зненацька, white elephant – подарунок, якого важко позбутися, yes-man – людина, що з усіма згоджується, тільки підтакує).

Descriptive translation is particularly useful for idioms that encapsulate culturally loaded or novel ideas unfamiliar to the target audience.

Translating idioms is an intricate and creative endeavor that goes beyond linguistic knowledge. It requires sensitivity to both source and target cultures, a deep understanding of idiomatic meaning, and an ability to judge when to use equivalence, analogy, substitution, or explication. A well-translated idiom preserves not only the literal sense but also the emotional and rhetorical power of the original expression.

Ultimately, the task of a translator is not merely to convert words but to convey meaning – colorful, expressive, and culturally embedded meaning that gives language its vitality and charm. In this regard, translating idioms is not a hindrance but an art form, one that transforms linguistic barriers into bridges of understanding.

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AUDIO-VISUAL TRANSLATION: SUBTITLING AND DUBBING CHALLENGES

In recent decades, audio-visual translation (AVT) has gained increasing importance due to the global expansion of multimedia. As films, series, video games, and online content spread across linguistic borders, the need for accessible and culturally appropriate translation has grown dramatically [4].

The aim of this article is to explore the challenges and specific features of audio-visual translation (AVT), with a particular focus on subtitling and dubbing. It seeks to highlight the linguistic, technical, and cultural complexities involved in each mode,

analyze their impact on audience reception, and discuss the strategies used to preserve meaning, humour, and cultural relevance in the target language.

Among the most prominent AVT modes, there are subtitling and dubbing – both widely used but fundamentally different in nature.

Subtitling involves converting a spoken dialogue into a written text on the screen. This method is more economical and faster than dubbing and preserves the original soundtrack and performance. However, subtitling presents challenges: space constraints (usually two lines with 35 – 40 characters each), synchronization with audio, and the need to condense speech while maintaining meaning. Moreover, cultural references must be carefully adapted. For example, the English "prom" in American high school films may be subtitled simply as "випускний вечір" in Ukrainian, though it may miss some cultural connotations.

Dubbing, by contrast, replaces the original audio with a target-language version performed by actors. It allows for a more immersive viewer experience, especially for children or audiences unfamiliar with foreign languages [3]. However, it requires careful lip synchronization, emotional tone matching, and script adaptation. A well-known example is Disney's "Frozen": its Ukrainian version became popular due to localized song lyrics and expressive voice acting, which resonated deeply with the local audience.

There are numerous critical translation issues relevant to both subtitling and dubbing. Word choice can be tricky, especially if there is no equivalent in the target language, resulting in the original word being left intact and causing audience confusion [6].

Both approaches raise cultural translation issues. Subtitlers tend to preserve more of the original culture (a strategy known as foreignization), while dubbing often adapts content to local norms (domestication). For instance, jokes or idioms like "raining cats and dogs" might be localized to a phrase familiar to the target audience or even substituted entirely. In "The Simpsons", political or celebrity references are often changed, depending on the country, to keep the humour relevant.

An additional challenge is translating humour, wordplay, and slang. In sitcoms like "Friends" or "The Office", humour often depends on context, timing, or cultural assumptions. Direct translation may lose its effect, requiring creative solutions. In the Ukrainian version of "Shrek", for instance, translators replaced some jokes with local equivalents that would elicit laughter from a domestic audience.

Video game localization, a growing AVT branch, includes adapting dialogues, names, and interface elements. Japanese games like "Pokémon" have had significant localization changes: names of creatures, cities, and cultural items were adapted to be more relatable for Western players.

Subtitling can also serve educational purposes. Research suggests it enhances language learning by improving reading speed, vocabulary retention, and listening comprehension. Some countries, like the Netherlands, intentionally favour subtitling over dubbing to support foreign language acquisition.

In conclusion, both subtitling and dubbing play vital roles in making content accessible across cultures. They each require a unique set of linguistic, technical, and

creative skills. While subtitling emphasizes brevity and fidelity, dubbing focuses on performance and immersion. As international media continues to grow, high-quality AVT remains essential to global communication.

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PROJECT MANAGEMENT PRINCIPLES IN LANGUAGE TEACHING AND LEARNING

Project management (PM) is the structured application of knowledge, skills, tools, and techniques to achieve project goals effectively and efficiently. It focuses on initiating, planning, executing, monitoring, and closing tasks within constraints such as time, scope, and resources. Through PM studies, students learn to manage project life cycles, allocate resources, assess risks, and ensure timely delivery of objectives. According to Kerzner H., successful PM requires a blend of technical skills and strategic thinking, enabling managers to adapt to challenges while ensuring team alignment [1, p. 32].

In recent years, project management principles have also become increasingly vital in educational contexts, especially in language teaching. Educators can enhance instructional quality, student engagement, and motivation by structuring lessons with PM strategies (such as setting clear goals, managing resources efficiently, and tracking progress). Integrating PM principles into language education can provide teachers with a systematic and practical lesson planning and instruction framework. According to Harmer J., clear objectives and structured timelines are essential for language acquisition, allowing teachers to break down complex skills into manageable phases

(vocabulary, grammar, and conversation), which align with PM phases [2, p. 122]. The study investigates the practical benefits of PM for language education through real-world examples.

Planning and Resource Management

Effective language teaching requires meticulous planning and strategic resource management, elements at the heart of PM. Planning each module with designated resources (interactive vocabulary apps, digital grammar exercises, and multimedia content) ensures that every session builds toward cumulative language proficiency. Nation I. S. P. highlights that providing accessible, varied materials fosters independent learning and reinforces structured language progression [3, p. 75]. Given the experience gained, implementing weekly skill-focused plans has allowed students to prepare adequately and feel accountable for their progress. For instance, using digital tools like Quizlet for vocabulary building enables students to study independently while tracking their progress. This PM-based approach creates a structured path for language mastery and motivates students to participate actively in their learning.

Time Management and Motivation

Time management is crucial for sustaining motivation and ensuring language acquisition goals are met within a specified time frame.

PM principles (breaking down larger goals into smaller, manageable steps) can make language learning feel more attainable and rewarding. Teaching experience proved that establishing a structured lesson routine that consistently starts with a warm-up activity engages students and activates their prior knowledge. This is followed by a precise sequence of learning activities, each with a defined purpose and timeline. This routine provides a predictable structure that allows students to build a sense of progress with each activity, reducing anxiety and enhancing engagement [4, p. 195]. Students perceive their language learning journey as organised and achievable by setting clear expectations and time frames for each part of the lesson. Evidence suggests that routines like these, with clear transitions and incremental goals, contribute to a sense of accomplishment and keep students motivated as they progress toward their language fluency goals.

Communication and Collaboration

In both PM and language learning, communication is critical. Establishing channels for feedback and encouraging collaborative activities such as peer reviews, role-playing, and group presentations provide students with practical language application opportunities. Thornbury S. emphasises that peer feedback, for example, can improve speaking skills and foster a sense of teamwork [5, p. 134]. An excellent example is implementing peer-review sessions where students give feedback on each other's presentations. Not only did this practice boost confidence in speaking, but it also strengthened communication skills. Furthermore, collaborative language projects grounded in real-world scenarios encourage students to apply language skills dynamically, enhancing both interpersonal skills and linguistic confidence.

Conclusion

Applying project management principles to language teaching and learning enables their participants to create (design) a structured, dynamic, and motivating

learning environment. Through comprehensive planning, time management, and collaboration, students experience language learning as an organised process, leading to measurable improvements in language proficiency and confidence. Empirical research and real-life applications confirm that while PM frameworks require a certain level of initial setup, their long-term benefits for students and educators are profound, enhancing proficiency and confidence in language skills.

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Session work № 2

CURRENT RESEARCH IN THE FIELD OF LAW AND SECURITY

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CRIMINAL LAW REGULATION OF CITIZENS' PARTICIPATION IN THE DEFENSE OF UKRAINE

Criminal law regulation of citizens' participation in the defense of Ukraine is an important part of national security and ensures the country's defense capability. Citizens' participation in the defense of Ukraine involves both a constitutional obligation and special legal regulations that determine liability for certain actions or omissions in this process.

The main provisions of such regulation are enshrined in the Constitution of Ukraine, the Criminal Code, as well as in special laws on defense, mobilization preparedness, and state security [4].

The general principles of criminal law stipulate that participation in the defense of Ukraine is not only a duty but also a right of every citizen. To ensure this process, the legislation establishes special rules that regulate both liability for evasion of military duty and legal guarantees for persons participating in hostilities.

Article 65 of the Constitution of Ukraine stipulates that it is the duty of every citizen to protect the Motherland, independence, and territorial integrity of Ukraine, and to honor its state symbols. This provision forms the basis for the legal regulation of citizens' participation in defense activities. In particular, it stipulates that every citizen is obliged to participate in the defense of the state if there is a threat to its sovereignty or security [1].

According to Article 43-1 of the Criminal Code of Ukraine, an act (action or inaction) committed under martial law or during an armed conflict and aimed at repelling and deterring armed aggression by the Russian Federation or another country is not a criminal offense if it caused harm to the life or health of the person carrying

out such aggression or harm to law enforcement interests, provided there are no signs of torture, use of means of warfare prohibited by international law, or other violations of the laws and customs of war under treaties ratified by the Verkhovna Rada of Ukraine [2].

In addition, everyone has the right to defend the Motherland, independence, and territorial integrity of Ukraine, regardless of the possibility of avoiding a confrontation, causing damage, or seeking assistance from other persons or public authorities, including the Armed Forces of Ukraine.

A person shall not be subject to criminal liability for the use of weapons (armaments), ammunition or explosives against persons who carry out armed aggression against Ukraine, and for damage or destruction of property in this regard [3].

With regard to conscription and mobilization, the Law of Ukraine "On Military Duty and Military Service" establishes the rules for conscription for regular service, mobilization during a special period, and the procedure for service by reservists. In case of refusal to be called up without legal grounds or evasion of mobilization, criminal liability is provided under Article 336 of the Criminal Code of Ukraine, namely, imprisonment for a term of three to five years [3].

The participation of volunteers in the defense of Ukraine is also regulated by law. Citizens may voluntarily join the Armed Forces of Ukraine, territorial defense units or other paramilitary formations operating within the law. The law protects volunteers from criminal liability for their actions if they act in accordance with orders and within the framework of martial law [4].

Under martial law, liability for crimes that violate the state's defense capability is increased. In accordance with Article 111 of the CCU, treason is an act intentionally committed by a citizen of Ukraine to the detriment of the sovereignty, territorial integrity and inviolability, defense capability, state, economic or information security of Ukraine. Such acts include defection to the enemy during an armed conflict, espionage, assistance to a foreign state, foreign organization or their representatives in conducting subversive activities against Ukraine, shall be punishable by imprisonment for a term of twelve to fifteen years with or without confiscation of property. The same acts committed under martial law shall be punishable by imprisonment for a term of fifteen years or life imprisonment with confiscation of property [2].

Article 111-1 of the Criminal Code of Ukraine defines collaboration as a crime punishable by imprisonment, and in some cases confiscation of property, fines, correctional labor, and deprivation of the right to hold certain positions or engage in certain activities [2].

Article 111-2. Aiding and abetting the aggressor state, intentional actions aimed at assisting the aggressor state (aiding and abetting), armed formations and/or the occupation administration of the aggressor state, committed by a citizen of Ukraine, a foreigner or a stateless person, except for citizens of the aggressor state, with the aim of causing damage to Ukraine by implementation or support of decisions and/or actions of the aggressor state, armed formations and/or occupation administration of the aggressor state; voluntary collection, preparation and/or transfer of material resources

or other assets to representatives of the aggressor state, its armed formations and/or occupation administration of the aggressor state shall be punishable by imprisonment for a term of ten to twelve years with deprivation of the right to occupy certain positions or engage in certain activities for a term of ten to fifteen years and with or without confiscation of property [2].

Article 402 of the CCU, namely disobedience, i.e. the open refusal to execute an order of a superior, as well as other intentional failure to execute an order committed in a special period other than martial law, is punishable by imprisonment for a term of five to seven years. Disobedience committed under martial law or in a combat situation is punishable by imprisonment for a term of five to ten years. Pursuant to Article 408 of the CCU, desertion, i.e. unauthorized leaving of a military unit or place of service with the intent to evade military service, as well as failure to report for service for the same purpose in case of appointment, transfer, business trip, vacation or from a medical institution, if committed in a special period other than martial law, is punishable by imprisonment for a term of five to ten years. The same act, if committed under martial law or in a combat situation, shall be punishable by imprisonment for a term of five to twelve years [2].

To summarize, the criminal law regulation of citizens' participation in the defense of Ukraine is an important tool for ensuring state security and order. Establishing liability for evasion of military duties and enhanced liability during martial law creates legal conditions for citizens to participate in the defense of Ukraine. Such regulation contributes to the formation of legal awareness, increases discipline, and ensures proper preparation for fulfilling civil and military duties, thereby strengthening the state's defense capability in the face of modern challenges and threats [4].

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THE RIGHT TO SECURITY IN THE FACE OF GLOBAL THREATS

In the 21st century, the right to security has become a pivotal issue in the protection of fundamental human rights. Global threats such as terrorism, environmental catastrophes, pandemics, and mass migration flows have increased the tension between state security interests and the obligation to respect individual freedoms and rights.

Terrorism represents one of the most challenging threats to national and international peace. Governments often respond with urgent and severe counterterrorism legislation. However, these measures sometimes restrict civil liberties such as the right to privacy, freedom of movement, and the right to a fair trial. Fineberg (2015) highlights how international sanctions and security measures imposed in the name of fighting terrorism can bypass due process and violate basic human rights [1, p. 72].

Similarly, Williams (2005) addresses how common law nations have struggled to maintain a balance between individual freedoms and national security in the aftermath of 9/11. In some cases, courts have accepted the need for temporary restrictions; however, long-term constraints on human rights often lack adequate legal oversight and transparency [2, p. 47; 4, p. 23].

The COVID-19 pandemic brought new dimensions to the debate over security and rights. Governments worldwide adopted emergency regulations, lockdowns, and mandatory tracking systems. While these were meant to ensure public health, they also resulted in wide-scale restrictions on movement, freedom of assembly, and data privacy. Zamir (2020) argues that many emergency powers exceeded proportionality, with insufficient safeguards for restoring freedoms once the crisis was under control [5, p. 67].

Furthermore, migration triggered by environmental disasters or conflicts is increasingly framed as a security issue. As migration flows rise, states tend to prioritize border control and national stability, often at the expense of migrants' rights. The article from E-International Relations (2012) emphasizes the need to humanize migration policies and to remember that state sovereignty does not nullify international human rights obligations [3, p. 45].

Ultimately, a democratic and legal state must seek a sustainable and justifiable balance between national security and human rights. As highlighted by research on international law and institutions, security and rights must not be seen as mutually exclusive. Instead, they should complement each other to build resilient societies that can respond to threats without compromising liberty [2, p. 50; 5, p. 69].

The right to security must be exercised with caution, following legal standards, transparency, and proportionality. It is crucial that emergency measures be temporary, clearly defined, and subject to judicial control to avoid becoming tools for authoritarian

abuse. International human rights law provides a framework within which states can act decisively and still uphold the dignity of every individual.

While global threats continue to evolve, one thing remains clear: states must not sacrifice human rights in the name of security. The examples of past and ongoing crises show that a short-term approach to national security can lead to long-term consequences for democracy and the rule of law.

According to Fineberg (2015), the lack of clear definitions in counterterrorism frameworks has led to the misuse of power, including arbitrary detention and limitations on access to legal counsel. She argues that such ambiguity allows authorities to justify excessive restrictions without accountability [1, p. 74]. This has often affected minority communities and political activists, creating new forms of discrimination under the guise of national security.

Williams (2005) provides an in-depth analysis of legislation introduced after major terror attacks. He warns that emergency powers tend to remain in force long after the immediate threat has passed. In some cases, these powers become part of normal law, blurring the lines between temporary crisis management and permanent restriction of freedoms [2, p. 49].

The E-International Relations article (2012) stresses that migration management based on fear and control rather than international cooperation and empathy leads to the marginalisation of vulnerable groups. The framing of migrants as "security threats" is not only misleading but also dangerous, as it normalizes xenophobia and undermines global human rights standards [3, p. 46].

Zamir (2020) takes a legal-philosophical perspective, reminding us that democratic states cannot be judged solely by their security policies but also by how they treat people in times of crisis. He emphasizes that even under real threats, ethical leadership must guide legal decisions. Security policies that lack transparency or independent review tend to erode trust between citizens and institutions [5, p. 68].

ResearchGate's study (2020) also underlines the importance of checks and balances. It warns that without public oversight, intelligence agencies and law enforcement bodies may operate with little regard for privacy or procedural rights. The authors suggest that parliamentary review and public reporting mechanisms are crucial to prevent abuse of power [4, p. 26; 2, p. 50].

What's more, some researchers have called for stronger cooperation between international bodies to ensure that emergency laws comply with human rights conventions. For instance, Zamir (2020) advocates for clearer international legal instruments that can guide states during crises without compromising fundamental freedoms [5, p. 69].

In conclusion, security should never be used as a justification for authoritarian tendencies. The real challenge lies in developing security strategies that respect the principles of justice, equality, and human dignity. Governments must remain accountable and always ensure that emergency powers do not become a permanent threat to civil society.

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INTEGRATING CHATGPT INTO ENGLISH LANGUAGE LEARNING: OPPORTUNITIES, LIMITATIONS, AND PEDAGOGICAL STRATEGIES

With the advancement of artificial intelligence (AI) and the growing popularity of digital tools, the educational landscape is undergoing significant transformations. One of the most prominent tools is ChatGPT — a language model with the potential to revolutionize the approach to foreign language learning. Its integration into English language education opens new perspectives but also raises a number of questions regarding its effectiveness, pedagogical feasibility, and ethical boundaries.

Opportunities of Using ChatGPT in English Language Learning:

1. Support for learning grammar and vocabulary. ChatGPT can provide explanations of grammar rules, example sentences, synonyms, antonyms, and more.
2. Personalized learning. Students can interact with ChatGPT at their own pace, according to their individual needs.
3. Writing practice. The model can generate sample essays, correct errors, and provide feedback.
4. Development of dialogue skills. Through simulated conversations in English, students can improve their speaking skills.

Limitations and Risks:

1. Inaccuracy of responses. ChatGPT may provide incorrect or outdated information, requiring teacher supervision [1, p. 5].

2. Loss of critical thinking. Automated responses may reduce students' motivation to independently search for and analyze information.

3. Academic integrity concerns. Excessive use of ChatGPT to complete assignments can lead to plagiarism or superficial work lacking deep understanding [2, p. 8].

Pedagogical Strategies for Effective Implementation:

- Integration as a supplementary tool. ChatGPT should not replace traditional teaching but complement it.
- Controlled interaction. Teachers should design tasks where AI stimulates language use rather than replaces the learning process.
- Developing information literacy. Students should be taught how to verify, critically evaluate, and edit AI-generated content.

Thus, ChatGPT is an innovative tool with significant potential for developing language competencies. However, its effective use is only possible with well-considered pedagogical guidance. Striking a balance between modern technologies and traditional pedagogy is the key to successfully integrating AI into English language learning.

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THE ART OF UKRAINIAN DUBBING: ADAPTATION, LOCALIZATION AND CULTURAL FEATURES

The study explores the history of dubbing formation and its stages of development in Ukraine. It also examines the influence of state language policy on the popularization of Ukrainian dubbing, the specifics of translation and adaptation of jokes, wordplay, and cultural references, and examples of a creative approach to adaptation (use of Ukrainian dialects, colorful expressions).

Dubbing plays an important role in cinema, providing viewers with the opportunity to perceive foreign content in their native language. Ukrainian dubbing has gone through a long path of formation and development, which was accompanied by both political and cultural changes. Important aspects of the study are the history of dubbing, language policy, adaptation and localization, as well as its impact on the audience.

According to research [1, c. 1], the history of Ukrainian dubbing dates back to the 20th century, but its active development began only after Ukraine gained independence. Legislative regulation played an important role, which contributed to the spread of Ukrainian dubbing in cinemas [4, c. 1].

State language policy played a key role in the popularization of Ukrainian dubbing. According to research, the introduction of mandatory dubbing in Ukrainian in 2006 significantly increased the number of high-quality dubbed films and TV series. This contributed to the development of its own dubbing school and the improvement of the professional level of voice actors.

One of the key aspects of dubbing is the adaptation and localization of the text. As noted in [1, c. 75], the translation of subtitles and dubbing should take into account the cultural characteristics of the country to which it is adapted. In Ukrainian dubbing, special attention is paid to the translation of jokes, wordplay and idiomatic expressions, which makes it more natural for the local audience. A creative approach is often used, which includes the use of dialects and colorful expressions.

According to [2, c. 23], the study on translation of popular cinema points out the difference between literal translation and artistic reinterpretation. Ukrainian dubbing, unlike Russian, often favors adaptation taking into account context and culture, which makes it more attractive to viewers.

Ukrainian dubbing is an important cultural phenomenon that combines high-quality adaptation and localization with the preservation of language authenticity. It plays a significant role in the popularization of the Ukrainian language and the formation of cultural identity. Further research on this topic could focus on analyzing the impact of dubbing on the language consciousness of viewers and comparing it with other European localization models.

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Session work № 3

CURRENT RESEARCH IN THE FIELD OF ECONOMICS

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ВПЛИВ ВДАЛОЇ АЙДЕНТИКИ НА СПРИЙНЯТТЯ КОМПАНІЇ ЦІЛЬОВОЇ АУДИТОРІЇ

Айдентика бренду - це набір елементів, матеріалів і методів, які формують впіазнаваний образ компанії. Термін «корпоративна ідентичність» з'явився на початку XX століття в результаті розвитку економіки, коли зростаюча кількість компаній потребувала способів виділення серед конкурентів.

Етапи створення айдентики бренду:

Дослідження бренду - це вивчення його цінностей, цілей і аудиторії, щоб краще зрозуміти, у чому його особливість і як правильно зайняти своє місце на ринку.

Визначення цільової аудиторії - це аналіз людей, для яких створюється бренд, щоб говорити з ними однією мовою і пропонувати те, що їм справді потрібно.

Формування концепції - створення ідеї, яка коротко і влучно передає характер бренду і допомагає будувати його образ.

Створення логотипа - процес розробки знака, який буде легко впізнаватись і асоціюватись саме з цим брендом.

Вибір кольорової палітри - підбір кольорів, що не просто прикрашають, а й передають настрій і стиль бренду.

Корпоративна ідентичність формує уявлення про компанію, впливаючи на ставлення споживачів, рівень їхньої довіри та бажання обрати товари або послуги. Це виражається через візуальні елементи, предмети, методи комунікації та навіть тактильні враження, що дозволяє бренду легко бути впізнаваним і створювати асоціації з певним стилем та цінностями.

До прикладів успішної айдентики доцільно віднести наступні бренди:

Компанія Apple - мінімалістичний логотип, чорні та сірі кольори, які підкреслюють простоту та елегантність.

Американська компанія Coca-Cola - має фірмовий червоний колір, характерний шрифт і класична форма пляшки, що створює емоційний образ.

Бренд Nike - легендарний «swoosh» і слоган «Just Do It», що передають динаміку та мотивацію.

Світова мережа McDonald's - в брендбуці має червоний і жовтий кольори з літерою «М», що викликають асоціації з енергією та доступністю.

Сильний корпоративний бренд є важливим інструментом для створення позитивного іміджу компанії, підвищення її конкурентоспроможності та формування лояльності клієнтів. Він демонструє культуру компанії, її позиціонування та характеристики продукції чи послуг. Ігнорування розробки корпоративного стилю може призвести до втрати унікальності та виділення серед конкурентів.

До переваг фірмового стилю належать:

Впізнаваність - фірмові кольори, логотип і шрифти допомагають бренду стати помітним навіть без прямої згадки назви, що дозволяє створити стійке враження у свідомості споживачів і легко асоціювати його з певними характеристиками та цінностями.

Формування іміджу - унікальний стиль бренду сприяє підвищенню його статусу на ринку, а також зміцнює репутацію компанії, допомагаючи виділити її серед конкурентів та створити позитивне враження серед споживачів.

Чіткий образ бренду - стабільний корпоративний стиль, що включає єдину візуальну і комунікаційну стратегію, допомагає споживачам правильно сприймати компанію, її місію, цінності та ставлення до клієнтів, формуючи довіру та лояльність.

Контроль і вплив - добре продумана айдентика дозволяє бренду не лише ефективно керувати своєю присутністю на ринку, але й активно впливати на поведінку споживачів, адже через правильно підібрані елементи комунікації можна формувати очікування та інтерес до продукції чи послуг.

Основними елементами айдентики бренду є :

Неймінг - назва компанії, що відображає її сутність.

Логотип і товарний знак — логотип є візуалізацією бренду, товарний знак - його юридичним втіленням.

Слоган - коротке, змістовне формулювання, що передає цінності компанії.

Фірмові кольори - відтінки, що впливають на емоційне сприйняття бренду.

Шрифти - передають характер компанії, від грайливості до стабільності.

Tone of voice - стиль комунікації, що формує імідж компанії.

Обличчя бренду - людина, яка представляє компанію в медіа та рекламі.

Бренд - це не статичний набір характеристик, а живий організм, що взаємодіє зі споживачем, викликає емоції та отримує зворотний зв'язок. Завершальним етапом формування бренду є комунікаційна стратегія, яка об'єднує всі елементи айдентики у єдину систему впізнаваності. Комунікація повинна адаптуватися до змін у вподобаннях та поведінці аудиторії. Успішний

бренд еволюціонує разом зі своїми споживачами, залишаючись актуальним і близьким до них.

Таким чином, сукупність вдалої айдентики впливає на сприйняття компанії цільовою аудиторією. Тому важливо враховувати всі ці пункти, що дозволить підвищити довіру та впізнаваність бренду, а відповідно збільшити попит на продукцію або надання послуг. Це, у свою чергу, сприятиме зміцненню позицій на ринку та розвитку компанії.

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CMS - CONTENT MANAGEMENT SYSTEM

With the growing threats in the modern world, tactical medicine is becoming a critically important field of knowledge, especially in the context of armed conflicts, terrorist attacks, natural disasters, and other emergency situations. Timely and effective first aid on the battlefield or in extreme conditions can significantly increase survival chances and reduce the consequences of injuries. A tactical medicine blog plays an important role in spreading knowledge and skills among military personnel, rescuers, medical professionals, and even the civilians.

The object of research is the design and development of a CMS for a tactical medicine blog. This topic was chosen due to the necessity of solving specific tasks related to quick access to relevant information and tracking the latest news in the field of tactical medicine.

The aim of this research is to explore and implement a CMS that meets the needs of a tactical medicine blog and to study the key principles of designing such systems.

Throughout the research, the key stages of CMS development will be examined, taking into account the requirements for high availability, performance, and reliability of the system.

The main goal of this research is to develop a CMS for a tactical medicine blog that will provide up-to-date and useful information for its users.

In this research, we will start by analyzing the key challenges, tools, and methods for completing the task of creating a CMS for a tactical medicine blog. We will explore existing solutions in this domain, including a review of similar websites, in order to identify best practices and areas for improvement. Based on this analysis, we will formulate a detailed technical specification that will define the core requirements and constraints for the system to be developed.

Next, we will move on to the design and development of the software. This will include designing the overall logic and structure of the application, as well as building specific functional algorithms that will support content management, user interaction, and data handling. The actual implementation of the CMS will follow, using appropriate technologies to ensure the system is scalable, efficient, and easy to use.

Finally, we will describe how the application functions from a user perspective and conduct thorough testing to ensure the system meets the defined requirements. Testing will cover both functionality and performance, aiming to verify the reliability and usability of the CMS in real-world scenarios.

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PROCESSES IN THE MANAGEMENT SYSTEM OF THE ENTERPRISE

In today's society, the social attributes of each individual are becoming more prominent. Social attributes are a combination of the different roles and identities that each person plays in the environment in which he or she lives or works. This means that everyone in a social group is part of a larger network of relationships, and communication is an important link to this network. A company is a profit-oriented economic organisation, which means that it is an organisational unit of people with a different division of labour and a unique way of operating within the larger society. Communication is not only an important link between employees but also an important way to build positive customer relationships. Peter Drucker, the famous management guru, pointed out that communication takes up most of a manager's time and energy and that managing communication is one of the basic responsibilities of managers and is a fundamental component and element of management behaviour [2]. It shows that effective and good communication skills are not only the golden key to enhance corporate cohesion and improve corporate combat effectiveness, but also a basic quality that business managers must have.

When assessing communications needs, it’s important to remember that feedback from employees and customers is invaluable if a company wants to improve and maintain healthy growth. This is often referred to as an “open communication” model. A company should focus on the easiest way for an audience to give feedback, and then create ways for that to happen efficiently. And with the vast array of communication methods available in this digital age, communication management experts must seize on shifting innovations and adapt quickly to ensure they are reaching their audiences. One way to keep from getting bogged down by technological whiplash is to keep the big picture in mind, and there’s no better way to do that than by making sure all communications follow the five W’s. The five W’s of communication management are:

- **“What information** is essential for the project?”
- **“Who requires** information, and what type of information is needed?”
- **“What is the duration** of time required for the information?”
- **“What type or format** of information is required?”
- **“Who are the person/s** who will be responsible for transmitting the information?”

These are good general guidelines, but it’s important to keep in mind other considerations such as cost and access to information [1].

Many managers will openly express on different occasions that they welcome employees to put forward their opinions and suggestions through different channels and means, but in fact, many managers do not like to accept employees who disagree with them, and in serious cases, they may even become dissatisfied. In the long run, employees dare not and do not want to put forward their opinions and suggestions

again, and they no longer care about the problems of the company. Therefore, managers should consciously change this idea and practice, to have the courage to encourage employees and the sense of responsibility for the enterprise [3]. In Maslow's hierarchy of needs theory, human needs are divided into physiological, security, love and belonging, respect, self-actualisation, etc., and in the management of enterprises to open up the way, respect and allow the existence of different views can precisely make employees feel recognized, and then meet the need for respect. Therefore, truly sincere and genuine respect and allow the existence of different opinions, but will strive to win the support of employees.

Communication efficiency is inseparable from the establishment, operation and innovation of institutional mechanisms, and the development of information and network technology nowadays provides the conditions and basis for continuous innovation. Enterprises can innovate their communication mechanisms accordingly, using new, fast, efficient and acceptable channels such as QQ, MSN, mobile phone WeChat and management information platforms to strengthen communication at all levels and in all areas. Of course, as communication methods and channels continue to innovate, it is also important to recognise that traditional communication methods and channels remain powerful and important, and that meetings, discussions and interviews can be used simultaneously. John Naisbitt (the famous American futurist) once said: "The competition of the future will be a competition of management, and the focus of the competition will be on effective communication between the members of each social organisation and their external organisations." People, or rather a team of people who can work together as a team and have a strong fighting spirit, constitute the core element of a company, and the creation of a work team cannot be achieved without sincere and effective communication, which helps to break down the barriers between managers and employees, and then helps to increase the competitiveness and cohesion of the company.

In conclusion, effective communication is a fundamental component of successful business management, playing a vital role in enhancing efficiency, fostering collaboration, and promoting positive organizational culture. By ensuring accurate information transfer, real-time feedback, and harmonious interactions, enterprises can overcome common communication barriers and build stronger relationships both internally and externally. Implementing strategies such as leveraging modern communication technologies, encouraging open feedback, and fostering a culture of mutual respect significantly contributes to organizational success. Moreover, recognizing the importance of communication as an ongoing process allows managers to continuously innovate and adapt their communication methods, thereby strengthening the company's competitiveness and cohesion. As communication remains a cornerstone of management practices, enterprises that prioritize and nurture effective communication processes will undoubtedly achieve long-term growth and sustainability.

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HR-MANAGEMENT AND MOTIVATION

In the modern world it's still crucial to care about employee motivation. Ensuring high motivation is the basis of employee productivity and satisfaction, which, in turn, affects the overall success of the company. The main aim of the article is to explore to explore effective methods of motivating employees, as well as identify key factors that contribute to increasing their productivity. If motivation is absent, employees may feel dissatisfied, which leads to low productivity and high employee turnover.

HR management (Human Resources) is a set of measures and strategies aimed at managing human resources in an organization. The HR manager must create an environment in which employees feel valued and involved in their work. An important element of HR management is staff motivation, which directly affects the efficiency of work and the success of the company, because the level of job satisfaction determines the effectiveness of task performance, loyalty to the company and the overall success of the business [4 p. 356].

HR management covers a wide range of functions necessary for the effective operation of the company, for example: personnel selection (search for candidates who meet the needs and values of the company), training and development of employees (providing opportunities for advanced training and professional growth), remuneration (competitive wages, bonuses and bonuses for employees), interpersonal relations in the team (good team, joint cooperatives and recreation, as well as teamwork) [8 p. 528].

Motivation is the process of encouraging employees to work to achieve the goals and objectives of the organization. Motivation affects the behavior of employees, their productivity and job satisfaction, stimulates them to better perform their duties. There are two main types of motivation: intrinsic motivation – employees are guided by personal aspirations, self-development, and external motivation is caused by material

incentives, such as salary, bonuses, promotions [5 p. 411]. To maintain high motivation of staff, companies use various methods of stimulation:

1. **Financial incentives** – material rewards are one of the most effective methods of motivation. Among them: bonuses for productivity, additional payments for exceeding plans. Financial incentives make employees feel that their work is appreciated and motivate them to better results. Let's have a look the international brand Apple [1]. One of the types of motivation of personnel in this company is material motivation. The basic monetary motivation in the company – "the opportunity to create wealth" is the result of owning company shares. Most Apple employees receive stock grants as a reward for their work.

2. **Intangible motivation** – certificates for achievements, awarding employees certificates for excellent work or the title of "employee of the month", recognizing the best employees of the company. For example, McDonald's has the "Employee of the Month" program, where the best employees receive certificates, bonuses, or gifts [6].

3. **Career growth** – the opportunity to increase, training at the expense of the company, participation in conferences. Training and clear career prospects motivate employees to stay with the company and develop. For instanse, Apple supports career growth through mentoring programs and internal transfers, providing opportunities for employees to grow within the company [1].

4. **Employee training** – HR managers help employees identify opportunities for growth within the company, which contributes to their involvement and long-term commitment. The opportunity for training and development significantly increases employee motivation. For example, paying for courses, attending conferences and financial support for further education. When employees see that the company invests in their development, they are more interested in their work and career growth. Microsoft invests in employee training through the Microsoft Learn platform, which includes training and certification programs. [7].

5. **Work-life balance** – flexible work schedules, the ability to work remotely and support for mental health help employees maintain high productivity. Microsoft – in many countries, the company has introduced a four-day work week (for example, in Japan) to increase productivity and provide more time for rest [7].

6. **Corporate culture** – a friendly work environment, open communication and support contribute to the growth of team spirit and increase motivation. Employee engagement measures are also effective (team building, sports events and corporate initiatives help to create strong relationships between employees and increase morale in the team). Some companies offer: vacations and paid trips to health centers to restore strength, swimming pool and sports clubs. Such motivation not only increases job satisfaction, but also contributes to the physical and mental health of employees. Let's have a look at Google company which covers the costs of sports activities, provides access to fitness centers, yoga, and massage, and also organizes healthy meals in the office [3].

In conclusion**,** looking at the experience of well-known companies and corporations, financial motivation is one of the most effective ways to stimulate staff.

For the long-term success of a company, it is important to apply a comprehensive approach to motivation. Career growth, opportunities for professional development, a comfortable working atmosphere and care for the mental health of employees also play a key role in increasing staff efficiency and engagement. Therefore, a combination of financial and non-financial motivation is the most optimal approach to achieving high results [2 p. 982]. With effective motivation strategies, companies can increase employee satisfaction, increase productivity, and achieve long-term success. In my opinion, companies that use comprehensive motivation programs have a high level of employee engagement, which is directly reflected in business performance. Motivation affects employee productivity and the overall success of the company by creating conditions that promote employee effectiveness, professional development, and personal well-being. By offering bonuses, vacations, training opportunities, and certificates, companies increase employee satisfaction, increase motivation, and improve business results.

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KANBAN AS A FLEXIBLE APPROACH TO EFFECTIVE PROJECT MANAGEMENT

Kanban Project Management is a unique approach to project management that is based on the Kanban method. It is suitable for companies of all sizes, because

flexibility and adaptability of Kanban methods make it a suitable approach for managing projects of varying complexity and expertise, from manufacturing and construction to software development projects. In today's fast-paced business environment, where customer requirements are constantly changing and competition is growing, effective project management is becoming critical to the success of any organization. The Kanban methodology provides companies with the opportunity to increase process transparency, optimize workflow, adapt to change, and continuously improve.

An important feature of this management method is that it can be applied at a wide range of scales, from the level of individuals and small teams to strategic business initiatives.

This article provides a detailed explanation of the Kanban methodology, analyzing its effectiveness in enhancing project management efficiency and adaptability.

The Kanban method originated in the 1940s at Toyota, where it was developed as part of a lean manufacturing system. The term Kanban is translated from Japanese as "signboard" or "billboard", reflecting the visual nature of the system. In the Toyota workshop, there was a board with cards. The cards contained the addresses of the sender and receiver, as well as information about the parts. When the team needed a new part, the corresponding card was sent to the part of the board for which external or internal suppliers were responsible. For greater convenience, the cards were color-coded: for example, an external supplier had a red card, and an internal supplier had a blue card. As a result, Toyota increased production, met deadlines, and reduced inventory to the required minimum. Thanks to Kanban, in 1972 Toyota became the first automobile company in the world to produce more than 10 million cars a year. This example was adopted by other industries.

Many organizations already utilize project management software integrated into their daily workflows. These platforms often include Kanban features, with popular examples being Jira, Trello, Monday.com, ClickUp, and Asana, among others. Building upon existing systems, the Kanban method offers a structured approach to visualizing and managing work. Rather than demanding immediate, disruptive changes, Kanban emphasizes a gradual, evolutionary improvement. This philosophy is rooted in four fundamental principles :

1. Start from what you have now. The methodology does not call for instant changes to the company structure and employee roles. On the contrary, you need to implement changes to the existing system.

2. Strive for gradual, constant and evolutionary changes. In other words, take small steps towards a big goal. At first glance, it may seem that global changes will bring more benefits and profits. But you need to remember that they will also bring huge risks. Gradual movement towards the goal is a more flexible and safe approach.

3. Respect flow processes and roles. You need to preserve what works well. This applies to relationships, positions and processes. Relationships with people will help to gain support for changes, and established processes will improve unstable ones.

4. Support leadership at all levels. Employees at all levels, not just management, should strive to be leaders and propose change.Kanban is primarily a visualization. For visualization, a board and a set of colorful cards are used. One color represents one performer or process. All team members can check the status of any task at any time.Such boards can be used for both personal time management and project planning. The simplest Kanban board is three columns: “To Do”, “In Progress”, “Done”.

Spotify, the world's largest music streaming platform, is an example of how the Kanban methodology is applied. The company's operations team was having a hard time finding the time to keep up with their planned projects. So they turned to Kanban to divide projects into smaller parts that could be better planned and organized. On their board, they break tasks down into To Do, Doing, and Done columns and categorize them as tangible (i.e., physical work) and intangible (i.e., planning and design). Next, they determine whether the tasks are small (a workday), medium (a few days), or large (a week), with anything that takes longer being broken down into smaller tasks so that they can be reclassified as small, medium, or large. Since Spotify started using this system, they have noticed that lead times have decreased and more internal tasks are being completed, but the day-to-day work of people has not changed. The fundamental values of the kanban method are transparency, balance, collaboration, customer focus, flow, leadership, understanding, consent, and respect.

A Kanban board greatly improves communication within a team. If everyone updates tasks, the entire team knows who is working on which task. This reduces the risk of duplication of work and misunderstandings. The board also provides a way to track progress and ask for help if needed.

The Kanban method has a number of advantages that make it a popular tool for managing workflows. Here are some of them:

1.Visualization of the workflow, making it easier and more convenient to control the processes of task execution and keep them under control.

2.Optimization of the workflow, reducing the time for completing tasks, increasing team productivity.

3.Flexibility and adaptability, the ability to configure the Kanban board as you like and easily make adjustments to it.

4.The ability to quickly identify problems and barriers in the work, reduce the time to eliminate them and generally improve the quality of the workflow.

Of course, like any other method, Kanban has its drawbacks:

1.Kanban is not the best suited for complex processes with many interconnected tasks. It will simply be inconvenient to work with them on the board.

2.It takes some time to master the Kanban methodology. Therefore, it will not work to introduce it in the company “here and now”.

3.Kanban cannot replace full-fledged communication in the team. And insufficient communication can lead to errors in work and misunderstandings.

It is also worth adding that Kanban is only effective if you use it correctly, and the use of the methodology is justified. If there is no real need for Kanban, then the system will only slow down the workflow, not optimize it.

Kanban project management can help you visualize your work to better understand your workflow. This allows you to organize and manage your work more effectively. It also allows teams to easily track each project and task, identifying inefficiencies and workflow issues.

To summarize, the main benefit of Kanban is improved workflow management through visual task tracking, which leads to increased efficiency and reduced bottlenecks. However, its success depends on proper implementation, which includes accurate visualization of the workflow, limiting work in progress, and continuous process improvement.

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DIGITAL TRANSFORMATION AND ENTRY OF DOMESTIC ENTERPRISES INTO INTERNATIONAL MARKETS

In modern economic conditions, domestic enterprises face the necessity of entering foreign markets. The domestic market has limited capacity and cannot absorb all the offered products, forcing companies to expand their activities beyond national borders. High competition in international markets requires careful planning and the development of a growth strategy that ensures long-term competitive advantages.

The purpose of this article is to analyze the key factors influencing the digital transformation of enterprises and their impact on international expansion. Understanding these factors will help businesses effectively navigate global markets and implement appropriate digital strategies [4].

Companies are revising their business strategies in modern operational conditions for the following reasons (Figure 1).

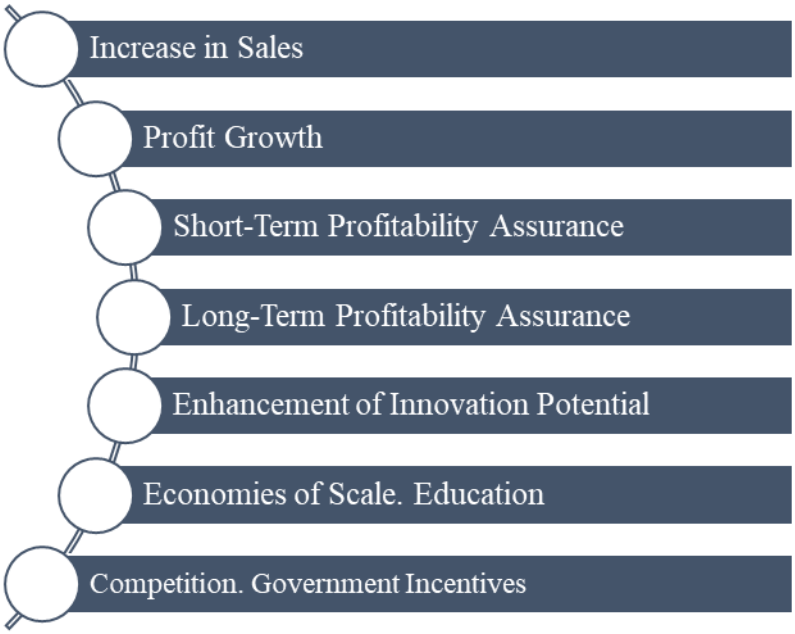

Fig. 1. Reasons for Enterprises Entering International Markets

As we can see, the reasons listed above illustrate the necessity of digital transformation for successful global expansion. Digitalization facilitates efficiency improvement, cost reduction, and the creation of competitive advantages, making it a crucial element in modern business development [2, pp. 89-102].

Modern business is increasingly oriented toward global markets, and digital transformation has become a key factor for successful international expansion. The implementation of advanced technologies not only contributes to expanding market presence but also enhances operational efficiency, automates business processes, and improves customer interaction [5, pp. 45-78].

Digital transformation in entering international markets involves several key aspects:

1. ***Business Process Automation.*** The transition to digital technologies enables companies to improve the efficiency of internal processes, reduce costs, and minimize risks associated with human factors. The use of ERP systems (Enterprise Resource Planning) helps optimize resource management, while CRM systems (Customer Relationship Management) improve customer interaction in international markets [3, pp. 156-189].
2. ***Use of Digital Platforms for International Expansion.*** Modern companies actively leverage e-commerce and marketplaces to enter foreign markets. Platforms such as Amazon, Alibaba, and eBay provide opportunities to reach a broader audience without the need to establish physical offices. Additionally, proprietary online stores using digital marketing strategies allow businesses to better control customer interactions. For instance, Alibaba has successfully expanded globally by leveraging its digital ecosystem to connect international buyers and sellers [1].

3. ***Cybersecurity and Data Protection.*** With the increasing digital presence of companies in international markets, cybersecurity risks also grow. Reliable data protection and confidentiality are critical to maintaining customer and partner trust. The implementation of modern security standards, such as GDPR (General Data Protection Regulation), ensures compliance with international norms [6].
4. ***Digital Marketing and Personalized Customer Engagement.*** To effectively attract customers in different countries, businesses must utilize digital marketing tools. SEO optimization, content marketing, targeted advertising, and data analytics enable companies to tailor marketing campaigns to the needs of each market and ensure a personalized approach to customers. For example, Nike utilizes AI-driven marketing strategies to personalize customer experiences and enhance brand engagement worldwide [7].
5. ***Data Analytics and AI Technologies.*** The use of Artificial Intelligence (AI) and Big Data analytics allows companies to analyze consumer behavior, predict demand, and make data-driven strategic decisions. This contributes to more precise audience targeting and increases the efficiency of marketing and sales strategies[6].
6. ***Cloud Technologies and Business Flexibility.*** Cloud computing enables companies to scale operations without significant investments in physical infrastructure. The use of cloud services such as AWS, Google Cloud, or Microsoft Azure allows businesses to quickly adapt their models to different market conditions and respond swiftly to changes in the global business environment. Tesla, for example, utilizes cloud-based infrastructure to streamline global operations and enhance data-driven decision-making [9].
7. ***Product Localization and Adaptation***. For successful international market entry, companies need to adapt their products and services to cultural specifics and consumer preferences. Localization involves not only translating content but also adapting design, functionality, and marketing strategies [8, pp. 12-34].

To further illustrate the role of digital transformation in global expansion, it is important to emphasize the growing influence of emerging technologies. The rapid development of AI (Artificial Intelligence), machine learning, and blockchain is reshaping the way businesses approach both operations and customer relations. These technologies are not only streamlining supply chains and improving decision-making processes but also enabling companies to build stronger, more transparent relationships with international partners and customers. As digital tools evolve, businesses must remain agile, continuously adopting innovations that will enhance their ability to compete and succeed in global markets. This strategic approach will be essential for companies aiming to achieve sustainable growth and maintain their competitive edge in an increasingly digital world.

Digital transformation is an integral part of a company's successful international expansion. The adoption of innovative technologies helps optimize business processes, improve customer communication, and secure competitive advantages. Among the

most effective tools are digital platforms, cloud computing, and AI-driven analytics, which enable companies to remain agile in the competitive global market. A comprehensive digitalization approach is key to the sustainable development of businesses in the global economy.

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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON HR MANAGEMENT: AUTOMATION AND ANALYTICS OF THE FUTURE

In the modern world, personnel management is undergoing significant changes due to the rapid development of artificial intelligence. Process automation, big data analysis, and machine learning open up new opportunities to improve the efficiency of HR departments. The introduction of such technologies allows to optimize recruitment, reduce recruitment costs and improve the quality of decision-making. This article analyzes the impact of artificial intelligence on HR management, considering its potential benefits and challenges for companies.

The involvement of artificial intelligence begins at the stage of searching for candidates, in particular, with the creation of a structured request for a candidate and the search for the most relevant sources of vacancy distribution. Due to this, while maintaining the basic requirements and a set of qualities that are necessary for the enterprise, the recruiter can quickly and efficiently create a request that, with its clarity and ease, will allow only candidates who meet the requirements of the enterprise, which will subsequently facilitate the next stage of selection, directly from potential candidates to the list of the best of them.

At the next stage, when the HR manager receives potential candidates using their CV, it can attract AI to reduce the circle to those that the most meet the requirements, it can be software or hard skills, language proficiency, and level of proficiency in a particular language, previous jobs, individuals, education and any other specifications in general. AI reduces recruiter workload by filtering candidates early, cutting hiring time and costs [1].

It gives the recruiter more time for the next stage, when a small number of candidates must correspond to what the employer is looking for. For large companies that have a lot of employees and are also growing, increasing their staff and reducing the cost of finding these employees allows you to use the savings to develop their employees or new employees better and reduce your costs in general [2].

At the stage when the recruiter has a limited range of the most relevant candidates, he can consider them on his own, exploring aspects important to the company, but those that artificial intelligence cannot determine, in particular personal qualities, behavior, life views, or anything else that requires the human mind, this is important because modern companies are trying to create an ecosystem within themselves. Involvement of each employee not just as an executor of tasks, but as a participant in the life of the company, a member of corporate culture, where every person matters. However, if the recruiter cannot decide, he can use artificial intelligence as a third party without prejudice, comparing in great detail [3].

The use of AI in the early stages of a new employee's work is an important element of modern HR management. A 2024 study in the Journal of Applied Psychology showed that AI significantly reduces adaptation time. Automated training systems and chatbots help new employees quickly learn corporate rules and procedures, aiding faster integration. AI also enables personalized adaptation plans based on an employee's experience and skills, improving the focus of training [4].

In the HR management process, the use of artificial intelligence for analytics can significantly improve decision-making and personnel management. AI makes it possible to process large amounts of employee data, allowing you to get deeper and more accurate insights about work efficiency, motivation, and potential risks.

In particular, data analysis using AI makes predicting the probability of staff turnover possible. Machine learning algorithms can detect patterns in employee behavior, such as analyzing their activity, level of job satisfaction, social interaction, and other factors. This allows HR professionals to identify risks in time, for example, for employees who may be planning a layoff or experiencing professional burnout.

Another aspect of using AI is evaluating the performance of workers. Instead of traditional assessment methods, which are often subjective, AI algorithms use data from different sources (results of completed projects, feedback from colleagues, and engagement metrics). This allows you to get an objective picture of performance and make more informed decisions about career development or compensation. AI also helps in analyzing the educational and developmental needs of employees. And also It allows you to create personalized development plans that consider employees' strengths and weaknesses. Thanks to this, HR managers can more accurately and effectively organize training and advanced training of employees [5].

Thus, using AI-based analytics in HR management opens up new opportunities for improving personnel management and productivity and reducing risks such as staff turnover and employee burnout.

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APPLICATION OF MATHEMATICAL METHODS AND MODELS IN ECONOMICS

The financial success of an enterprise and its place in the market largely depend on the correct strategy of behaviour. In order to choose rational options for managing

an enterprise, it is necessary to predict possible situations, influence them, directing its economic activity towards achieving the set goal. It is impossible to carry out rational management of the entire economic and production system, taking into account changes in each type of element, and resolve conflict situations without the use of economic and mathematical tools. A significant contribution to the development of the practical application of mathematical modelling methods in economics and finance was made by scientists such as: B. Burkinsky, V. Vitlinsky, B. Grabovetsky, V. Zdrok, N. Lepa, V. Osipov and others. With the help of economic and mathematical methods, they built their theories, carried out practical calculations, gave reasonable conclusions, made forecasts and assessed the risks of many economic phenomena and processes.

The main purpose of the work is to study the application of mathematical methods in economics and finance, to substantiate the need for mathematical modelling to solve complex economic problems, and to develop proposals for mathematical modelling of financial activities of an enterprise.

Economic and mathematical modelling is a universal tool for analysing and researching production, financial and economic processes and phenomena. The widespread use of mathematical methods is an important area for improving economic analysis, which increases the efficiency of enterprises and their divisions. The main reasons for the rapid spread of economic and mathematical modelling methods are the sharp complication of modern economic practice caused by the high level of production development, the growing pace of scientific and technological progress, and the requirements to improve the efficiency of natural resources. Modelling is a scientific theory of building and implementing models that study phenomena and processes in nature and social life [4]. Building economic and mathematical models is a complex process that requires in-depth knowledge of economic theory, the subject of research and mathematical tools [2]. A model is a simplified representation or abstraction of reality, a conditional image of an object that is created for a deeper study of reality [3]. A mathematical model makes it possible to find the optimal variant of a management decision that makes it possible to ensure the development of the situation for the effective achievement of the goal. Economic and mathematical methods and models provide such opportunities:

- accurately and compactly present the provisions of economic theory;
- formally describe the relationships between economic variables;
- solve planning and management optimisation problems, reflecting the specifics of production processes;
- respond in a timely manner to changes in goals, resource constraints, dependencies between parameters and adequately adjust plans and management decisions;
- obtain information about the object and its functioning;
- predict the object and its behaviour in the future.

For example, methods of elementary mathematics are used in economic calculations to justify resource requirements, account for production costs, develop plans and projects, and in balance sheet calculations.

Methods of mathematical statistics are widely used in economic analysis. These methods are used in cases where the change in the analysed indicators can be represented as a random process. Statistical methods are the main means of studying massive, repeated phenomena and play an important role in forecasting the behaviour of economic indicators. Econometric methods are a unique combination of three areas of knowledge: economics, mathematics and statistics. The basis of econometrics is an economic model, which is a schematic representation of an economic phenomenon or process using scientific abstraction. One of the main branches of econometrics is correlation and regression analysis, a set of mathematical methods that investigate the relationships of correlated variables [3].

Matrix methods and models are used to study complex and large-scale economic structures.

They allow us to present the relationship between costs and production results in the most compact form. Convenience of calculations and clarity of economic interpretation are the main features of matrix models. This is important when creating systems for mechanised data processing and when planning production using computers. Mathematical programming methods are designed to optimise production and business activities. At their core, they are a means of planning calculations. Their value for economic analysis lies in the fact that they make it possible to assess the achievement of potential, the intensity of planned tasks, determine the condition of equipment, limited types of raw materials, the degree of competition and shortages. To make management decisions in the face of risk and uncertainty, companies should use game theory. Game theory is a set of mathematical methods and models related to rational decision-making in the face of conflict and uncertainty [1]. The theory of queuing explores, on the basis of probability theory, mathematical methods for quantifying queuing processes.

Thus, each of the structural units of an industrial enterprise can be represented as an object of the service system. Operations research methods are used in the analysis to obtain a comparative assessment of alternative solutions. The implementation of these methods should cover the following stages: formalisation of the initial problem; construction of a mathematical model; solution of the model; verification of the model's adequacy; implementation of the solution. In recent years, expert evaluation methods have been increasingly used to make management decisions. These methods are based on the use of professional experience and intuition of specialists in solving analytical problems, especially in forecasting the development of economic situations. As for the use of mathematical tools in solving practical problems, there are at least four aspects:

1. Improvement of the economic information system. Mathematical tools make it possible to organise the system of economic information, identify shortcomings of the available information and develop requirements for the preparation of new information or its correction. The development and application of economic and mathematical models indicate ways to improve economic information that is focused on solving a certain system of planning and management tasks.

2. Intensification and improvement of the accuracy of economic calculations. The formalisation of economic tasks and the use of computers speed up typical, mass

calculations many times over, increase their accuracy and reduce labour intensity, and allow for multifaceted economic justifications of complex measures.

3. Deepening the analysis of economic problems. The use of modelling techniques significantly improves the quality of a specific quantitative analysis of the links between the elements of the economic system, creates conditions for studying many factors that affect economic processes, and allows for a qualitative assessment of the consequences of changes in the conditions for the development of economic objects.

4. Solving fundamentally new economic problems. Mathematical modelling helps to solve economic problems that are virtually impossible to solve by other means.

Depending on the type of tasks that are solved at a manufacturing enterprise, the following main areas of economic and mathematical modelling can be identified:

- quantitative analysis of own production and use of production capacities based on balance sheet matrix mathematical models;
- selection of promising production areas and financial activity strategy using predictive mathematical models;
- optimisation of technical and economic planning with different time detail;
- forecasting the choice of an optimal credit mechanism;
- forecasting optimal behaviour in the markets of production resources and products.

Conclusions. Mathematical modelling of financial activity of an enterprise can be presented as a set of tasks, the solution of which should be carried out in three stages. The first stage involves determining the purpose and specificity of the models, the mathematical apparatus and information support to be used in the study, the main directions and trends in the development and use of models, directions and methods of the study. The second stage involves researching models, identifying and evaluating the capabilities of economic and mathematical tools for analysing the financial performance of an enterprise. At the third stage, the possibility and necessity of creating a system of financial models are investigated, the consistency of their functioning is ensured, and a draft model of the system under study is developed.

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DESIGN THINKING IN BUSINESS

Design thinking in Ukraine is becoming increasingly popular, especially in changing business environment and the need for innovation. Ukraine is witnessing a vibrant development of startups that use design thinking to develop products and services. This allows new companies to respond quickly to market needs and create solutions that truly solve user problems. More and more Ukrainian companies cooperate with international companies and organizations, which promotes the exchange of experience in the field of design thinking. This opens up new opportunities to learn and practice new methods.

In a broad sense, design thinking is a kind of approach to shaping a company's business processes that focuses on understanding user needs and creating innovative solutions based on them. In this way, it promotes creativity and innovation in business processes. Teams that apply Design Thinking are able to create non-standard ideas and solutions and stand out from the competition.

Design thinking should be viewed as a human-centered approach to innovation that integrates people's needs, technology capabilities, and business success requirements (Brown, 2008). The basic principles of design thinking are particularly pertinent to today's business environment. Let us list them:

- User Focus (directing all attention to the user's needs and problems)
- Iterativity (the process of continuously improving solutions through testing and feedback),
- Cross-functionality (the involvement of experts from different disciplines to generate new ideas and solutions).

The Design Thinking process consists of five key stages:

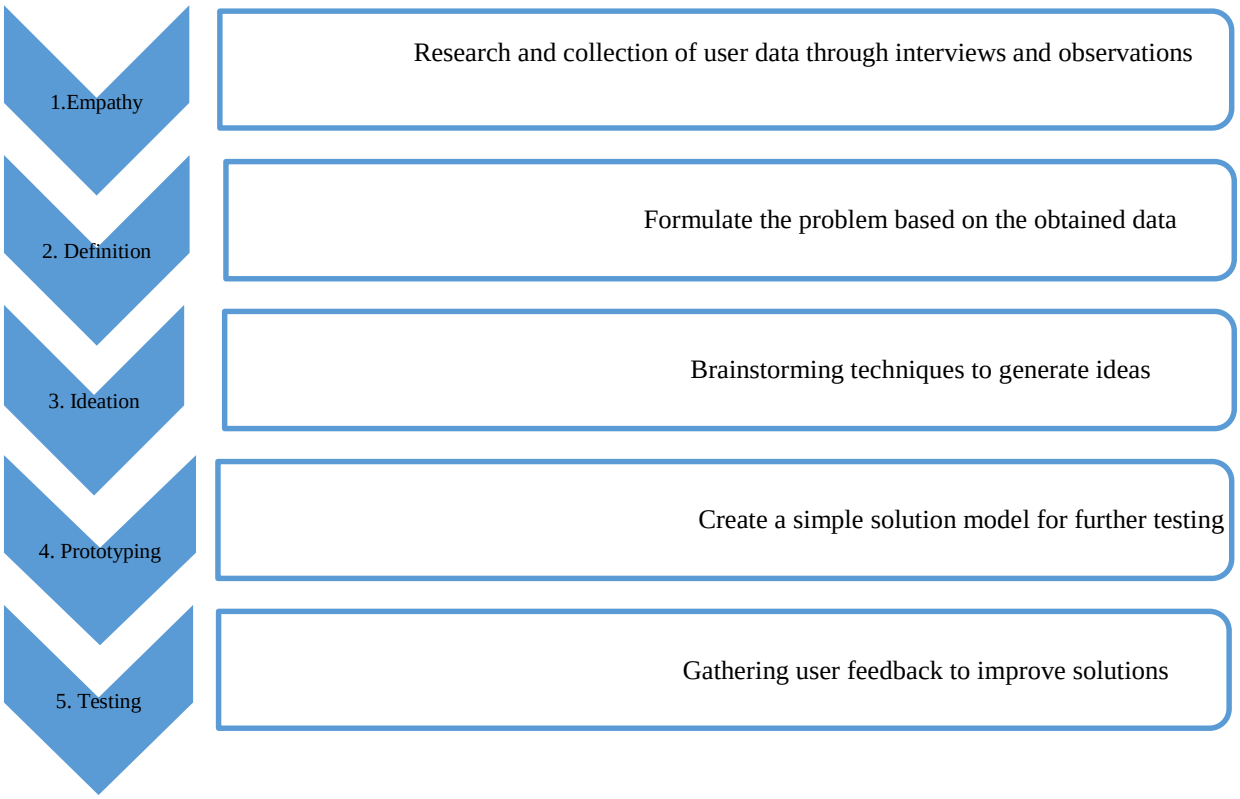

Figure 1. The Design Thinking Process

It should be noted that the Design Thinking methodology includes a variety of methods and tools that are used at various stages of the project team's implementation

1. Developing a new product or service
2. Optimization of a company's business processes
3. Developing a culture of innovation and creative thinking in professional problem solving;
4. Development of development strategies.

The benefits of design thinking to business can be defined as following

- Increased innovation: Involving users in the development process can generate new ideas and solutions.

- Improved user experience: by gaining a deeper understanding of customer needs, products can be created that better meet customer requirements.

- Reduced risk: Testing prototypes before launching a product can reduce the likelihood of market failure.

Adopting a design thinking approach can change a company's culture by creating an atmosphere of openness, creativity, and experimentation. As a result, it can increase employee engagement and encourage the development of new ideas. Despite its many benefits, implementing design thinking can be challenging.

However, applying design thinking in modern business faces a number of challenges such as

1. resistance to change. Employees may not be ready for the new approach, leading to team resistance. Therefore, effective change management and training are needed. 2.

2. time constraints. An iterative design process can take longer than traditional methods, which can make it more difficult to meet deadlines.

3. need for cultural change. Successful implementation of design thinking requires a change in corporate culture to one that is more innovative and customer-oriented.

Despite these challenges, there are a number of leading companies that have successfully used the results of design thinking in their businesses.

Apple is a prime example of a company that has successfully implemented design thinking. By actively involving their users in the development process, they are creating products that meet their needs and expectations.

Airbnb uses design thinking to improve their services. By actively interacting with users and understanding their needs, they are constantly improving their platform.

Another design firm, IDEO, is a pioneer in applying design thinking to business. Their user-centered approach to product development has changed the way companies approach innovation.

Another example is Netflix. Netflix is an American entertainment company that offers movies and TV series based on streaming media. As an innovative solution, they created the first online streaming service for watching movies and TV series. As a result of the successful application of the design thinking model to its business activities, by 2019 the company had grown from a start-up to the world's most capitalized multimedia company with annual sales of 11 billion dollars US in its first decade on the market, surpassing the world-renowned Disney Company in these metrics [2].

In recent years, the concept of design thinking has been actively used in the field of human resource management. The entire human resource management system in the broadest sense includes the methods, techniques, technologies, and processes that organize the activities of an organization's staff of employees. The domain of human resource management includes the recruitment of personnel based on business and personal qualities, the promotion of employees based on the results of evaluations or on the use of a system of evaluations and criteria approved by the organization, and the organization of activities to train and improve the skills of employees [2].

Thus, design thinking is a powerful tool for companies to create innovative solutions and improve the user experience. Success with this approach requires openness to change, creativity, and active teamwork. Design thinking has great potential for further development in Ukraine, especially in the context of globalization and digitalization. Using this approach, Ukrainian companies can adapt to changes in the environment, increase innovation, and improve the quality of their products and services. If the startup environment and education are actively developed, design thinking will become an important tool for Ukraine to be competitive on the global stage.

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THE INFLUENCE OF THE RUSSIAN-UKRAINIAN WAR ON THE ENERGY SECURITY OF THE EUROPEAN UNION

The russo-Ukrainian war has not only become a tragedy for the Ukrainian people but also a challenge to the energy system of the European Union. The escalation of hostilities has led to the disruption of logistical chains, the imposition of sanctions, and geopolitical uncertainty, resulting in significant fluctuations in energy prices and a redistribution of roles in the energy sector.

Energy security is paramount to the European Union's (EU) policy framework. Implementing effective policies in this domain safeguards against threats to energy and fuel supply while mitigating the risks of energy crises within member states. However, given their uneven global distribution, no single nation can achieve complete self-sufficiency in all resources. Consequently, states with limited energy resource endowments exist, necessitating their procurement from external sources. Interdependence among nations engenders various challenges that inevitably impact economic and national security. The most pressing issues that states may encounter are inflated energy resource prices, heightened risks to energy supply stability, and the potential for political leverage to achieve unilateral objectives.

Ukraine's significance for European partners and the impact of the full-scale war on the European Union's energy security are multifaceted. Ukraine is a critical partner for EU nations, primarily due to the transit of the 'Druzhba' oil pipeline through its territory. Construction of this pipeline commenced in 1960, with operational deployment in 1964. The pipeline's annual capacity reaches up to 66.5 million tons of oil. The southern branch of the 'Druzhba' pipeline, traversing Ukraine, possesses a total

capacity of 16.7 million tons annually, with a throughput of approximately 2 million barrels daily. This southern branch is pivotal for supplying energy resources to European countries such as the Czech Republic, Germany, and Hungary [1].

Historically, russian tactics of blackmail and manipulation have been employed to achieve absolute control over energy resources. Since the onset of the full-scale war, a primary objective has been to minimize the russian federation's influence on European energy security and to diversify energy resource sources. The primary fossil fuel sources include oil, gas, and coal, and nuclear power. Concurrently, there is an accelerated development of renewable energy sources, such as solar, wind, hydropower, and biomass.

Russia's invasion of Ukraine has compelled other nations to reassess the imperative of ceasing the acquisition of russian energy resources. In response to military aggression against Ukraine and the occupation of Ukrainian territories, allied countries have imposed sanctions on russia, including those targeting the russian energy sector. Given that trade in oil, coal, and gas replenishes the russian federation's budget and finances its expansionist policies, nations supporting Ukraine's sovereignty and independence are contributing to the struggle against a common adversary and accelerating the path to victory.

- On December 17, 2024, **the United Kingdom** imposed sanctions on 20 vessels of the shadow fleet illegally transporting russian oil, including «Ocean Faye», «Andaman Skies», and «Mianzimu», each of which transported over four million barrels of russian oil in 2024. The UK has sanctioned over 100 ships transporting russian energy resources, including 93 oil tankers, more than any other nation.
- On October 21 in 2024, **Canada** implemented a series of sanctions designed to prevent the circumvention of existing measures and to impede the sale of oil through intermediary companies, thereby closing loopholes previously exploited.
- **Switzerland** has prohibited 52 vessels from providing comprehensive services, which could involve the transportation of russian oil or stolen grain from Ukrainian territory and its subsequent sale.
- In our latest sanctions package, announced on September 24, 2024, **New Zealand** imposed restrictions on individuals and entities involved in russia's illegal occupation of the Zaporizhzhia Nuclear Power Plant, the russian military-industrial complex, and Belarusian individuals and entities providing support for the invasion [2].

In addition to sanctions targeting the energy sector, European nations have gradually shifted away from purchasing russian gas, exploring alternative avenues for cooperation. Poland, for instance, is actively pursuing the diversification of its energy sources, with plans to increase alternative energy production by 20% by 2030. Furthermore, Poland initiated the construction of new power plants in 2019 to ensure its energy self-sufficiency, with one facility slated for completion by the end of 2024 and another projected for completion by 2035.

Through collective efforts and coordinated actions against the russian federation, we are preventing the adversary from consolidating its position and further extending its influence in the energy domain, thereby precluding future acts of energy coercion against other nations.

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TRAVEL BLOGGING AS A MODERN METHOD OF DEVELOPING TOURISM POTENTIAL

Travel blogging, as an innovative communication and marketing tool, is becoming increasingly significant in the tourism industry. It involves the creation and publication of travel-related content on digital platforms, becoming an integral part of the tourism sector [1]. This format promotes active interaction between travel agencies and travelers, allowing them to highlight various aspects of travel experiences and services offered. However, despite the widespread use of travel blogs to promote tourism products, their role in the development of tourist destinations remains insufficiently explored. It is crucial to conduct a deeper analysis of the impact of travel blogging on consumers and identify mechanisms for attracting tourists' attention [2]. This is particularly relevant when a full-scale military invasion has altered tourism activity and perceptions of travel safety.

The purpose of this study is to examine the role of travel blogging in developing the tourism potential of regions and to analyze its impact on tourists' decision-making. The research object is travel blogging as a digital marketing tool in the tourism industry, while the subject of the study is the interaction between travel bloggers, tourism companies, and service consumers.

By sharing their experiences and recommendations, travel bloggers act as intermediaries, helping potential tourists gain insights into various destinations [3]. In times of global challenges, bloggers serve as valuable informants, providing data on

safe routes, the current state of infrastructure, and recommending reliable vacation spots. This underscores the need for a detailed analysis of travel blogging's impact on consumers in the context of the tourism industry.

Blogging, as a phenomenon of the information business, reflects modern trends in electronic communication and the use of web platforms to create and disseminate content. This innovative tool attracts attention due to its ability to generate revenue through various monetization strategies and commercialization approaches. Travel bloggers transform their journeys and experiences into valuable content that engages audiences, providing them with information and inspiration.

Travel blogging has become a significant player in the modern tourism industry, performing various roles and playing an essential function in promoting different destinations and tourism services [5]. Firstly, this type of blogging serves as an effective tool for promoting tourism products and services, attracting new clients to hotels, travel agencies, restaurants, and local attractions. Secondly, travel blogging is an independent business that requires significant effort and investment from bloggers.

Dmytro Komarov, host of the show "The World Inside Out," is a striking example of a domestic travel blogger. With the outbreak of war in Ukraine, he reformatted his show, focusing on the promotion of domestic tourism. This became an essential step in supporting national identity and regional development. Komarov offers his followers unique routes and vacation opportunities in Ukraine, emphasizing the country's beauty and wealth. According to data, the number of tourists visiting Ukrainian regions increased by 30% compared to previous years.

One of Ukraine's most striking examples of successful tourism destination promotion is the Druzhbivskyi Quarry. The beginning of this story lies in the activity of local residents who started sharing their photos and videos of the quarry on social media in 2021. These publications not only showcased breathtaking natural landscapes but also shared stories about this unique site, attracting a broader audience.

Subsequently, travel bloggers recognized the potential of the Druzhbivskyi Quarry as a tourist destination. They began visiting the site, documenting and sharing their experiences on platforms such as Instagram, YouTube, and TikTok. This content significantly increased the quarry's popularity and helped attract tourists from various parts of Ukraine. For example, bloggers Max Uzola and Olya Manko, who run the YouTube channel "Uzol and Manko," released a video titled "Zhytomyr Region - Discovery 2024: The Most Beautiful Quarries, Canyon, Fisherman's House, Stone Village | EXPERIENCE," which, at the time of writing, has garnered over one million views.

As a result, the number of visitors to the Druzhbivskyi Quarry has significantly increased, leading to infrastructure development in the region, with new cafes, hotels, and information centers emerging. This example underscores the importance of social media as a tool for promoting tourist destinations, as local residents, being pioneers, laid the foundation for large-scale promotion through influential travel bloggers.

On an international level, there are successful travel bloggers such as "Nomadic Matt," who promotes budget travel, and "The Blonde Abroad," who focuses on women's travel. These bloggers use various platforms to share their stories,

contributing to the growth of destination popularity. For instance, "Nomadic Matt" recorded a 20% increase in tourist flows to Southeast Asia after publishing a series of articles on affordable travel options.

The analysis of travel blogging's role in promoting tourist destinations demonstrates its significant influence on shaping perceptions of various regions, both in Ukraine and abroad [6]. Travel bloggers, acting as intermediaries between consumers and tourism offers, provide unique information about safe routes, interesting locations, and current events, thereby attracting tourists.

International examples show how bloggers can change attitudes towards specific destinations, enhancing their appeal through personal stories and visual content. The domestic experience, particularly Dmytro Komarov's show "The World Inside Out," illustrates the adaptation of travel blogging to new conditions, emphasizing domestic tourism during wartime. This highlights the crucial role of bloggers in supporting and developing the tourism potential of national destinations.

Travel blogging is becoming not only a source of information but also a powerful marketing tool capable of shaping a positive image of destinations and stimulating tourism activity[7]. As a result, it opens new opportunities for the development of tourist destinations, which is especially relevant in the face of contemporary challenges.

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LES FAMILIARITÉS COMME COMPOSANTE DE LA LANGUE PARLÉE FRANÇAISE

Cette étude examine l'usage des familiarités dans le français parlé. Ces expressions informelles, souvent issues de l'argot ou du langage populaire, jouent un rôle fondamental dans la communication quotidienne. [4] Elles permettent d'exprimer des émotions, de favoriser l'échange social et de refléter l'identité culturelle des locuteurs. Une attention particulière est portée à leur variation selon les régions, les classes sociales, ainsi qu'à l'influence des emprunts étrangers.

Cette étude s'inscrit dans une approche sociolinguistique, en s'appuyant sur les théories de Labov (variation linguistique) et Bourdieu (capital linguistique). Elle vise à montrer que l'usage des familiarités est à la fois un marqueur identitaire et un outil d'expression émotionnelle et sociale.

Le langage familier constitue une composante essentielle du français oral. Les familiarisés, en tant qu'éléments du registre familier, regroupent des mots ou expressions utilisés dans des contextes informels. Ils incluent des diminutifs, interjections, mots d'argot, locutions idiomatiques, et plus encore.

En linguistique, les *familiarités* désignent une unité lexicale propre au registre familier de la langue. Il se distingue par une connotation affective, humoristique ou relâchée. Nous utilisons la classification des familiarités qui s'appuie sur des catégories largement reconnues dans les études de linguistique française. Elle est souvent utilisée dans les travaux académiques, les manuels de linguistique (comme ceux de Georges Kleiber, Henriette Walter, ou encore dans le Dictionnaire de linguistique de Jean Dubois), ou dans les recherches sur les registres de langue et le français familier.

Classification :

- Expressions idiomatiques : « en avoir marre », « c'est nul »
- Argot lexical : « mec », « thunes »
- Diminutifs : « pépère », « fifille »
- Interjections : « oh la vache ! », « pff ! »

Les familiarités trouvent souvent leur origine dans des pratiques langagières marginales avant d'être progressivement intégrées au langage courant. Ce processus de « légitimation » linguistique est notamment observé avec des mots comme *kiffer* ou *galère*, autrefois argotiques et aujourd'hui largement diffusés. On distingue des différences terminologiques ci-dessous:

Familiarités : expression du registre familier, souvent affective.

Argot : langage codé, souvent propre à un groupe social restreint.

Langage populaire : langage oral des classes populaires, historiquement moins valorisé.

Registre familier : registre intermédiaire entre le courant et le vulgaire.

Les *familiarités* facilitent la communication spontanée, permettent d'exprimer la proximité entre interlocuteurs, et renforcent l'identité linguistique d'un groupe.

Après avoir analysé le corpus de cette recherche qui repose sur des dialogues extraits de séries françaises contemporaines (« Dix pour cent », «Lupin ») et des films («Intouchables», «Le Prénom») nous avons défini les principales fonctions des *familiarités notamment* :

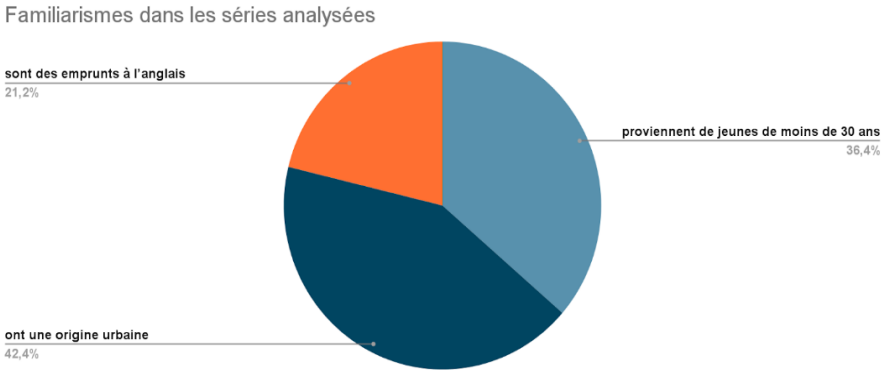
- Expressive : exprimer des émotions (« C'est dingue ! »)
- Connivence : créer une proximité sociale (« mon pote », « meuf »)
- Identitaire : affirmer une appartenance à un groupe (« daron », « relou »)

Les *familiarités* varient selon :

- la classe sociale : les jeunes des milieux populaires utilisent davantage l'argot urbain.
- la région : certaines expressions sont propres à l'Ile-de-France (« ouf ») ou au sud de la France (« fada »).

Le lexique familier français intègre de nombreux anglicismes : «cool», «fake», «chill». Le phénomène est amplifié par les réseaux sociaux et la culture numérique.

L'analyse de 200 familiarités dans les séries analysées a révélé que: 60% proviennent de jeunes de moins de 30 ans, 70% ont une origine urbaine, 35% sont des emprunts à l'anglais.



Les *familiarités*, en tant qu'éléments dynamiques du français parlé, reflètent les mutations sociales et culturelles de la société française. Ils méritent une attention particulière tant sur le plan linguistique que sociologique. Leur maîtrise permet une meilleure compréhension du français authentique, mais leur usage doit être adapté au contexte.

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FINANCIAL STATUS ASSESSMENT INDICATORS OF THE ENTERPRISE

The key element of the economic management system in market conditions is the quality of the development and adoption of management decisions aimed at ensuring the profitability and financial stability of the enterprise. A comprehensive analysis of financial indicators allows for an objective evaluation of the level of financial stability, timely detection of bankruptcy threats, and improvement of the efficiency of financial resource utilization, which contributes to the long-term stability and development of the business entity. [3, p.25]

The analysis of an enterprise's financial status is a crucial tool in financial management. It enables managers, investors, and other stakeholders to gain a deeper understanding of the company's financial health, which helps them make informed decisions. The purpose of this analysis is to evaluate how effectively the enterprise's resources are being utilized and whether it is financially stable. The indicators and methods used vary depending on the specific goals of the analysis.

The classification of key indicators used to evaluate the financial health of an enterprise includes the following categories: Indicators for assessing the property status of the enterprise.

1. Profitability indicators.
2. Liquidity and solvency indicators.
3. Financial stability and sustainability indicators.
4. Profitability indicators.
5. Business activity indicators.
6. Shareholder capital indicators. [1]

Each of these categories offers important in sights into the enterprise's performance and future prospects. Below is a more detailed discussion of each group of indicators and their contribution to understanding the financial health of the enterprise.

Indicators for Assessing the Property Status of the Enterprise

The property status of an enterprise reflects there sources available to it. Understanding the property structure is crucial formanaging and planning the enterprise's operations.

The primary indicators reflecting the property status of an enterprise are:

– the total amount of assets at the disposal of the enterprise, which defines the total value of assets on the balance sheet. This value provides a snaps hot of the size and scale of the enterprise.

– the depreciation ratio of fixed assets shows the portion of fixed assets that have become worn out. This indicator gives insight into the condition of long-term assets, such as machinery, equipment, and buildings.

– the renewal ratio of fixed assets reflects the proportion of new fixed assets relative to the total value of fixed assets at the end of the reporting period. Itisanimportantmeasureforassessinghowthecompanyismodernizingitsinfrastructurean dequipment.

– the disposal ratio of fixed assets reveals the portion of fixed assets that have been sold or disposed of during the period, indicating the turn over or replacement of assets.

This set of indicators allows determining how effectively the enterprise's assets are used. The amount of assets is one of the most important measures of the size and scale of the enterprise. Fixed assets, which include buildings, machinery, and equipment, are a critical part of the enterprise's property. The depreciation ratio provides insights into the condition and age of these assets, indicating the potential need for future investments in new equipment or infrastructure.

Profitability Indicators of the Enterprise

Profitability is a key aspect of an enterprise's financial health. Profitability indicators are used to asses show effectively the enterprise generates profitfromits resources, as well as to identify potential areas for improvement and growth.

The main profitability indicators include:

The key profitability indicators include:

– the return on investment in ordinary shares, which evaluates the profitability of investments made in the enterprise's shares;

– the return on investment in the enterprise, which reflects the overall level of profit received from investments in the enterprise;

– the return on assets, which shows how much profit each unit of the enterprise's assets generates;

– the turnover of material assets, which determines the efficiency of using material assets to generate profit;

– the profitability of sales, which characterizes the ability of the enterprise to earn profit from its core activities.

These profitability indicators provide a comprehensive evaluation of the enterprise's financial health and its ability to generate profits relative to invested capital, total assets, and operational resources. They also help assess the efficiency with which the enterprise utilize sits assets and generates revenue.

Liquidity and Solvency Assessment Indicators

The assessment of liquidity and solvency is critical for determining the financial stability of the enterprise and its ability to meet obligations.

Liquidity refers to the enterprise's ability to quickly convert its assets into cash and pay off liabilities. It is determined by the ratio of highly liquid assets to short-term

liabilities. The liquidity analysis helps predict future changes in liquidity and assess the structure of accounts payable, which is essential for operational planning and managing cash flow.

Solvency refers to the enterprise's ability to meet its financial obligations on time. Solvency is assessed both for the current period and based on forecasts. Current solvency can be assessed based on the reported balance by comparing available funds with urgent liabilities through a payment calendar. The main indicator of solvency is the ratio of cash inflows to fixed expenses.

The assessment of liquidity and solvency includes calculating the following indicators:

– The amount of working capital reflects the portion of the enterprise’s equity that is used to cover current assets, as shown in the equity report.

– The coverage ratio (Kp) reflects the ratio of current assets to the enterprise's current liabilities. For proper functioning, this indicator should exceed 1.0. An increase in this indicator indicates a positive trend. The target value is determined by the enterprise independently and depends on daily needs for free financial resources to cover current liabilities.

– In addition to the coverage ratio, the quick and absolute liquidity ratios are calculated to assess liquidity levels.

– The quick liquidity ratio (Kshl) is calculated as the ratio of the most liquid assets (cash and accounts receivable) to current liabilities. It reflects the enterprise's ability to cover its short-term liabilities with assets that can be quickly realized or converted into cash. The average value of this ratio is 0.5–0.6.

– The absolute liquidity ratio (Ka) (solvency) reflects the enterprise's ability to immediately pay off part of its short-term liabilities with the most liquid assets. The recommended lower limit for this indicator is 0.2.

– The portion of own working capital in covering inventories is the value of inventories financed by the enterprise's own working capital. The recommended lower limit for this indicator is 50%.

These liquidity and solvency indicators are crucial for assessing the enterprise's financial flexibility and resilience. By ensuring that the enterprise can quickly meet its obligations and maintain solvency, these ratios help mitigate potential financial risks.

Financial Stability Indicators

The financial stability of an enterpriser eflects its ability to maintain operations without excessive reliance on borrowed funds. Financial stability is crucial for long-term success, as enterprises that rely heavily on debt are at greater risk of financial in stability.

The main indicators of financial stability include:

– The equity provision ratio, which determines the level of the enterprise's provision with its own funds. It is calculated as the ratio of the actual available sources of own and equivalent funds (excluding debts related to settlements with participants, future income, reserves for future expenses, and payments, and restructured debt) to the total available current assets of the enterprise.

– The financial dependence ratio is the inverse of the equity provision ratio. It defines the share of borrowed funds in the total funding of the enterprise and indicates the level of risk associated with attracting external financial resources.[2. p. 103]

Financial stability also involves assessing the enterprise's financial leverage, which considers long-term obligations and the enterprise's reliance on borrowed capital. Maintaining a good balance between equity and debt is critical for long-term financial health.

A balanced approach to managing debt and equity is essential for maintaining financial stability. Enterprises that maintain a strong equity base and use debt prudently are better positioned for long-term growth and financial health.

Profitability Indicators

Profitability indicators are used to assess the relative profitability of an enterprise from various perspectives. They are essential for comparing profit with the factors influencing it, forming a diverse set of profitability indicators that may vary in content and calculation objectives.

Profitabilityindicatorshelpassesshowefficientlytheenterprisegeneratesprofitsinrelationtosales, assets, equity, and invested capital. Profitability is a key metric for evaluating business performance, helping stakeholders understand the effectiveness of operational strategies and financial management.

Key profitability indicators include:

– Return on equity (ROE), which evaluates how effectively the company uses its equity capital to generate profits.

– Return on assets (ROA), which reflects the ability of the company to generate profit from its assets.

– Gross profit margin, which measures the percentage of revenue remaining after the cost of goods sold, indicating operational efficiency.

These profitability measures provide a comprehensive picture of the enterprise's financial health, helping stakeholders make informed decisions about future investments and business strategies.

The financial status of an enterpriseis a multifaceted concept, encompassing various indicators such as property status, profitability, liquidity, solvency, financial stability, and share holder equity. By assessing these indicators, managers, investors, and other stakeholders can gain a comprehensive understanding of the enterprise’s financial health and identify potential areas for improvement. Regular monitoring of these indicators is essential for ensuring that the enterprisere mains financially stable and capable of achieving its long-termgoals.

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ECONOMIC FACTORS AFFECTING THE ACTIVITIES OF AN ENTERPRISE WITH FOREIGN CAPITAL

Today, companies with foreign capital play an important role in the economy. Their activities affect not only the economic development of the country, but also the competitive atmosphere that contributes to the creation of new jobs and the improvement of infrastructure.

Foreign investments are the values invested by foreign investors in investment objects in accordance with the legislation of Ukraine in order to make a profit or achieve a social effect [1].

One of the important indicators characterising the economic activity and attractiveness of a country for international investors is the volume of foreign direct investment (FDI). Fig. 1 shows the changes in FDI in Ukraine over the period from 2015 to 2022, which allows us to assess the general trends in the country's investment environment.

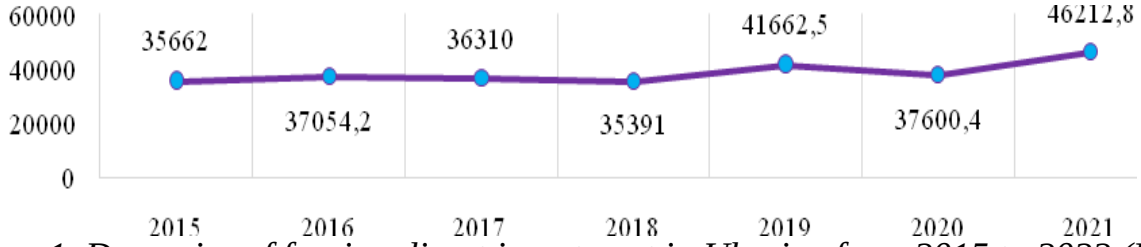

Figure 1. Dynamics of foreign direct investment in Ukraine from 2015 to 2022 (USD million) Source: compiled on the basis of data from [3].

Considering the data in Figure 1, it is worth noting that the volume of foreign direct investment attracted to Ukraine remains relatively low, given the needs of the national economy for financial resources to ensure sustainable development. This situation is a consequence of the specifics of the investment climate in Ukraine, the level of confidence of international investors, and the risks associated with political and economic stability. In addition, the transparency of the business environment and the effectiveness of legal regulation, which remain key factors for increasing the country's investment attractiveness, have a significant impact.

Business entities with foreign investment include the following enterprises:

- with equity participation of foreign investors (JVs), as well as their subsidiaries and branches;
- with 100 per cent foreign investment in the authorised capital;

- branches of foreign legal entities.

Nevertheless, the performance of such enterprises depends to a large extent on many economic factors.

Economic factors influence both the overall economy and individual businesses, deriving from aggregated data across sectors. Investors prioritize measurable and trackable factors to identify trends [2].

These factors can be categorized by their impact. Macroeconomic conditions, including financial stability, exchange rates, inflation, and economic growth, are fundamental. Industry-specific factors reflect market conditions, while financial aspects such as taxation, credit availability, and investment resources shape foreign investment decisions. Market and socio-economic factors, including consumption patterns and income levels, influence demand. Regulatory and legal stability also play a crucial role in long-term business strategies.

Classifying economic factors clarifies their impact on foreign-owned enterprises. Macroeconomic stability, particularly economic growth, inflation, and exchange rates, is essential for investment decisions. Instability increases risks, potentially deterring foreign investors.

Financial factors, including capital availability, credit conditions, and taxation, significantly influence investment decisions. Countries with low interest rates and favorable tax policies attract foreign capital, as seen with Toyota and Volkswagen in Poland and the Czech Republic. Conversely, high taxes and bureaucracy deter investors.

Regulatory stability also impacts investment attractiveness. Strong legal protections encourage foreign capital, while corruption and excessive regulation undermine confidence.

Socio-economic factors, such as income levels and consumption patterns, shape market opportunities. High-income countries attract businesses targeting affluent consumers, while lower-income markets require adapted business models focused on affordability.In conclusion, enterprises with foreign capital are a significant factor in the development of national economies, but their activities are largely dependent on economic factors.These factors create both opportunities and risks for their operations. In order for such enterprises to continue to grow in the future, it is important to constantly monitor the external environment, create flexible business models and cooperate with government authorities to create a favourable investment climate.

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COMPONENTS OF THE ESG RISK MANAGEMENT STRATEGY AND THEIR ASSESSMENT IN THE COMPANY

The concept of ESG (Environmental, Social, Governance) is an important area of research in the field of strategic management of enterprises, covering aspects of sustainable development and risk mitigation. The lack of a universally accepted definition of ESG complicates its systematic implementation, which makes it necessary to analyse the components of this concept. Given that ESG factors determine non-financial aspects of a company's operations, their integration into management practices is becoming increasingly important for both investors and regulators. That is why the study of ESG strategy as a basis for managing sustainability risks is important in terms of developing effective management approaches in the business environment [1].

When studying the ESG strategy, it can be generally considered as an approach to enterprise management that takes into account environmental, social and governance factors in order to increase the responsibility of business to society and stakeholders. Each component of this strategy encompasses a set of measures, including:

– *the environmental component* of the ESG strategy involves identifying and managing environmental risks associated with the company's operations. This includes analysing the areas where the company is most vulnerable to environmental threats and developing appropriate measures. In particular, such measures include assessing compliance with regulatory requirements, monitoring operational processes, implementing pollution control systems, minimising waste and introducing sustainable technologies. Integration of ESG ratings into risk management allows companies to identify long-term risks and improve sustainable development practices, which contributes to their competitiveness and environmental sustainability;

– *the social component* of the ESG strategy covers the management of social risks that may affect the company's reputation, customer loyalty and financial performance. One of the key aspects is compliance with ethical standards in relations with employees, customers and suppliers. Businesses should implement mechanisms to monitor suppliers' compliance with labour laws, security and personal data protection standards. Internal auditors, who check compliance with social standards, as well as educational programmes for employees on ethical behaviour, play an important role here. Active work with stakeholders helps to avoid reputational threats and increase the level of trust in the company;

– *the governance component* of the ESG strategy pertains to corporate governance, ethical conduct, and compliance with legal requirements. Ineffective governance and a lack of transparency can lead to significant financial and reputational losses, as was the case with Volkswagen in 2015. Companies should create risk mitigation strategies that encompass corporate responsibility assessment, anti-

corruption measures, enhancements to internal audit mechanisms, and transparency in executive compensation. The use of analytical technologies and artificial intelligence can help predict potential risks and respond quickly to changes in the regulatory environment.

In order to assess the effectiveness of measures taken as part of the ESG risk management strategy, it is important to develop clear key performance indicators and analyse them regularly[2]. First of all, it should be noted that ESG risk assessment is a key element of an effective risk management strategy.ESG ratings provide an overall assessment of potential threats related to sustainability issues and are based on an analysis of financial performance, environmental risks, as well as social and governance aspects.

Independent rating agencies use various methodologies to objectively assess a company's ESG performance. Environmental risks are evaluated through CO2 emissions, water use, land changes, and biodiversity impact, alongside safety standards for production and waste management. Social indicators include employee training, labour law compliance, and financial transparency, while governance assessment covers corporate transparency, board independence, and anti-corruption measures.

For Ukraine, which is going through a war, this issue is certainly relevant, although it has its own specific challenges. The war has changed the rules of investment, significantly increasing the risks that determine investment attractiveness. However, this process opens up new opportunities to incorporate the principles of sustainable development into the country's economic strategy.

The war has put unprecedented pressure on human resources, in particular through loss of life, migration and reduction in the number of employees. Therefore, the restoration of human capital through the development, public discussion and implementation of educational programmes in educational institutions, the development of professional skills and the retention of qualified personnel in the national labour market will be an important component of the sustainable development strategy. This includes social initiatives that support vulnerable groups and help reintegrate them into the workforce.

In times of war, transparency and timely reporting on the financial and social impact of business activities are crucial. The government has introduced several initiatives to promote these standards, including the Resolution of the Cabinet of Ministers of Ukraine «On Provision of Financial State Support» dated 24.01.2020 No. 28 (the «Resolution») [3]. The Resolution allows state loans that meet the World Bank's environmental and social standards. In addition, the National Bank of Ukraine's policy on sustainable financing until 2025 and other programmes encourage the financial sector to actively implement ESG and non-financial reporting principles. It is expected that after the end of the war, the focus on reporting and disclosure in the context of sustainable development will increase, in particular particularly through the implementation of the Sustainable Finance Disclosure Regulation.

An important component of the country's economic strategy is to contribute to the development of alternative energy, renewable energy sources and the introduction of green technologies, which will become a key element of investment policy. These

initiatives can be supported through international finance mechanisms such as the €50 billion Ukraine Facility. At the same time, the war requires new approaches to supply chain management, in particular with an emphasis on resilience, reliability, and risk mitigation.This includes ensuring the stability of the supply of goods and services even in the face of global crises and conflicts. Companies that start using ESG principles in their supply chains will be better able to adapt to change and become more competitive.

Investments in traditional environmental industries can be an important part of a country's post-war recovery. It is also worth introducing incremental greening measuresinto all business processes, reducing the negative impact on the environment. Cooperation with the European market and Ukraine's movement towards European integration can significantly change the approach to sustainable development in Ukraine. Compliance with ESG will be beneficial for the country if key players focus on energy saving, optimisation of production and management processes, investments in human capital, increased transparency and anti-corruption measures. Supporting local initiatives can be an important element of achieving competitive advantage. Rather than being limited to meeting donor requirements, ESG strategies can provide long-term benefits that not only enhance reputation but also contribute to sustainable development and economic progress.

To conclude, the ESG risk management strategy is an integral part of the modern approach to sustainable development of companies, which takes into account the environmental, social and governance aspects of their activities. Implementing effective mechanisms for assessing ESG risks helps to minimise potential threats, improve reputation and attract responsible investors. In wartime, social sustainability, governance transparency, and environmental safety become especially relevant, requiring adaptation to new challenges.Integrating ESG principles into business helps reduce risks, ensuring long-term competitiveness and economic sustainability.

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ANALYTICAL SUPPORT FOR DECISION-MAKING BASED ON SUSTAINABILITY REPORTING

Sustainability is a topical issue today. EU law requires companies to report the information on the risks and opportunities arising from social and environmental issues, and on the impact of their activities on the environment and society. This helps investors, civil society organisations, consumers and other stakeholders to evaluate the sustainability performance of companies, as part of the European green deal [2].

Many companies focus on the three main areas of sustainability: environmental impact, social impact, and economic impact. They care about reducing pollution, helping communities, and using resources wisely. Companies publish sustainability reports to show what they are doing in these areas [3]. Sustainability reporting supports companies in making smart and sustainable choices. If a company is aware of exceeding the use of energy, it can find ways to use less and save money. If it sees areas where it can support the community, it can invest in programs that help local people. The research aims to showcase how companies can use data from sustainability reports to make decisions that benefit the environment, society, and their business.

The paper studies real sustainability reports from companies in terms of the contained information and its utilization [1]. The emphasis is laid on exploring how different types of data, such as energy use, waste production, and social projects, are reported and how this data can support the company's goals for sustainable growth. When a company reports on its waste reduction efforts, it can analyze the results and decide whether it should invest more in recycling or waste management. When companies understand their impact, they can make better choices for the future. Using data from sustainability reports helps companies become more responsible. They can see the areas where they need to improve and plan for the long term. By focusing on sustainability, a company can build a good reputation, attract more customers, and even save money by reducing waste or energy costs. The reports are not just numbers but useful tools that support positive change.

In conclusion, sustainability is important for the future. Companies need to take responsibility for their actions, and sustainability reports are one way they show this. By analyzing these reports, companies can support the environment, help society, and still succeed financially.

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EXTREME TOURISM: BUNGEE JUMPING, DIVING AND CAVING

The aim of this study was to investigate the types of extreme tourism, its influence on our lives and places to do it.

Modern tourism is not only about beach holidays or city tours. Extreme sports are found everywhere in our lives. Travelers who love thrills understand perfectly well that extreme sports can be life-threatening, but it is the feeling of adrenaline in the blood that makes them return to extreme tour routes again and again.

But extreme tourism cannot be called just fun on the verge of life and death: it provides an opportunity to enjoy unique encounters with nature and the world around us in all its dangerous manifestations [2].

Extreme tourism is divided into water, land, mountain, air and exotic.

Water extreme tourism:

Water tourism includes the types listed above, as well as kayaking, slalom kayaking, and rafting.

Land extreme tourism:

Land-based types of extreme tourism include caving, mountain biking, spelunking, and X-races.

Mountain extreme tourism:

Mountain tourism includes extreme mountaineering, snowboarding, and alpine skiing.

Some of the most popular activities are bungee jumping, diving, and caving. These activities allow you to challenge yourself, get unforgettable emotions, and feel a real adrenaline rush.

Bungee jumping: jumping into the abyss

Bungee jumping is a jump from a height, during which a person is attached to a special elastic rope. It is one of the most famous extreme tourism types, attracting adrenaline lovers around the world [5].

Where can you try?

Korina Bridge, Greece – one of the most beautiful bungee jumping sites in the world, offering incredible views of the gorge.

Victoria Falls, Zimbabwe – jump from a bridge over the Zambezi River from a height of 111 meters.

Hong Kong, Macau Tower is the highest commercial bungee jumping point (233 meters).

Ukraine, Kyiv Metro Bridge is one of the most popular bungee jumping sites in Ukraine [1].

What do you need to know before you jump?

- It is important to check the certification of the company that organizes the jumps.

- This type of activity may be contraindicated for people with heart, blood pressure, or back problems.
- The main thing is to overcome fear and trust the instructors [3].

Diving: a journey into the underwater world

Diving is a form of scuba diving that offers unique opportunities to explore the depths of the sea. The water hides amazing coral reefs, sunken ships, underwater caves, and a diverse world of marine life [4].

The best places for diving

The Great Barrier Reef, Australia is the largest coral ecosystem in the world.

The Red Sea, Egypt is an ideal place for beginners due to its warm water and rich underwater world.

The Blue Hole, Belize is one of the most mysterious underwater places in the world.

Bora Bora Island, French Polynesia is a famous place for diving with stingrays and sharks.

What do you need to know before diving?

- You need to complete training and obtain a PADI or SSI certificate.
- It is important to monitor oxygen levels and be able to properly equalize pressure in the ears.
- After diving, it is not recommended to fly by plane for 24 hours to avoid decompression sickness [3].

Speleology: the study of caves

Caving is the study of natural caves and underground formations. It is one of the most exciting, but also dangerous types of extreme tourism. It involves passing through narrow tunnels, underground lakes, and even vertical mines [6].

The best caves for speleotourism

The Ice Cave in Skaftafell, Iceland is a fantastic place where the ice walls glow blue.

Son Dong Cave, Vietnam – the largest cave in the world with its own ecosystem and rivers.

Optimistic Cave, Ukraine – the longest gypsum cave in the world.

Mammoth Cave, USA – one of the most famous and longest cave systems.

What do you need to know before exploring caves?

- It is worth having physical fitness and endurance.
- Be sure to use a safety helmet, flashlight, and appropriate clothing.
- It is best to explore caves accompanied by experienced guides [3].

So, bungee jumping, diving and caving are extreme types of tourism that give you the opportunity to test your limits and get unforgettable impressions. However, it is important to remember the safety rules, prepare for such adventures and trust only professional organizers. If you are looking for new challenges and want to diversify your life with bright emotions - try extreme tourism!

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THE IMPACT OF ARTIFICIAL INTELLIGENCE ON GLOBAL ECONOMIC GROWTH

The aim of this study was to investigate the impact of artificial intelligence on global economic growth.

Artificial Intelligence (AI) is reshaping economies worldwide, with estimates suggesting it could contribute up to $15.7 trillion to global GDP by 2030 (McKinsey Global Institute, 2023). From finance to healthcare, manufacturing to logistics, AI-driven innovations boost productivity, optimizing decision-making, and give businesses a competitive edge [2].

One of AI's biggest contributions to economic growth is its ability to increase productivity. Research suggests AI-powered automation could raise global labor productivity by up to 40% by 2035 (Accenture, 2023) [1]. AI-driven analytics help companies streamline operations, cut costs, and make smarter decisions—whether it's optimizing supply chains, enhancing customer experiences, or improving predictive maintenance. In finance, for example, AI-powered algorithms process transactions 50 times faster than traditional methods, leading to better risk assessment and fraud detection (World Economic Forum, 2024) [5].

AI is transforming the workforce, eliminating some jobs while creating new ones. By 2025, AI is expected to displace 85 million jobs, but it will also generate 97 million new roles in fields like AI development, cybersecurity, and digital marketing (World Economic Forum, 2024) [5]. However, 40% of workers may need retraining by 2030 to stay relevant in an AI-driven world (PwC, 2023). Governments and businesses must invest in education and upskilling programs to help workers transition smoothly [4].

Artificial intelligence is transforming key industries, making them faster, smarter, and more efficient. In the financial sector, AI-driven trading platforms increase market efficiency by 30% (Goldman Sachs, 2023). In healthcare, AI-powered diagnostic systems detect diseases with 95% accuracy, reducing misdiagnosis rates (Harvard Medical School, 2023). In manufacturing, AI-based predictive maintenance

cuts equipment downtime by 20% (Deloitte, 2023). In retail and logistics, AI-driven demand forecasting improves supply chain efficiency by 35%, reducing waste and optimizing inventory management (MIT Sloan, 2023) [5].

As AI adoption accelerates, concerns around data privacy, bias, and regulation are growing. Policymakers are working to create ethical AI frameworks to ensure transparency and accountability. The European Union's AI Act aims to standardize AI governance, while the U.S. and OECD are pushing for stronger AI safety measures to prevent biased algorithms and unethical data use (OECD, 2023) [3].

AI is undeniably a powerful engine for economic growth, but its success will depend on responsible deployment, strategic policymaking, and workforce adaptation. While it enhances productivity and drives innovation, tackling ethical, regulatory, and employment challenges will be a key factor in ensuring that AI-driven progress benefits everyone.

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THE LAST MOLFAR OF THE CARPATHIANS

The aim of this study was to investigate a part of Carpathian folklore and an important tourist resource in Ukraine.

Molfars, as a unique phenomenon of Ukrainian culture, are not only a part of Carpathian folklore, but also an important tourist resource that attracts travelers with their mysticism and authenticity. Their knowledge related to nature, healing, and spiritual practices arouses interest in modern society, striving for harmony with the surrounding world.

Mykhailo Mykhailovych Nechay (1930–2011) was a prominent Carpathian molfar, folk healer, and Honored Worker of Culture of Ukraine. His activities not only preserved the traditions of Hutsul culture, but also contributed to the development of cultural tourism in the region, opening up new opportunities for the popularization of authentic customs [1].

Biography and activities

Born on February 24, 1930 in the village of Verkhniy Yaseniv, Ivano-Frankivsk region, Nechay studied the properties of plants, folk healing methods and traditions of Hutsul life from childhood, adopting knowledge from older family members. According to local historians, at the age of eight he showed an extraordinary ability to stop bleeding and heal wounds, which laid the foundation for his later work as a healer [1].

Healing and spiritual practice

Throughout his life, Nechay was engaged in healing people with the help of herbs, spells and rituals, providing not only physical but also spiritual support to his compatriots. He was approached by residents not only from the region, but also from other parts of Ukraine, which testifies to his reputation. It is also known that his knowledge was even used for consultations of law enforcement agencies in complex cases, where traditional wisdom helped to reveal the essence of events [2].

Cultural Contribution

In 1964, Nechay founded the folklore and ethnographic ensemble "Struni Cheremosh", where he not only made, but also played the drymba - a traditional Hutsul musical instrument. He was actively engaged in collecting and recording folklore material: legends, spells and tales, which became the basis for preserving the cultural identity of the Carpathians. Of particular importance was his collaboration with director Sergei Parajanov during the filming of the movie "Shadows of Forgotten Ancestors", thanks to which Hutsul life gained wide recognition [4].

Molfars and Tourism

Molfars have always been an integral part of Hutsul culture. The village of Kryvorivnya, where Nechay lived, has become a symbol of the mystical heritage of the Carpathians. Tourists come here not only for the picturesque landscapes, but also to touch the legendary world of folk wisdom, get acquainted with the rituals and listen to stories about real molfars. However, after the tragic death of Nechay in 2011, many people posing as molfars appeared on the market, which creates confusion and complicates access to authentic information for tourists [3].

To effectively popularize authentic molfarism and develop cultural tourism in the Carpathians, it is necessary to implement several key areas, creation of tourist routes that include historical sites associated with the life and activities of prominent molfars, in particular Mykhailo Nechay. Organization of festivals and cultural events dedicated to Hutsul culture and molfarism, which will help attract both local residents and foreign tourists. Information support that will help distinguish authentic bearers of traditions from impostors, providing tourists with reliable knowledge about the history and practices of molfarism. Preservation of the heritage of such outstanding personalities as Mykhailo Nechay is a guarantee of the further development of cultural

tourism, preservation of Hutsul identity and popularization of traditional values of the Carpathians [5].

Thus, molfars are not just a page from the past, but a living bridge between tradition and modernity, which makes the Carpathians a special place on the tourist map of Ukraine.

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MODERN STUDY OF WORLD AD COMPANIES

The aim of this study was to investigate how effective modern advertising companies are. It was examined how advertising contributes to brand strength, influences consumer purchasing behavior, and impacts societal values. Various visuals illustrate the distribution of advertising budgets across different channels, including a pie chart and network diagrams that demonstrate the interconnections between channels and their psychological influence on consumers.

Our data analysis indicates that advertising significantly contributes to market growth and economic activity. We utilized digital tools for data collection, which enhanced the development of optimized advertising strategies.

In today's digitally-driven world, brands and markets evolve rapidly alongside technological advancements. Social networks such as TikTok, Instagram, Threads, and YouTube have become essential marketing platforms due to their vast user bases. These platforms enable precise targeting based on demographics, interests, and behaviors.

According to data from the LiveDune social media monitoring tool (as of March 25, 2025), social media users span various age groups and gender categories, each preferring different platforms. This diversity enables marketers to tailor their messages

for specific segments of the population. Furthermore, a pie chart visualisation illustrates the proportion of each demographic group within a specific social network's user base. For example, we can identify platforms where the majority of users are young adults, and others where older demographics prevail, indicating a shift in platform usage across age groups [1,3,4].

This information allows businesses to deliver highly targeted advertisements to users who are most likely to engage. For companies targeting younger audiences, prioritizing platforms such as TikTok and Instagram can significantly enhance campaign effectiveness.

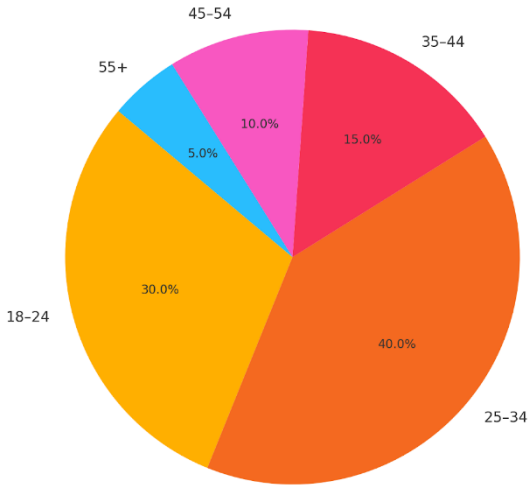
Influencer marketing, especially involving micro and nano-influencers, has emerged as a powerful tool. These individuals maintain authentic relationships with their followers, resulting in higher engagement and trust. According to Freberg et al. (2011), public perception of influencers strongly impacts brand credibility [2, p. 91].

Video advertising, particularly on mobile devices, creates emotional resonance with audiences. Additionally, content marketing plays a crucial role by offering valuable and relevant material that builds long-term trust and loyalty (Pulizzi, 2012) [5, p. 120].

To assess campaign effectiveness, marketers use metrics such as return on investment (ROI), engagement rates, and brand lift. These indicators help determine the long-term influence of advertising strategies.

In contemporary advertising campaigns, targeted advertising has emerged as a crucial and highly effective tool, as shown in the visual representation of the targeting funnel (see Picture 1.2). Research by Epsilon shows that 80% of consumers are more likely to purchase from brands offering personalized experiences. Furthermore, HubSpot reports that personalized email campaigns yield six times more conversions than generic ones [1].

Picture 1.1 – Demographics of Social Media Users



Picture 1.2 – Targeted Advertising Funnel

Stage	Description
1. Data Collection	Gathering data from user behavior, preferences, and demographics

2. Audience Segmentation	Creating segments based on interests, age, gender, etc.
3. Ad Personalization	Tailoring ad content to each segment
4. Placement and Delivery	Delivering ads on suitable platforms (e.g., Instagram, YouTube)
5. Engagement & Conversion	Measuring interaction, click-throughs, purchases
6. Feedback & Optimization	Adjusting campaigns based on performance metrics

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HOW WAR IMPACTED ON THE TOURISM IN DONETSK REGION

The aim of this study was to investigate the influence of the full-scale invasion on tourism in the Donetsk region.

Before the full-scale invasion, tourism was one of the main economic sectors in the region. Outstanding hydrological, geological, and biological natural monuments, the region's rich historical past, numerous historical and cultural landmarks, resort complexes, and dozens of unique industries [1] were attractive not only to Ukrainians but also to foreign tourists. Many resort towns combined most of the features mentioned above, making them both popular and comfortable for vacations. Many children used to spend their summers at a variety of summer camps catering to different ages and interests.

Probably the most famous attractions among tourists were Svyatohirya, the Artwinery sparkling wine factory in Bakhmut, the salt mines in Soledar, the Belokuzminovsky chalk cliffs in the Kramatorsk Regional Landscape Park, and the

Kamiani Mohyly Reserve [2]. These sites were even promoted by the State Agency for Tourism Development in Ukraine.

Unfortunately, everything changed after the start of the full-scale invasion. Many roads, hotels, and historical, cultural, and natural sites were destroyed or looted. Businesses connected to tourism were forced to either shut down or relocate, making travel to the Donetsk region impossible and even dangerous [3]. This led to a decline in the economy and a significant drop in tourist numbers.

All of this will have many long-term effects on the region, such as the perception of it as unsafe for tourism even after the war ends, the psychological impact on both potential visitors and locals, and, as mentioned before, the damage to cultural and natural heritage sites. Many of these sites are impossible to restore or rebuild due to their condition.

At this point, there are some possibilities to restore at least part of the tourism in this area. For example, leisure tourism could be replaced with war tourism, attracting journalists, researchers, and war historians. Additionally, some historical artifacts could be relocated to safe places such as museums or galleries. Another possibility is the development of VR tourism, allowing people to explore old sites virtually.

Future prospects and challenges for this region are making strategies for rebuilding the tourism industry post-war, changing travel trends and their impact on future tourism in Donetsk and increased attention to the region from the government.

In conclusion, the full-scale invasion has profoundly affected the tourism industry in the Donetsk region, transforming a once-thriving sector into an inaccessible and dangerous landscape. The destruction of infrastructure, historical landmarks, and natural sites, along with the collapse of tourism-related businesses, has led to severe economic and cultural consequences. Even after the war ends, the region will face significant challenges in rebuilding its tourism industry due to long-term damage, safety concerns, and shifts in public perception.

Despite these hardships, there are potential paths toward recovery which could help maintain interest in the region’s rich cultural and natural heritage. However, restoring tourism in Donetsk will require strong governmental support, strategic planning, and international cooperation. The long-term future of the region’s tourism depends on its ability to adapt to new realities while preserving the legacy of what was lost.

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QUANTUM COMPUTING: CURRENT RESEARCH AND FUTURE PROSPECTS

The aim of this study was to introduce readers to the fundamentals of quantum computing, its current state of development, key achievements and challenges, and potential future applications of this technology.

Quantum Computing: Current Research and Future Prospects Quantum computing is one of the most advanced fields of information technology, with the potential to fundamentally change approaches to data processing, complex system modeling, and cryptography. It is based on the principles of quantum mechanics, which significantly enhance the speed and efficiency of computational processes.

Unlike classical computers, which work with bits that can take values of 0 or 1, quantum computers use qubits. Thanks to superposition, qubits can exist in both states simultaneously, enabling much faster computations. Additionally, quantum entanglement ensures instant communication between qubits without information loss, providing another important advantage [3].

Current research in quantum computing focuses on developing stable quantum processors and improving error correction methods. Leading technology companies such as Google, IBM, Intel, and D-Wave are actively working on increasing qubit coherence, minimizing noise interference, and enhancing computational reliability. A key area of exploration involves different types of qubits, including superconducting, trapped ion, and photonic qubits, each offering unique advantages for scaling quantum processors [4].

In 2019, Google announced the achievement of quantum supremacy—a state in which a quantum computer solved a problem that a classical supercomputer could not solve in a reasonable amount of time. Although this achievement sparked debate, it was an important step in the development of quantum technologies. IBM and other research institutions presented alternative interpretations, emphasizing that practical quantum advantage still requires further advancements [2].

Quantum computing opens up vast opportunities for practical applications. In cryptography, it has the potential to break modern encryption algorithms, driving the development of quantum-resistant cryptography—new methods of information protection. In chemistry and materials science, quantum computers will help model the behavior of complex molecules, contributing to the creation of new drugs, catalysts, and materials with unique properties. Additionally, quantum simulations offer unprecedented precision in studying quantum phenomena, leading to breakthroughs in fundamental physics [1].

Beyond theoretical advancements, quantum algorithms are being developed to solve complex optimization problems in finance and logistics, allowing for more efficient risk management, portfolio optimization, and improvement of logistical processes. Quantum-inspired algorithms are already being tested in real-world applications, showcasing their potential even before full-scale quantum computers become commercially viable.

Despite significant achievements, quantum computing faces serious challenges, such as qubit instability, scaling difficulties, and the need for new programming approaches. Modern quantum processors require extremely low temperatures to operate, complicating their practical implementation. Furthermore, the development of quantum software remains in its early stages, necessitating innovative frameworks and programming paradigms to leverage quantum computational advantages effectively.

It is expected that in the future, quantum computers will be integrated with classical ones into hybrid systems, enabling their use in finance, logistics, medicine, and scientific research. Governments and private enterprises are heavily investing in quantum technologies, recognizing their strategic significance for global competitiveness [5].

In conclusion, quantum computing is one of the most promising technologies of today. Despite technical challenges, its development continues at an accelerating pace. As research progresses and hardware stabilizes, quantum computing may revolutionize computing systems, opening new horizons for science, business, and information security.

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WINTER SKIING IN SLOVAKIA, FIS HOTEL

The aim of this study was to investigate the skiing resorts of Slovakia and describe the duties of interns at the Hotel FIS.

1. General Information About Internships in Slovakia

I first went on an internship to Slovakia at the age of 17, and it was here that I learned a lot related to my specialty. Štrbské pleso (Slovak: Štrbské pleso) is a lake in the High Tatras, Slovakia. It is located on the southern side of Kryvan Mountain at an altitude of 1335 m above sea level, with the area of 19.8 hectares, and depth up to 20 m. On the southern shore, the resort of the same name has been operating since 1885, the highest in the High Tatras [1].

0. Description of Hotel FIS in the High Tatras

In the Slovak High Tatras, in the very popular mountain resort of Štrbské Pleso, you will find the FIS Hotel. It is a great place for winter sports and enjoying nature. Direct access to the ski slopes, ski jumps and cross-country ski trails at Štrbské Pleso makes the FIS Hotel the best choice for winter sports enthusiasts. The hotel offers a wide range of rooms including standard rooms, superior rooms, family rooms and apartments. Many rooms have wonderful views of the lake and mountains. The hotel has a certain history connected with the sporting events at Štrbské Pleso. It was built for the FIS World Ski Championships in 1970, hence its name [2].

3. Responsibilities of Intern Waiters at Hotel FIS

- Assisting the main waiters in preparing the restaurant hall for the opening.
- Taking orders from guests (under the supervision of experienced waiters).
- Serving drinks and meals to guests.
- Clearing used dishes from tables.
- Carrying out orders from senior waiters.
- Assisting in the preparation of simple drinks and dishes.
- Replenishment of supplies of dishes, drinks and other necessary materials.
- Familiarization with the menu, ingredients and drink menus.
- Studying the rules of etiquette and standards of guest service.
- Familiarization with safety and hygiene rules.

4. Responsibilities of Intern Bartenders at Hotel FIS

- Assistance in preparing the bar for the opening.
- Assistance in replenishing stocks.
- Preparing simple drinks (coffee, tea, juices, water) yourself.
- Regular cleaning of the work area, bar counter and equipment.
- Washing dishes and bar equipment.
- Garbage removal.
- Meeting customers and taking drink orders.
- Serving drinks to customers.

5. Requirements for Interns

- Ability to work for the entire internship period (which may vary).
- Willingness to work required hours, which may include evenings, weekends, and holidays, depending on the department.
- Ability to adapt to different situations and tasks.
- Ability to stand on one's feet for extended periods of time.
- Ability to lift and carry moderate weights.
- Professional appearance and manners.
- Reliability and punctuality.
- Positive attitude and willingness to learn [3, p 320].

6. Internship Conditions at Hotel FIS

Internships can be paid or unpaid. Paid internships may include a monthly stipend or hourly pay. The amount of pay depends on the hotel, region, and length of the internship. Meals may be provided free of charge. Possibility to receive a letter of recommendation.

7. Challenges and Difficulties of the Internship

- Routine and monotonous tasks.
- High workload and high level of responsibility.
- Disappointment due to not meeting expectations.
- Insufficient support and mentoring.

Conclusion

An internship at FIS Hotel is a useful opportunity for those who want to try their hand at the hotel business. It is like the first steps in the professional world, where you can see how everything works from the inside, learn how to serve guests and meet the right people.

But it is worth remembering that not everything is always easy. The salary may be low, you will have to do not very interesting work, or there will not always be enough support. For the internship to go well, it is important to show initiative yourself, not be afraid to ask questions and actively learn.

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USING AI TO ANALYSE THE SECURITY OF BLOCKCHAIN PAYMENTS

The rapid development of technology in recent decades has led to the need for new approaches to data processing and analysis, especially in such dynamic industries as cryptocurrencies and blockchain. With the openness of blockchains, a large number of transactions, and changing market behavior, there is a need for tools that can quickly and accurately interpret complex data. In this context, artificial intelligence (Al) is a powerful tool for analysis and forecasting, capable of identifying patterns that remain inaccessible to traditional methods.

The use of machine learning algorithms, in particular deep neural networks, allows not only to automate the processing of transactional data but also to build predictive models for risk assessment, trend prediction, and detection of anomalous behavior. This opens up new horizons for both research and practical applications in finance, security, and analytics.

As a decentralized data storage technology, blockchain is characterized by a high level of transparency but, at the same time, by complexity in structure and dynamics. Every transaction on the network, every smart contract or token movement leaves a digital trace that can be used for analytics. However, the volume of such data is growing exponentially, making it inefficient to process using traditional statistical methods. In this context, artificial intelligence opens up new opportunities for the structured analysis of blockchain data (online analytics), revealing hidden connections and creating forecasting models [1, p. 46].

Machine learning (ML) methods enable the automation of the blockchain analysis process. One of the most common applications is the classification of wallet types and transaction clustering. For example, the k-means algorithm can be used to group addresses based on their activity, transaction size, frequency of actions, etc. This allows you to separate institutional players from ordinary users, as well as identify potential bots or wallets associated with fraud.

The next step is to build forecasting models based on time series. Algorithms such as LSTM (Long Short-Term Memory) are used to analyze the behavior of the cryptocurrency market in the time dimension. LSTMs are able to take into account both short-term and long-term dependencies between cryptocurrency rate changes, trading volumes, and network activity. Such models demonstrate high accuracy in predicting short-term price changes, especially when combined with technical analysis indicators (e.g., MACD, RSI) [2].

Another promising approach is hybrid models that combine online data with social indicators (content analysis on Twitter, Reddit, etc.). Using natural language processing (NLP), it is possible to detect investor sentiment and predict market growth

or decline even before changes become visible in charts. For example, a sharp increase in the number of tweets with the words "bullish", "buy", "ATH" often precedes market growth [3].

In addition, AI systems can be used to detect anomalies in blockchain networks. This is especially relevant for combating money laundering, terrorist financing, and other criminal schemes. Algorithms such as Isolation Forest, AutoEncoder, or DBSCAN can detect atypical transactions that may signal a violation [3].

One example of a commercial application is Chainalysis, which uses blockchain analytics and Al to identify suspicious wallets and build interaction graphs. Glassnode also provides predictive analytics based on online metrics using intelligent models [1, p.59].

Despite the undoubted advantages, it is worth noting the limitations of using Al in the crypto sphere. First of all, it is the high variability of data, its fragmentation (especially in multi-chain systems), and high market volatility. In addition, even the most advanced models can give false signals in the face of market manipulation or force majeure (such as stock market crashes or global regulatory changes) [3].

Thus, the integration of artificial intelligence with blockchain analytics is a promising area of research that combines a high level of innovation with practical value.

It opens up new opportunities for traders, analysts, fintech product developers, and researchers. Further research should focus on improving the accuracy of models, their adaptability to market changes, and creating open platforms for training and testing AI models based on blockchain data.

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THE PROCESS OF MARKETING RESEARCH AND ITS STAGES

Marketing research plays a crucial role in business decision-making by providing reliable data on consumer behavior, market trends, and competition. A structured research process allows companies to make informed decisions and develop effective strategies. The aim of this study is to explore the fundamental stages of marketing research based on insights from various sources.

Key Stages of the Marketing Research Process:

Identifying the Problem

The first step in marketing research is defining the research problem. A well-formulated problem ensures that the study remains focused and relevant. Businesses must determine the specific challenge they face—whether it's understanding customer preferences, analyzing competitors, or testing a new product concept. Without a clear problem statement, the research risks becoming directionless and ineffective [1].

Developing the Research Plan

Once the problem is defined, a detailed research plan is created. This stage involves selecting the appropriate research design, such as exploratory, descriptive, or causal research. Additionally, researchers decide whether to collect **primary data** (gathered directly from consumers through surveys, interviews, and experiments) or rely on **secondary data** (existing reports, industry statistics, and academic studies). The choice of methods depends on the nature of the research problem and the available resources.

Data Collection

At this stage, information is gathered according to the research plan. Primary data collection methods include qualitative techniques like focus groups and in-depth interviews, as well as quantitative approaches such as online surveys and statistical sampling. Secondary data, on the other hand, comes from published sources, company records, or government databases. Ensuring accuracy and objectivity in data collection is essential for obtaining reliable insights.

Data Analysis and Interpretation

After data is collected, it must be systematically analyzed to extract meaningful patterns and insights. Statistical tools such as regression analysis, factor analysis, and data visualization techniques help transform raw data into actionable conclusions. The goal is to identify trends, relationships, and significant findings that can guide business decisions.

Reporting and Recommendations

A structured research report is prepared to present the findings clearly and concisely. Effective reports include visual representations such as charts, graphs, and tables to make the data easier to understand. The final recommendations should align

with the research objectives and provide actionable insights that help companies refine their marketing strategies.

Implementing and Monitoring Results

The last step in the marketing research process involves applying the findings to real-world business strategies. Companies must continuously monitor the results of their marketing decisions and adjust their approaches based on feedback and performance data. This iterative process ensures that businesses remain competitive and responsive to market changes [3].

Marketing research is an essential tool for businesses, allowing them to adapt to market changes and improve customer satisfaction. A systematic approach ensures that research findings contribute to strategic growth and competitive advantage.

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FAILED MARKETING CAMPAIGNS

Every brand has had its failed campaigns — and big companies are no exception. Failing to fully understand their audience or just making careless mistakes often leads to marketing failures. Sometimes a campaign doesn’t achieve the desired results, and sometimes it can seriously hurt the brand’s reputation [1].

Coca-Cola was losing its market share: blind taste tests showed that consumers preferred Pepsi. As a result, the brand decided to change its nearly century-old secret recipe. The new cola was meant to have a smoother, sweeter taste — similar to Diet Coke, but with corn syrup. Marketers were confident this would bring Coca-Cola back to success, but Americans reacted negatively to the change, and the new cola turned out to be a failure. Within three months, Coca-Cola underwent a rebranding and reintroduced the original drink under the new name Coca-Cola Classic. This led to a significant increase in sales. There were even rumors that the company had planned this move in advance.

The Dove brand is no stranger to failed marketing campaigns. In 2017, the company ran a short-lived Facebook ad featuring a Black woman taking off her shirt to reveal a white woman, who then revealed a Middle Eastern woman. All this supposedly happening after the women used a Dove body lotion. The idea with the advertisement probably was to inform consumers that Dove's product line is for everyone no matter the color of their skin, which is very much in keeping with Dove's brand message of real beauty. After the initial response Dove removed the video clip and issued an apology. However, in 2011, Dove published a "before-and-after" advert which charted the transition of a woman of color into a white woman after using their body wash [2].

In another failed marketing campaign from 2017, Audi ran a campaign in mainland China, hoping to increase their sales of used cars in that country. The ad itself pictured a man and a woman, standing in front of a priest, when the mother of the groom raises her hand. She walks up to the couple, where she starts inspecting the bride.

The most controversial McDonald's ad, shown in the UK in 2017, left many people upset. After receiving hundreds of negative comments on social media, the fast food chain removed the video and apologized. The ad showed a boy who was missing his late father and asked his mom what he had in common with him. While at McDonald's, the woman realizes they both love the Filet-O-Fish. Social media users were angered by the use of a child's emotions to promote burgers, and the brand also faced criticism from several charity organizations [3].

The Gillette commercial, aimed at addressing unacceptable male behavior and "toxic masculinity," received mixed reactions from the public and sparked a lot of debate, but it also gathered millions of views. Part of the audience was outraged by the negative portrayal of men. For example, American actor James Woods commented that supporting a campaign perceived by some as portraying men negatively was unacceptable and promised to boycott Gillette products.

Even the most well-intentioned marketing ideas may turn into reputational disasters if companies misjudge their audience or cultural context. A lack of understanding of your customer can lead to failure. Using references to social issues in advertising is not always a bad idea, but it's a risky path if you're not sure how it will be received. Sometimes, carelessness not only makes the campaign ineffective but also offends people [1].

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Session work № 4

CURRENT RESEARCH IN THE FIELD OF INFORMATION AND COMPUTER TECHNOLOGIES

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MODERN RESEARCH IN THE FIELD OF INFORMATION AND COMPUTER TECHNOLOGIES

Artificial Intelligence (AI) is one of the most transformative forces of the 21st century, reshaping economies, industries, and global power structures. AI is revolutionizing labor markets, accelerating innovation, and altering the balance of power among nations [1, p.2]. However, this rapid development also presents risks, such as job displacement, ethical dilemmas, and cybersecurity threats. The geopolitical landscape is evolving under the weight of AI-driven technological competition, particularly between major powers like the United States and China. The rise of AI is not only affecting global governance but also raising concerns about security, democracy, and sovereignty.

The aim of this research is to analyze the impact of Artificial Intelligence (AI) on geopolitics, global governance, and e-governance. It shows how AI influences international relations, economic power, military applications, cybersecurity, and political strategies. The study also investigates ethical dilemmas, regulatory challenges, and the role of AI in public administration. Finally, the research highlights both the opportunities and risks associated with AI integration in governance and proposes directions for future international AI regulations and ethical frameworks. This article explores AI's multifaceted impact on geopolitics and global governance. It examines how AI influences international relations, its role in e-governance, and the strategic considerations nations must take into account as they integrate AI into their political and economic frameworks.

AI has become a strategic asset for nations, driving economic growth and military capabilities. Countries that lead in AI research and deployment gain a competitive edge in [2, p.7]:

- **Economic dominance**: AI-driven automation increases productivity and efficiency, fueling economic growth.
- **Military applications**: AI enhances cybersecurity, autonomous weapons, and intelligence-gathering capabilities.
- **Political influence**: AI-powered disinformation campaigns and surveillance technologies shape global narratives.

It should be noted that the global AI arms race is intensifying, with significant powers investing heavily in AI research and development. Key trends include:

- **U.S.-China AI rivalry**: Both nations are competing for AI supremacy in defense, economy, and innovation.
- **AI-driven cyber warfare**: AI is used to develop advanced hacking tools, cyber defenses, and misinformation campaigns.
- **Regulatory challenges**: The lack of global AI regulations raises concerns about ethical AI use and security risks.

It is necessary to mention that international organizations are leveraging AI to improve governance, decision-making, and crisis response. AI applications include:

- **Predictive analytics for policy-making**: AI models analyze global trends, such as climate change and economic shifts.
- **Automated conflict resolution**: AI can assist in diplomatic negotiations and peacekeeping operations.
- **Enhanced global surveillance**: AI-driven data analysis improves monitoring of human rights violations and compliance with international agreements.

The integration of AI in governance raises ethical questions, including:

- **Bias and discrimination**: AI systems may reinforce existing inequalities if they are not properly regulated.
- **Surveillance and privacy**: Governments use AI for mass surveillance, raising concerns about individual freedoms.
- **AI in decision-making**: Delegating critical decisions to AI risks reducing accountability and transparency.

It is necessary to focus on the fact that AI is transforming e-governance by improving the efficiency, transparency, and accessibility of public services. Governments utilize AI-powered systems to automate administrative tasks, optimize decision-making, and enhance citizen engagement. By implementing AI-driven solutions, states can ensure faster response times, reduce bureaucracy, and improve service delivery. However, challenges such as data privacy, security risks, and the digital divide must be addressed to ensure equitable access and responsible AI governance [2, p.10; 3, p.100-102].

In Public Administration AI helps to automate administrative processes **in such ways:**

- Enhancing service delivery
- Fraud detection and transparency

- Cybersecurity and Digital Sovereignty
- Threat detection
- Data sovereignty

Conclusion

To summarize the main ideas of the research, it is important to emphasize that AI is reshaping global governance, influencing economic growth, military capabilities, and international relations. While AI enhances efficiency, transparency, and security in governance, it also introduces challenges such as ethical dilemmas, cybersecurity threats, and regulatory gaps [1, p.3].

The intersection of AI and geopolitics is reshaping global governance, creating both opportunities and challenges. AI is enhancing e-governance, improving decision-making, and strengthening international institutions. However, it also intensifies competition among nations, raises ethical concerns, and necessitates new regulatory frameworks. As AI continues to evolve, governments must prioritize responsible AI development to ensure a balance between technological advancement and global stability [3, p.100]. Future research should focus on the establishment of international AI regulations, ethical AI frameworks, and the long-term impact of AI on democracy and sovereignty.

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EVOLUTIONARY ALGORITHMS IN ARTIFICIAL INTELLIGENCE: GENETIC PROGRAMMING AND NEUROEVOLUTION

Evolutionary algorithms are viewed as a set of computational methods inspired by the natural process of evolution [1, c. 3]. Evolutionary algorithms techniques work by improving a population of candidate solutions over multiple generations. Unlike traditional optimization methods, evolutionary algorithms do not require gradient information or smooth, continuous functions; they are effective in handling complex, non-linear, or even discrete problems. At the heart of these methods is a fitness function that evaluates how well each candidate solution performs on a specific task. In genetic programming (GP), computer programs are represented as tree structures

— each node representing an operation or a variable. The fitness function scores each program based on its ability to solve the problem, such as predicting a data trend or controlling NPC. The best- performing programs are selected to form a new generation, mimicking the process of natural selection.

The creation of new candidate programs relies on two key operators: crossover and mutation [2, c. 30]. Crossover takes two parent programs and combines parts of their tree structures to produce offspring that inherit traits from both parents. Mutation introduces small random changes into a program, such as altering an operation or replacing a sub-tree with a newly generated one. These operations help maintain a diverse population and allow the exploration of various regions in the solution space. Over time, the evolutionary process can yield innovative programs that outperform those designed manually. Neuroevolution applies these evolutionary ideas to artificial neural networks. Traditional neural network training involves adjusting fixed architectures using methods like gradient descent. In contrast, neuroevolution allows both the weights and the structure of the network to evolve. A well-known method in this area is NEAT (NeuroEvolution of Augmenting Topologies). NEAT starts with simple networks and gradually complexifies them by adding nodes and connections as needed. This approach not only tunes the connection strengths but also adapts the network architecture to the problem, potentially leading to more efficient and tailored solutions.

One clear advantage of neuroevolution is its ability to discover network architectures automatically. Instead of manually designing a network, which can be time-consuming and error-prone, neuroevolution explores many configurations and identifies those that perform best on the task. This adaptability is especially useful in environments where the ideal network structure is unknown or may change over time.

Example: Applying Evolutionary Algorithms to YouTube Recommendation Systems [3]

To illustrate the practical potential of evolutionary algorithms, consider the case of YouTube's recommendation system. Although YouTube primarily uses deep learning techniques and collaborative filtering, the underlying idea of automatically optimizing a complex system is very similar to evolutionary approaches. YouTube's recommendation system works in two main stages: candidate generation and ranking. In the candidate generation phase, a large number of videos are selected based on the user's history, preferences, and behavior. Then, in the ranking phase, these videos are ordered based on predicted user engagement metrics like click-through rate, watch time, and likes. Imagine applying neuroevolution to optimize the candidate generation stage. In this scenario, the architecture of the neural network responsible for generating candidate videos is not fixed. Instead, an evolutionary algorithm could be used to evolve different network configurations. The fitness function in this context might combine several performance metrics: for example, higher click-through rates and longer watch times would result in a higher fitness score. Over successive generations, the algorithm would produce network architectures that are better at predicting which videos the user is likely to enjoy.

Similarly, genetic programming could be used to evolve decision-making rules within the recommendation pipeline. For instance, a set of rules determining which video features (such as thumbnail quality, video length, or user comments) are most predictive of engagement could be evolved over time. The system would evaluate different rule sets and select those that lead to better overall performance in terms of user satisfaction. By incorporating evolutionary algorithms, the recommendation system could automatically discover new, more effective strategies for selecting and ranking videos. This approach would reduce the need for manual tuning and could help the system adapt more rapidly to changes in user behavior or content trends. Although YouTube's actual recommendation system is proprietary and relies on well-established deep learning models, the example shows how evolutionary algorithms can be applied in similar large-scale, real-world scenarios.

However, there are also some challenges when speaking about Neuroevolution. Evolutionary algorithms often require significant computational resources because they involve evaluating many candidate solutions over numerous generations. This can be a major drawback when each evaluation is computationally intensive, as is often the case with large-scale systems like YouTube's recommendation engine. Furthermore, there is a risk of premature convergence, where the population becomes too uniform and gets stuck in suboptimal solutions.

In summary, evolutionary algorithms like genetic programming and neuroevolution offer powerful tools for developing adaptive, intelligent systems. Their ability to automatically evolve solutions — whether they are computer programs or neural network architectures — makes them a valuable area of research in artificial intelligence. The example of applying these methods to a YouTube-style recommendation system highlights their potential in real-world applications. While challenges such as high computational costs and the risk of premature convergence remain, ongoing research and hybrid strategies continue to expand the practical utility of evolutionary algorithms. As these methods mature, they are likely to play an increasingly important role in optimizing complex systems and improving decision-making processes across various fields [2, 135].

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WHY GAMES ARE NOT JUST FOR GAMING

Video games are changing and becoming more than just entertainment. Although many people still think games are only for fun, new research shows they can help improve the brain. Playing video games can strengthen important skills such as problem-solving, memory, and quick thinking—abilities that are useful in jobs like programming, science, and medicine. While some believe that gamers are inactive or unproductive, studies suggest that games can actually train the brain and support learning. This paper will explore how video games can help people build skills that are valuable in both education and the workplace.

Modern video games are complex and require more than just quick reflexes. Players must engage in strategic thinking, adapt to changing situations, and make rapid decisions under pressure which can change your brain. Many games present players with dynamic scenarios where they must assess information, make choices quickly, and continuously adjust their plans. As a result, video games can help develop valuable skills such as critical thinking, adaptability, and decision-making – abilities that are essential in both academic and professional contexts.

Strategy games are particularly effective at developing forward-thinking and problem-solving skills. These games require players to plan ahead, manage limited resources, and adapt to changing situations. For instance, in *StarCraft*, players must build armies, allocate resources efficiently, and respond to opponents' actions in real time. Similarly, in *Civilization*, players guide a society across thousands of years, making decisions related to military strategy, diplomacy, technological advancement, and cultural development. These gameplay elements mirror the decision-making processes found in fields such as business, management, and science. Players must analyze situations, develop plans, implement them, and adjust based on outcomes – often learning from their mistakes. Research suggests that playing strategy games can enhance strategic thinking and improve real-life problem-solving abilities [6].

Action video games are different. They place high demands on visual and auditory processing as well as rapid decision-making. Research has shown that individuals who regularly play action games tend to have faster reaction times and enhanced attentional control. According to *The Impacts of Video Games on Cognition* study, gamers can react up to 25% faster to visual stimuli than non-gamers [1]. These games train the brain to filter distractions and maintain focus in dynamic, high-stimulus environments. Such cognitive abilities are particularly valuable in fields like emergency medicine, aviation, and software development, where quick thinking and attention to detail are critical. Thus, action video games can enhance the brain's ability to process information rapidly and stay focused under pressure.

Video games also play a role in enhancing memory and cognitive flexibility—the ability to shift between tasks and adapt to new information. Many games require players to remember complex rules, navigate virtual environments, and carry out

detailed plans. Research suggests that gaming can improve attention, working memory, and cognitive processing speed [1]. For example, strategy games have been shown to help older adults maintain flexible thinking, while puzzle-based games like *Portal 2* have demonstrated improvements in spatial reasoning and visual skills after only eight hours of gameplay [1]. These games challenge players to solve new problems, retain information, and adapt quickly—skills that are essential for learning and effective problem-solving across a wide range of professional fields.

In Table 1 we have represented cognitive skills improved by video Games

Table 1

Cognitive Skill	**Description**
Problem-Solving	Ability to analyze situations and find solutions
Strategic Thinking	Planning ahead and managing resources to achieve long-term goals
Reaction Time	Speed of response to stimuli
Attention	Ability to focus on relevant information and ignore distractions
Mental Flexibility	Ability to switch between tasks and adapt to new situations

Games and programming are similar in some ways. Both involve solving problems step by step. In games, you have to know the rules to win. In programming, you have to know the coding language. Games often have puzzles and challenges. These help you think in ways that are useful for programming. Both gaming and programming use logical thinking. This means breaking down big problems into small ones. Games help you develop this kind of thinking [2].

Many video games require players to pay close attention to small details – a skill that is also essential in computer programming. In coding, overlooking a single element such as a semicolon or bracket can lead to major errors. Similarly, games often involve identifying and solving problems, which parallels the debugging process in software development. By practicing these skills in a virtual environment, players improve their ability to notice errors and think critically about solutions – both of which are crucial for writing efficient and accurate code .

In addition, a growing number of games are specifically designed to teach programming concepts. These "programming games" make learning to code more accessible and engaging. Titles like *CodeCombat* and *CodeMonkey* introduce players to languages such as Python and JavaScript through interactive gameplay. Other games focus on skills such as web development, SQL, and version control using Git. These educational games demonstrate how game-based learning can enhance programming education [2].

The principles of gameplay are also being applied in scientific research through what are known as *citizen science games*. These games invite the general public to contribute to real-world scientific problems, often by solving puzzles based on biological data. A leading example is *Foldit*, a game that challenges players to fold

proteins into the most stable structures. Protein folding is critical because a protein's shape determines its function in the body, and understanding these structures can lead to advances in disease treatment.

Foldit has produced remarkable results. In 2011, players successfully solved the structure of a protein related to the AIDS virus in monkeys—something scientists had been working on for 15 years. Foldit players achieved it in just three weeks [3]. This example illustrates how human problem-solving, even by non-experts, can outperform computer algorithms in certain complex tasks.

Other notable citizen science games include *Phylo*, which helps researchers align genetic sequences to study diseases, and *EteRNA*, which involves designing RNA molecules to support biomedical research. These games enable public participation in cutting-edge science and demonstrate how game-based platforms can accelerate discovery by making science accessible and collaborative.

Games are also used in medical training. They use simulation and virtual reality. These tools let students practice medical skills in a safe way. They can learn to diagnose, do surgery, and make treatment choices. Game elements like points and badges make learning fun. Studies show that game-based training helps students learn and remember more [4]. It also lets them use what they learn in a practical way. Games give fast feedback, which helps students learn better. There are different kinds of games for medical training. They help students get ready for real medical situations.

Some research suggests that playing video games may enhance surgical skills. Studies have found that surgeons who regularly play video games tend to make fewer errors and perform certain procedures more quickly [7]. This may be due to the way games improve hand-eye coordination, spatial awareness, and decision-making under pressure—skills that are also essential in surgical settings.

Video games are also being used as tools in patient care. They can serve as effective distractions from pain and encourage adherence to medical treatments. For instance, the game *Re-Mission* was developed to support children undergoing cancer treatment. It helps patients better understand their condition and stay motivated throughout the treatment process [4]. By engaging patients emotionally and cognitively, such games can reduce stress, improve mood, and enhance overall well-being during medical care.

There are numerous real-world examples showing how video games can support professional development. For instance, Mark Zuckerberg said he learned about programming from video games [2]. In the medical field, Dr. James Rosser Jr., a surgeon, reported that his gaming experience enhanced his surgical performance, particularly in terms of precision and reaction time [7]. Dr. Halim Nassar used his medical knowledge to design video games that help with mental health. These are just a few examples of how gaming skills can be useful in different spheres.

To sum up, video games can support the development of a wide range of skills relevant to modern professions. Research shows that games can enhance problem-solving, strategic thinking, reaction time, attention to detail, memory, and cognitive flexibility. The use of game-based methods in education and scientific research has also proven to be effective. Many professionals in fields such as programming, science,

and medicine have benefited from skills gained through gaming. As our understanding of the potential of video games grows, it becomes increasingly important to view them not just as a form of entertainment, but as powerful tools for learning and professional development.

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MEMES – NEW WAY OF COMMUNICATION

The article explores the concept of the Internet meme, its evolution as a modern means of communication, typologies and cultural impact.

Wikipedia defines meme as a cultural item (such as an idea, behavior, or style) that spreads across the Internet, primarily through social media platforms [1]. Internet memes appear in diverse formats such as images, videos, GIFs, and various other forms of viral content. The term was originally introduced by Richard Dawkins in his 1976 book *The Selfish Gene*, where he described it as a unit of cultural transmission – an idea, behavior, or style that spreads from person to person within a society. In the context of today's digital culture, memes have evolved into a distinct form of online expression, shared primarily through platforms such as Instagram, Twitter, Facebook, and others.

While the standard definition provides a general understanding of what a meme is, it can also be helpful to define the concept based on everyday experience as an Internet user. Typically, when people think of a meme, they imagine an image combined with a caption or short piece of text—this is probably the most familiar and widespread format. In many ways, memes are the digital descendants of traditional jokes, delivered not just through language but also with visual elements that enhance the message or humor.

However, memes are not limited to static images. Videos are also commonly used, sometimes with sound and sometimes without. One especially popular format is the GIF—a short, looping video clip (usually around 3 to 5 seconds long) that plays continuously and usually lacks sound. Music plays an important role in meme culture as well. Certain songs are used to reference specific events, people, or online trends. In some cases, a song can even inspire an entire meme genre. One example is *Mississippi Queen* by the band Mountain, which has become closely associated with a specific meme format that will be explored later.

In short, while many memes consist of a combination of text, image, video, and/or music, none of these elements are strictly required. Each can function as a meme on its own, depending on the context and how it is shared online.

It is important to note, however, that attempting to categorize all existing memes is an almost impossible task due to their constantly evolving nature and the sheer diversity of formats and styles. Nevertheless, it is still possible to identify and describe some of the more prominent types.

One such type is the *copypasta* – a meme format that consists solely of text. The term "copypasta" is derived from the words "copy" and "paste," referring to the ease with which these texts are spread by simply copying and pasting them across platforms. Copypastas are often long, exaggerated, or absurd blocks of text, and their repetitive circulation contributes to their meme status. A classic example is the widely known "I own a musket for home defence" monologue, which humorously spirals into increasingly ridiculous justifications for owning outdated weaponry [2]. A more recent example is the "Mercedes CLR GTR" copypasta, which gained popularity in early 2024. This particular text, which appears to be AI-generated, includes a detailed and overly technical description of the Mercedes racing car's performance. It originally appeared in the comments section of car-related posts but quickly spread as it was reposted by various user accounts and bots – many of which tend to recycle content from one another.

The copypasta's rise was further accelerated by meme accounts that began to repost it ironically, using it to mock the repetitive nature of content and highlight how easily platform algorithms could be manipulated. In effect, this block of text became a tool to

boost engagement, leading more users to include it in their posts either to gain visibility or simply to join in on the joke. This phenomenon illustrates how even AI-generated or seemingly random content can evolve into a widely recognized meme when shaped by user interaction and platform dynamics.

Another recognizable meme type is the so-called *Stare* meme. While not as distinct in structure as the copypasta, the *Stare* meme has developed its own stylistic variations and cultural significance. Typically, this meme features an image or video of a person, fictional character, or even an animal staring directly into the camera. The expression is often ambiguous – simultaneously conveying intense emotion and emotional emptiness – which gives it a flexible and relatable quality.

The origins of this meme format can arguably be traced to the 2000 film *American Psycho*, where, near the end of the movie, the main character Patrick Bateman stares into the camera during an internal monologue, as the shot slowly zooms in. This scene has since become iconic and is frequently referenced in meme culture for its unsettling and introspective tone.

Well-known variations of the *Stare* meme include the "1000-yard stare," "Kurt Angie stare," "Ghost stare," and "Titan stare," among others. Many of these are based on images of fictional characters or real individuals captured in moments of emotional intensity—or complete detachment. It is also worth noting that the format has been widely adapted using images of cats and other animals, which adds a humorous and relatable layer. Given the Internet's longstanding affection for pet content, it is no surprise that animal-based versions of the *Stare* meme are especially popular.

This type of meme demonstrates how a simple facial expression can be repurposed in countless contexts to convey irony, exhaustion, existential dread, or absurdity, often depending on the accompanying caption or context [3].

When categorizing memes, it's useful to consider both where they come from and why they are created. Most memes gain popularity on social media platforms like X (formerly Twitter), Instagram, and TikTok, though many originate on more niche forums such as Reddit, 4chan, and Tumblr—spaces known for shaping early meme culture. As for their purpose, memes often serve as a way to cope with everyday problems or frustrations through humor. However, they can also be used to spread positivity, share relatable moments, or simply entertain. Many are inspired by day-to-day life and reflect common experiences and emotions.

In short, while memes vary in format, tone, and origin, they are united by their connection to real life and the emotions people experience in the digital age.

Examining the cultural value of memes, their influence on society, and their role as a new form of communication I would like to mention that memes have the power to "revive" older media – particularly songs and films by recontextualizing them for modern audiences. A strong example of this is the previously mentioned *Mississippi Queen Gun Meme*, which combines segments of educational 3D animations about firearms with the 1970s rock classic *Mississippi Queen*, along with an exaggerated or absurd caption describing a frustrating situation.

While the meme may appear dark, perhaps even controversial, it highlights a broader pattern in digital culture: the use of memes to express and manage mental health

challenges. Often employing irony, self-deprecation, or dark humor, these memes resonate especially with individuals experiencing depression, anxiety, or other psychological difficulties. In many cases, they serve not just as entertainment, but as a form of emotional validation, peer connection, and even psychological relief.

Since memes often reflect real-life events, societal reactions, and current opinions, I believe they can be considered "21st-century graffiti." For example, political memes can serve as valuable historical and cultural artifacts. A recent example is the meme *"Mr. President, we're tired of winning,"* which reflects public dissatisfaction with Trump's policies. It juxtaposes a 2016 speech where Trump claimed victory with images of declining stock markets, implying that the American public disapproved of the economic consequences of his tariffs. Another example is *"Day in the life of a true Brexit geezer,"* which satirizes British stereotypes while commenting on the Brexit referendum. Memes like these capture public sentiment and provide insight into the opinions and reactions of society, making them significant for both the present and the future. Future historians may not only learn what happened but also understand the public's perception of these events.

Memes also raise important questions about freedom of speech. As the saying goes, *"Winners write history,"* meaning that those in power often control the narrative. However, with memes, this dynamic shifts. They are easy to create, share, and save, meaning that once a meme is posted, it often lives on and can spread rapidly. Memes can highlight societal issues such as the *"short attention span"* meme, which points to the growing difficulty of focusing on longer content due to the rise of platforms like TikTok that prioritize short-form videos. Popular memes can offer future generations valuable insight into our culture, but they also present a risk: in some cases, memes can be used to manipulate public opinion or provoke outrage, a tactic that requires critical thinking and media literacy to navigate effectively.

To sum everything up, I want to state that memes overall are a valuable piece of culture, they are and they should remain free, they reflect our society, thoughts, issues, beliefs and can be of a great help to the future historians. You might even call them an art.

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OPTIMIZATION OF THE PATIENT REGISTRATION PROCESS THROUGH AN INFORMATION SEARCH SYSTEM

Today, IT is the basis for innovation in almost all areas of life - from medicine and finance to industry and entertainment. Information technology enables people to access any topic quickly and conveniently. Increasingly, aspects of our everyday lives are being digitally observed and stored. That is why Information Systems (IS) continue transforming how we live, work, and interact, making them an indispensable driving force behind progress and digital transformation in the 21st century.

In recent years, global healthcare systems have experienced significant transformation driven by the rapid growth of digital technologies. Today, innovations such as artificial intelligence (AI) and digital health platforms are changing how healthcare services are delivered, especially in diagnosis and personalised treatment. According to Statista, the Digital Health market in Ukraine is expected to generate approximately $182.9 million in revenue by 2024, with an anticipated annual growth rate (CAGR 2024–2029) of 2.74%, reaching around $209.4 million by 2029.

However, despite the rapid development of new technologies, not everyone can afford access to them, as communities with insufficient economic or digital services are left behind. Studies have shown that "digital deserts"—areas lacking adequate internet access—correlate with fewer healthcare options.

Therefore, any efforts to optimise healthcare, such as a patient registration system, should focus on efficiency and accessibility. Today, an information search system for patient registration can significantly improve access to healthcare services if designed with principles that ensure accessibility for all.

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WHY PEOPLE POST AND SHARE ON-LINE

Social media content now dominates the online world. According to the latest statistics, Twitter (X) saw a 29% annual increase in users, reaching an impressive 187 million people who send out more than 500 million tweets daily [2]. YouTube users upload 400 hours of video every minute, and Facebook attracts 2.8 billion active users each month, with the average user spending around twenty hours on the platform [4]. In just a short period of time, social media has reshaped the Internet and now is influencing how society functions. Due to these transformations, a typical morning of an average person begins with a scroll through Facebook, quickly browsing recent posts and liking those that grab their attention. Millions of people repeat this process every day. But what makes certain content stand out enough to be shared, while so much else is overlooked? Experts generally point to five key reasons behind what drives social media sharing.

1. **To Express Our Identity.** One of the most powerful reasons we share on social media is rooted in how we perceive ourselves, or to be more accurate, how we want others to see us. According to a survey by *The New York Times*, 68% of participants said they share content to help others understand who they are and what they stand for [3]. Psychologists explain this through the concept of two selves: the "*real self*" (our true nature) and the "*ideal self*" (the version we aspire to be). Much of our behavior is driven by the desire to align more closely with that ideal self. As a result, the posts we share can serve as a curated version of the person we want to present to the world. For example, supporting a political cause might signal our beliefs, a humorous post might reflect our wit, and sharing music could reveal our taste.

Additionally, social media platforms often reinforce this behavior through positive feedback. The more we post, the more we receive likes, comments, and followers – rewards that boost our self-esteem. This cycle confirms the identity we present online and motivates us to keep posting in search of more affirmation.

0. **To Maintain Relationships.** As social beings, we naturally seek to build and sustain meaningful connections. Sharing content online helps us do that. With our hectic schedules and limited time for face-to-face interaction, social media offers a quick and convenient way to stay in touch with friends and family. This role became especially significant during the COVID-19 pandemic, when physical separation was at its peak. In many ways, social platforms stepped in to fill the void, helping people reconnect and maintain their social bonds.

A survey found that 43% of participants felt that social media helped lift their mood during times of stress, anxiety, or depression. Among young people, nearly 90% said it was either "very" or "somewhat" important in staying in touch during the pandemic [5].

People especially like to share content that has specific relevance to a relationship or believe it might be interesting to their friends. For example, they often share content that captures a mutual interest, a shared experience, a private joke, or an idea for a future plan.

3. To Gain a Reward. Sometimes, person's motivation to share on social media is driven by the promise of a reward. Brands frequently use social platforms to engage with consumers by offering incentives – whether it's a free item, a discount, or a chance to win something. Many users will "like" a page or "share" a post specifically to access these perks. In fact, one study found that 67% of people who followed brand pages on Facebook did so just to receive exclusive deals [1]. On Instagram, contest-related posts tend to perform especially well, attracting 3.5 times more likes and 64 times more comments than typical content.

4. To Feel Connected and Accepted. Another reason users share content online is to feel connected and accepted by others. Positive reactions, i.e. comments and likes, can reinforce our *sense of belonging*. Most people would admit they feel better when a post is widely liked than when it's ignored. One study clearly demonstrated this: frequent Facebook users were told to use the platform as usual, but without knowing that no one would respond to anything they posted. No likes, no comments – just silence. By the end of the study, many participants reported feeling a drop in self-esteem and overall well-being.

This and similar studies highlight how important social validation is in the digital space. Feedback from others helps us feel seen and connected. However, the need for approval can also become a source of pressure. Many users start to feel they *must* post only content that will please others, which can lead to anxiety, stress, and even 'a disconnect' from their true self.

5. To Share Valuable or Inspiring Content. Many people are motivated to share content simply because they believe it has something worthwhile to offer – whether it's entertaining, insightful, or inspiring. In The New York Times study, 94% of participants said they think carefully about whether what they share will be useful or meaningful to others [3]. It might be a funny video, a thought-provoking quote, or an informative article – whatever it is, we often share with the hope that others will enjoy or benefit from it as we did.

Additionally, social media has become more than just a place to connect with others – it increasingly shapes how we view the world. Researchers note that it influences our perceptions and interactions, and many users now see social platforms as tools for creativity, learning, and exploring other cultures. By sharing content, we not only engage with our communities but also expand our awareness beyond our everyday surroundings.

Conclusion. Understanding what motivates people to share is key to creating content that resonates. The better you understand your audience's intentions, the more likely your content is to connect, engage, and be shared widely.

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CONTEMPORARY ADVANCEMENTS IN INFORMATION AND COMPUTATIONAL TECHNOLOGIES

Information and computational technologies (ICT) are evolving at unprecedented velocity and fundamentally shaping contemporary civilization. As an aspiring programmer, exploring current ICT advancement trajectories fascinates me since comprehending these evolutionary paths is crucial for my professional journey. Recognizing frontier research domains will guide my specialization choices and illuminate which competencies will command premium market value. This investigation aims to dissect principal ICT research trajectories and evaluate their transformative potential.

Machine intelligence remains among the most vibrant research spheres [1]. Recent years have witnessed remarkable breakthroughs in neural architectures, creative synthesis models, and autonomous optimization frameworks. Neural computational structures have permeated pattern identification, linguistic processing, and creative generation applications [2]. Transformer architectures, for instance, have fundamentally reshaped textual analysis capabilities. I recently incorporated DALL-E into educational assignments and found the visual synthesis quality remarkable. This domain faces challenges including ethical considerations, algorithmic prejudice issues, and substantial computational demands [1]. During academic presentations, our instructor emphasized that energy requirements for training extensive machine intelligence models present significant environmental concerns.

Distributed computing paradigms continue their evolution, delivering increasingly adaptable and performance-oriented solutions [4]. Function-as-service

architectures enable developers to concentrate on implementation logic without infrastructure management concerns. During practical workshops last term, I deployed a modest service using AWS Lambda and was impressed by the deployment streamlining. Edge computing approaches reduce latency and alleviate the load on central systems, particularly beneficial for interconnected device applications [5]. Composite cloud environments gain corporate sector traction [4]. I anticipate multi-provider strategies will dominate future landscapes, helping organizations mitigate vendor dependency risks.

Connected device ecosystems increasingly integrate throughout diverse life aspects [3]. Metropolitan innovation leverages sensory networks to enhance urban infrastructure, traffic coordination, and power utilization. Industrial device networks deploy intelligent monitors in production environments to maximize operational efficiency. Residential automation and wearable technology markets expand, transforming daily experiences [3]. My current project involves Arduino-based thermal monitoring system development, where I confront challenges regarding secure information preservation and transmission protocols.

Amidst accelerating digitalization, digital protection considerations gain paramount importance [3]. Quantum-resistant cryptographic methods evolve to counter threats from quantum computation capabilities. Machine intelligence security receives significant attention, exploring defense mechanisms against adversarial manipulation [2]. Biological characteristic authentication advances to strengthen access control systems. During cybersecurity instruction, we examined neural network vulnerability to subtle input manipulations, demonstrating how even cutting-edge technologies harbor weaknesses requiring investigation.

The practical implementations of these technological frameworks demonstrate remarkable diversity. Intelligent transportation coordination optimizes urban mobility, reducing congestion issues. Individualized healthcare utilizes information analytics for proactive medical intervention. Precision agriculture deploys sensor arrays for crop condition assessment [5]. Our academic institution partners with regional enterprises, introducing me to an innovative water resource management initiative.

Simulated and enhanced reality technologies unlock novel possibilities across educational, medical, and entertainment sectors. Virtual laboratories enable risk-free experimental learning. During computer graphics instruction, we observed three-dimensional model creation processes for immersive environments. I've begun exploring WebXR for developing elementary augmented reality applications.

Distributed ledger technology promises transformation across financial services, supply chain management, and administrative governance by ensuring information transparency [4]. During an elective module, I attempted Solidity contract implementation and recognized rigorous testing importance, as programming errors can trigger financial consequences.

Quantum computation represents a revolutionary problem-solving approach [2]. While comprehensive quantum systems remain under development, existing implementations demonstrate quantum advantages for specific computational

challenges. An instructor noted that Shor's algorithm theoretically threatens most contemporary encryption frameworks [3].

Massive information processing and analytical methodologies constitute another crucial direction [5]. Data volumes expand continuously, necessitating innovative processing approaches. During database coursework, we utilized MongoDB for unstructured information management, and its flexibility impressed me.

ICT research progresses rapidly, generating novel opportunities. As a programming student, I recognize potential in technological convergence addressing complex challenges [1]. I believe ICT's future lies in multidisciplinary integration, motivating my focus on machine learning algorithm exploration. Future investigations might examine ethical dimensions of machine intelligence application [2]. Technological advancement must consider societal implications [3]. Exemplifying this approach, I developed a conversational assistant for our university's digital platform supporting student information discovery. Continued engagement with emerging technologies and their societal implications will shape not only my career path, but also contribute to responsible digital transformation.Φ

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IMPLEMENTATION OF MACHINE LEARNING TECHNOLOGIES FOR CYBERSECURITY THREAT ANALYSIS

The modern world of information technology is characterized by a rapid increase in the number and complexity of cybersecurity threats. According to the 2024 Global Cybersecurity Report, the number of recorded cyberattacks increased by 38% compared to the previous year, and their sophistication continues to rise as attackers utilize advanced technologies, particularly artificial intelligence [1, c. 60]. Traditional information security systems based on signature analysis and static rules demonstrate limited effectiveness in detecting new types of attacks and protecting against complex, targeted threats [1, c. 65].

In this context, machine learning (ML) technologies open fundamentally new possibilities for improving information security systems. The ability of ML algorithms to analyze large volumes of data, identify hidden patterns, and adapt to new types of threats makes them extremely promising for cybersecurity applications [2, c. 115]. However, despite significant potential, integrating ML technologies into practical information security systems remains a challenging task that requires solving numerous technical and methodological issues [1, c. 68].

This research aims to develop and evaluate the effectiveness of new approaches to detecting and classifying cybersecurity threats using modern machine learning methods. Special attention is paid to creating a hybrid system that combines different types of ML algorithms and behavioral analysis methods to ensure high accuracy in threat detection while minimizing the number of false positives [3, c. 147].

Theoretical Foundations and Literature Review:

Analysis of current scientific literature indicates growing interest in applying machine learning methods in cybersecurity. Kovalchuk and Ivanov [2, c. 116] propose a classification of main approaches to using ML for intrusion detection, identifying the following categories:

1. Supervised Learning methods that require labeled datasets with examples of normal and malicious activity.
2. Unsupervised Learning methods based on detecting anomalies in unlabeled data.
3. Deep Learning that uses multi-layer neural networks to detect complex patterns in data.

Sharma and Patel [3, c. 150] made a significant contribution to the development of deep learning methods for network intrusion detection, conducting a comprehensive analysis of various neural network architectures and their effectiveness in detecting different types of cyberattacks. The authors demonstrate that convolutional neural networks (CNN) and recurrent neural networks with long short-term memory (LSTM) show the highest efficiency for network traffic analysis [3, c. 154].

Wang proposed a hybrid model concept that combines deep learning with behavioral analysis methods, allowing for improved accuracy in detecting complex attacks. However, their proposed architecture has limitations regarding real-time data processing and requires significant computational resources [4, c. 105].

Despite significant progress in research, several unresolved issues remain, including:

- High number of false positives in ML-based systems [2, c. 118]
- Difficulty in interpreting deep learning model results [3, c. 158]
- Limited effectiveness of existing methods in detecting zero-day attacks [4, c. 106]
- Scalability and performance issues when working with large data volumes in real-time [1, c. 68; 4, c. 107]

Our research aims to address these issues by developing a new threat detection system architecture and optimizing ML algorithms to ensure high accuracy and efficiency.

Research Methodology:

To achieve the stated goals, a comprehensive research methodology was developed, including the following stages:

1. Data collection and preparation. The study used the CICIDS2021 dataset containing network traffic records with various types of cyberattacks, including DoS/DDoS, Brute Force, SQL Injection, XSS, and others [2, c. 120]. The dataset was expanded with our own traffic samples collected in a controlled environment simulating a medium-sized corporate network. The total dataset size comprised over 1.2 TB of raw network packets.
2. Preprocessing and feature engineering. This stage included the following steps:

- Data filtering and normalization
- Extraction of relevant features from network packets (78 features total)
- Encoding categorical variables
- Class balancing to avoid model bias [3, c. 152]

0. Development and training of ML models. For comparative analysis, the following types of models were implemented and evaluated:
   - Traditional ML algorithms: Random Forest, Gradient Boosting, Support Vector Machines [2, c. 119]
   - Deep learning models: Deep Neural Networks (DNN), Convolutional Neural Networks (CNN), Long Short-Term Memory networks (LSTM), and a hybrid CNN-LSTM model [3, c. 153]
   - Ensemble methods combining results from different models [4, c. 108]

0. Testing and evaluation of the system under near-real conditions. The developed system was tested on a dataset containing samples of new types of cyberattacks not represented in the training set to evaluate its ability to detect unknown threats [1, c. 70].

Hybrid System Architecture:

The proposed hybrid system architecture consists of four main components:

1. Data collection and preprocessing module responsible for collecting network traffic, normalizing it, and extracting relevant features [2, c. 121].
2. Anomaly detection module based on autoencoders, trained on normal traffic and capable of detecting deviations from normal behavior [3, c. 155].
3. Attack classification module based on CNN, which determines the type of detected attack [3, c. 156].
4. Behavioral analysis component using recurrent neural networks to analyze sequences of user actions and detect complex attacks [4, c. 103].
5. Decision-making module that combines results from all components, makes decisions about the presence of threats, and generates notifications for system administrators [1, c. 71; 4, c. 103].

An important feature of the system is the feedback mechanism that allows continuous improvement of models based on new data and confirmations/refutations from security analysts [4, c. 105].

Comparison with Existing Solutions:

Comparison of the developed system with existing commercial solutions showed that the proposed approach reduces the number of false positives by 35% while maintaining high detection accuracy. This is achieved through:

- Using a hybrid architecture that combines different types of ML models [2, c. 122]
- Implementing a behavioral analysis mechanism [4, c. 108]
- Applying adaptive decision-making thresholds that adjust according to the specifics of the network environment [3, c. 159]

Practical Implementation and Deployment:

Based on the research results, software for network security monitoring using the proposed methods was developed. The system is implemented using Python programming language and TensorFlow and PyTorch frameworks for implementing machine learning models [3, c. 160].

The software architecture provides integration capabilities with existing information security systems through standard APIs and protocols. The system has a modular structure that allows easy adaptation to different network environments and user needs [1, c. 71].

Pilot implementation of the system in a medium-sized IT infrastructure (network with approximately 500 endpoints) showed the following results:

- 27% improvement in cyberattack detection effectiveness compared to traditional systems [2, c. 123]
- 35% reduction in false positives [3, c. 161]
- Reduction in security incident response time from 45 to 12 minutes [4, c. 106]

Conclusions and Future Research Directions

This study presents a new approach to detecting and classifying cybersecurity threats using modern machine learning methods. Experimental results confirm the high effectiveness of the proposed hybrid architecture, which combines anomaly detection, attack classification, and behavioral analysis modules [1, c. 72; 3, c. 162].

The main advantages of the developed system include:

- High accuracy in detecting various types of cyberattacks (up to 99.3% for some types) [3, c. 170]
- Significant reduction in false positives compared to existing solutions [2, c. 128]
- Ability to detect unknown types of attacks (Zero-day) with 89.3% accuracy [4, c. 103]

Future research directions include:

1. Development of Explainable AI methods to increase the interpretability of deep learning model results [3, c. 162]
2. Implementation of federated learning methods to ensure data privacy in collaborative model training [2, c. 124]
3. Improvement of detection mechanisms for complex, multi-stage attacks [4, c. 103629]
4. Development of active learning methods for rapid system adaptation to new types of threats [1, c. 72]

The practical value of the research lies in creating an effective tool for enhancing the cybersecurity level of organizations of various scales and industry affiliations.

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Session work № 5

CURRENT RESEARCH IN THE FIELD OF ENGINEERING SCIENCES

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УКРАЇНСЬКА МОВА В ІНЖЕНЕРНІЙ ОСВІТІ

Актуальність теми зумовлена тим, що сучасна українська мова дедалі більше піддається впливу іншомовних запозичень, особливо англіцизмів. Це проявляється у сленговому мовленні, професійних термінах та повсякденній комунікації.

Серед причин поширення запозичень можна виокремити кілька основних. По-перше, це тісна взаємодія мов і культур, що сприяє виникненню проміжних мовних утворень, зокрема жаргонізмів. По-друге, розвиток технологій зумовлює появу нових понять і термінів, що часто запозичуються без адаптації. По-третє, використання іншомовних слів сприймається як спосіб підкреслення модерновості та належності до певних соціальних чи професійних груп. Нарешті, ще однією причиною є недостатній рівень володіння рідною мовою, що ускладнює формулювання думок літературною українською.

Запозичення проходять різні етапи адаптації. Одні слова засвоюються без змін (наприклад, «паті» від *party*, «кеш» від *cash*), інші отримують нове значення («саунд» як «гучна музика» замість «звук»), а треті змінюються за допомогою українських словотворчих засобів («юзати» – користуватися, «гуглити» – шукати в інтернеті).

Українська мова постійно розвивається, тому запозичення є природним явищем. Проте важливо не сліпо приймати іншомовні слова, а збагачувати та розвивати власну лексику. Завдання полягає не у відмові від сленгу чи запозичень, а у вихованні мовної культури та формуванні свідомого підходу до використання слів.

У сучасній інженерній та технічній освіті важливим аспектом є правильне використання професійної термінології українською мовою поряд з її

оригінальними назвами. Багато технічних термінів, особливо в галузі програмування, мікроелектроніки та автоматизації, є інтуїтивно зрозумілими лише для носіїв мови, з якої вони походять. Наприклад, абревіатури RAM (Random Access Memory) та ROM (Read-Only Memory) можуть бути неочевидними для студентів, які не знайомі з англійською. Однак переклад цих термінів як «оперативна пам’ять» та «пам’ять тільки для читання» значно полегшує розуміння їхньої суті. Аналогічно, у сфері програмування терміни "Code review" можна перекласти як "перевірка коду", "Front-end" – як "клієнтська частина", "Back-end" – як "серверна частина", "Commit" – як "збереження змін", а "SQL query" – як "запит до бази даних". У сфері CAD/CAM систем "Rendering" відповідає "візуалізації", "PBR (Physically Based Rendering)" – "фізично коректному рендеру", "CAD" – "системі автоматизованого проектування", "CAM" – "системі автоматизованого виробництва", "CNC" – "числовому програмному керуванню". У мікроелектроніці "PCB" – це "друкована плата", "MOSFET" – "польовий транзистор", а "MEMS" – "мікромеханічна система". У навчальному процесі використання як українських відповідників, так і оригінальних назв сприяє більш ефективному засвоєнню матеріалу, допомагаючи майбутнім спеціалістам орієнтуватися в міжнародному професійному середовищі.

Окрім освітнього аспекту, важливим є також використання зрозумілих термінів у професійній діяльності. Спеціалісти, які працюють з клієнтами, замовниками чи колегами, що не мають технічної освіти, повинні адаптувати свою лексику для уникнення непорозумінь. Використання винятково англомовних термінів може ускладнити спілкування, тоді як пояснення українською мовою робить інформацію доступнішою для ширшої аудиторії. Варто зазначити, що перекладаючи терміни, потрібно враховувати контекст, щоб бути максимально точним та уникнути неправильного розуміння лексичного значення слів. Наприклад, термін «інтерфейс» (interface) може бути пояснений як «засіб взаємодії», а «рендеринг» (rendering) – як «процес обробки зображення». Подібний підхід забезпечує краще розуміння технічних процесів та сприяє ефективнішій комунікації.

Отже, поєднання україномовної термінології з оригінальними назвами є необхідним як у навчанні, так і в професійному спілкуванні. Це допомагає майбутнім інженерам не лише глибше розуміти спеціалізовані поняття, але й ефективно доносити їх до тих, хто не володіє технічними знаннями. Розвиток та стандартизація української технічної мови сприятиме підвищенню рівня освіти та професійної взаємодії, що є ключовим для подальшого розвитку науки та технологій в Україні.

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PLASMA METAL PROCESSING: PROSPECTS FOR USE IN MECHANICAL ENGINEERING

The use of plasma metal processing is a progressive area in mechanical engineering that has gained significant development in recent years. Plasma metal processing has great prospects in modern mechanical engineering due to its unique properties and wide range of applications.

The relevance of studying the plasma processing method is due to the need to improve the efficiency of metal part processing, especially those requiring high precision and minimal thermal effects.

Plasma processing is a technological method of processing in which a jet of ionized gas (plasma) is used to remove material. The main properties of plasma are high electrical conductivity, which allows the plasma to be controlled by magnetic fields; high velocity of plasma-forming particles; and high plasma temperature.

Plasma is used primarily in processes that require high-temperature concentrated heating of large areas of the workpiece material. As a result of the plasma jet’s impact on the processed material, the latter is heated in the processing area, then melts and partially evaporates. The molten material is removed from the processing area by the kinetic energy of the plasma jet. Plasma processing changes the shape and dimensions of the workpiece, the structure of the processed material, or the state of its surface.

Plasma processing includes: plasma turning, isolation and gouging cutting, coating, cladding, spraying, welding, planing, rock destruction (boring), and plasma surface activation [2].

Plasma processing has such significant technological advantages as: the possibility of application for processing any metals; the cutting speed for metals of small and medium thickness is several times higher than the speed of gas-flame cutting; small and local heating of materials, which eliminates thermal deformation; high purity and quality of the cut surface; cutting process safety; and the possibility of contour cutting.

However, the plasma method of material processing also has its disadvantages, such as: the need for relatively complex, bulky equipment and higher loads than in conventional arc processing; fairly rapid electrode wear; and the need to use special gases during processing, which increases the cost of the process [1, p. 194].

Plasma metal cutting is carried out using a plasmatron. A plasmatron (plasma generator, plasma head) is a gas-discharge device for producing low-temperature plasma. Arc and high-frequency plasmatrons are the most widely used.

In arc plasmatrons, gas is heated to the required temperature by an arc electric discharge. There are two types of arc plasmatrons: 1) direct-acting plasmatrons (for creating an external plasma arc); 2) indirect-acting plasmatrons (for creating a plasma jet).

High-frequency plasmatrons include inductive, capacitive, torch plasmatrons, corona discharge plasmatrons, high-frequency corona plasmatrons, and microwave plasmatrons.

A plasmatron consists of a body with a small cylindrical arc chamber inside. The channel forming the compressed arc is located at one end of the chamber, and a welding rod is located on the other side [3].

The principle of operation of plasma cutting machines is based on melting the material due to the heat generated by the compressed plasma arc, followed by intensive removal of the melt by the plasma jet.

Arc formation between the electrode and the surface is achieved by igniting a preliminary arc between the tip and the electrode. It comes out of the plasmatron nozzle and turns into a working stream. After that, the plasma arc column completely fills the channel. The gas passes through the plasmatron chamber, heats up and increases in volume. Chemically active plasma is used to intensify metal cutting. The high productivity of plasma cutting allows it to be used in continuous production processes [4].

Thus, the study of the plasma metal cutting process is extremely important for improving material processing technologies in industrial mechanical engineering, which will help to improve product quality, reduce waste, and optimize production processes.

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THE ART OF INDUSTRIAL AESTHETICS: A HISTORICAL PERSPECTIVE ON DESIGN

The history of design isn't just a chronology of events or a list of famous names. This is a reflection of the profound changes in society, economy, technology and culture that have taken place over the past hundred years. Design became its own job around the late 1800s and early 1900s because of new challenges in the industrial world. Making lots of products, the growth of machines, more competition, and what people wanted changed, all needed a brand-new way of making things.

Design didn't just pop up out of nowhere! It has roots in the old ways of making things look nice, like decorations and crafts. But instead of just one person making something by hand, modern design is about making lots of things that look good, are easy to use, work well, and do their job. It's like a helpful friend between the world of machines and people, making the things around us more comfy, easy to understand, and nice to look at.

A truly important way to understand the history of design is to look at how everything has changed over time. This helps us see not only how forms and technologies have improved step by step, but also the big ideas that have transformed the way we think about the things we use at home and in our communities. It's important to know that design is not just about making things look beautiful. It's a thoughtful way of creating — like an artist planning something, thinking about what people need, how new tools can help, how to be kind to the Earth, and what matters in our culture.

Thus, the history of design is a story about how a person learned to create not just functional, but meaningful objects that can carry emotional, aesthetic and social load. This is a history of creative searches, breakthrough ideas and constant renewal - in accordance with the spirit of the time.

The history of design covers a relatively short period of time - a little over a hundred years, starting in the late 19th century. It is based on a consistent presentation of the main events and stages of the formation of design activity in different countries. An evolutionary approach plays a significant role in the study of this process, allowing us to trace the gradual development of technologies, materials, forms and changes in consumer demands. Unlike the classical historical approach, which involves a detailed examination of all periods, the evolutionary approach focuses on key trends and breakthroughs.

The emergence of design as a separate field of activity in the early 20th century was driven by social, ideological, and economic changes associated with industrialization. The development of decorative and applied arts, the emergence of machine production, competition in the product market, and the need to harmoniously integrate the aesthetic and functional qualities of products created the conditions for

the emergence of design as a new professional field. The so-called design artist began to play a key role in creating the object environment, combining technical, ergonomic, environmental and aesthetic aspects.

Using the latest technological advances, from 3D modeling to nanotechnology and laser processing, modern designers not only meet our practical needs, but also shape the socio-cultural landscape by establishing a dialogue between producers and consumers. Their work is key to our adaptation to a changing world, providing comfort and visual harmony in our everyday lives.

Researching the history of design involves getting to know prominent personalities who laid the foundation for modern design approaches. Their innovative ideas contributed to the development of new forms, styles and methods in industrial production, graphic design and corporate identity. In this context, design is viewed not only as a professional activity, but as a special worldview closely related to the cultural context, technological progress and the needs of society.

Today, design is not only a professional activity aimed at creating aesthetically pleasing and functional things, but also a way of thinking that reflects the interaction of technology, cultural values, and social needs. Having emerged at the turn of the 19th and 20th centuries as a reaction to industrial development, it is constantly evolving, adapting to new realities and using the latest scientific and technological advances. Thanks to the outstanding masters who shaped its principles, design has become an important tool for social communication and helps people better navigate the dynamic world, providing comfort, harmony and meaningfulness to their environment.

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THE INFLUENCE OF SOCIAL MEDIA ON FASHION

This study examines the influence of social media on fashion trends, particularly the speed at which they spread and evolve. It traces the evolution of fashion from the dominance of designers and fashion runways to the modern impact of social media platforms, such as TikTok, in shaping new trends. The focus is placed on the phenomenon of microtrends—short-lived but widely popular style directions that gain

traction through content-sharing platforms. Styles such as "old money," "coquette," and "Y2K" are discussed as examples of trends that thrive on TikTok, creating new communities with distinct visual codes and cultural norms. The article also highlights the negative aspects of the rapid pace of fashion in the social media era, such as overconsumption and the loss of individuality. It calls for a more conscious approach to fashion consumption in the digital age.

Fashion is a form of self-expression that reflects the preferences of a society at a certain period of time through clothing, style, colors, and silhouettes. Historically, the sources of influence on fashion have varied according to social, economic, and cultural conditions: in ancient times, fashion was dictated by monarchs and the aristocracy, as clothing was an indicator of status and belonging to the upper class. In the 19th century, fashion began to be shaped by fashion designers such as Charles Worth, who is considered one of the first couturiers. Fashion runways, dressmakers and forecasters have played a key role in forming and changing the direction of fashion over time. After all, it is on the runways that new ideas are officially presented, which can set the tone for the entire upcoming season. Designers, as creators of aesthetics and visionaries, convey their own vision of relevance through their collections, sometimes being ahead of the time and offering non-standard approaches to shape, colour or pattern that can later become mainstream. Their name, reputation and influence help shape the tastes of both the professional industry and the general public. Fashion forecasters, or trend forecasters, study social, cultural, and economic processes and analyze changes in consumer behavior and public sentiment to predict what colors, fabrics, or styles will be relevant in the coming years.

In the 20th century, fashion was increasingly influenced by cinema, magazines, music icons and subcultures, which created new styles and aesthetics. With the advent of television and later the Internet, fashion sources have become even more accessible and diverse. In the 21st century, fashion trends are defined by globalization, street style, celebrities, bloggers, and especially social media, which have shifted the center of influence from professional designers to a wide audience of users capable of creating and spreading trends in real time.

However, modern fashion is no longer a one-way process dominated by catwalks, famous designers and analysts' predictions — today, social media plays a pivotal role in shaping trends, changing the very dynamics of the fashion industry. This shift was especially pronounced with the arrival of TikTok, a platform that has become a powerful trendsetter due to its speed, visual format, and ability to create viral content. On TikTok, fashion is not only demonstrated but also discussed, copied, adapted and modified directly in real time, where every user can become influential with a single video. This is where microtrends emerge and disappear — short-lived but vibrant phenomena that can reach millions of people in just a few days. Styles such as "old money", "coquette" and "Y2K" have gained immense popularity through TikTok, often accompanied by a certain visual code, music, lifestyle and even speech, which creates communities with their own slang and spirit. The "old money" style is associated with minimalism, a well-groomed look, shiny skin, smooth hair, basic clothing in neutral colours, and the idea of elegance and sophistication — it is a visual language of self-

discipline, tasteful simplicity, and quiet luxury. "Coquette" is a romanticized, flirty style inspired by retro images, pastel colors, bows, lace and an emphasis on femininity in its soft, slightly naive, but sexualized form, which often echoes the aesthetics of Tumblr. And "Y2K" is a nostalgia for the fashion of the early 2000s: low-rise jeans, glitter, pink glasses, strapless tops, denim looks, and the general vibe of pop culture from the era of Britney Spears and Paris Hilton [1].

While social media fashion provides unsurpassed opportunities for self-expression, it also causes social consequences and risks, such as stimulating overconsumption when consumers try to constantly update their wardrobes in pursuit of rapidly changing microtrends. This is not only harmful to the environment but also imposes pressure to conform to certain visual standards, often causing one to lose their own style in favor of algorithmic fashion. As a result, social media is shaping a new fashion reality in which self-expression is becoming widespread and risks being unified, and trends are changing faster than ever before, requiring a more conscious approach to both consumption and personal style.

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MODERN TRENDS IN ART: INTERIOR DESIGN

The term “interior design” only emerged in the mid-20th century, although the practice of beautiful decoration dates back to medieval castles, where hosts sought to impress guests and even servants. The industrial revolution brought significant changes — assembly lines made furniture and other items more affordable, altering approaches to home arrangement.

What is interior design? Simply put, it is a series of decisions required to furnish a space. From planning layouts and selecting color schemes to choosing finishing materials, furniture, lighting scenarios, and room decor, it encompasses all the steps necessary to bring a designer's vision to life. Aesthetic appeal must also align with functionality. Most importantly, there should be harmonious unity among elements, creating a cohesive picture that reflects the "character" of the home. If, upon entering a room, one notices the overall arrangement rather than an individual lamp or chair, it can confidently be said that the designer achieved a 100% success.

To imbue a home with meaning and life, it’s essential to first decide on a style. Studies have shown that our surroundings impact our mood and well-being. Poorly chosen styles or chaotic arrangements can harm emotional states, while aesthetically

pleasing and ergonomic interiors foster energy and positivity. Style also determines the materials, color palette, furniture, and decor to use.

From luxurious vintage to concrete walls, homeowners today have a wealth of styles and tools to realize their desired concepts. Finding a direction that resonates with your inner self is crucial for feeling comfortable at home. Modern interior design evolves constantly, adapting to new technological and social demands while introducing innovative trends that create stylish and comfortable spaces. Key trends include sustainable and eco-friendly design, integration of natural textures and organic forms, the use of smart technologies, and balancing minimalism with luxury. Smart technologies enable control of lighting, temperature, and other home aspects via mobile apps or voice commands, opening new possibilities for creating interactive and convenient spaces.

Equally significant are biophilic design, the revival of retro styles, monochrome solutions, industrial aesthetics, vibrant accents, and flexible, functional layouts. Interior design styles play a vital role in modern life. Despite their variety, choosing just one can be challenging. Regardless, when selecting an interior design style, it's important to consider all its features. The furniture, accessories, colors, and textures all contribute to a cohesive and visually pleasing outcome. Each interior design style conveys a distinct idea and has unique characteristics, making designs distinctive and unique. There is an abundance of styles to consider for a renovation. Previously, main interior styles included classical, baroque, and antique themes, but the landscape has drastically changed. Currently, the most popular styles include: Scandinavian, Loft, Eco-style, Art Deco, High-tech.

Thus, today, interior design is not just a matter of aesthetics but also a reflection of lifestyle, worldview, and technological progress. More often, residents choose personalized solutions combining style, comfort, and functionality. The way we arrange our spaces increasingly becomes a form of self-expression — sometimes more eloquent than words.

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RENAISSANCE IN GRAPHIC DESIGN: SKETCHING, PAINTING

Graphic design and modern technologies are developing faster than ever. Designers are looking for new ways to stand out from the crowd and competitors. It's even harder to be individual in your works when the trends of recent years are filled with minimalism and calm, pastel colors. People want to perceive information quickly and easily. This problem can be solved by one of the new movements that is not mentioned very often, specifically sketching, and painting as a way to create unique works.

Sketching in different branches of graphic design can look fresh, stylish, and vivid. This style has great potential because every designer has their own working attitude. Also, such works will have a more subconscious connection with the audience. This stems from the fact that people can feel the artist's emotions through the work, even if they can't explain it through rationalism and words. This brings design back to humanity, the importance of sincerity, sensuality and intimacy that have always been inherent in art. The old ways of working are coming back in a new bright way, because now there are many advanced mechanics and technologies that allow designers to combine styles, use sketching exactly where it is needed, looking organic.

Among graphic designers, Zeka Design (Yaroslav Yakovlev) has used sketching perfectly in his works. His projects are bright, unique and rich. He had the confidence to show the world his skills and ideas, so he created a project called Zeka Design, which started with an Instagram account where he began uploading poster designs in various fields and niches on a daily basis, trying to experiment with styles, colors, and shapes. Gradually, he developed his own style, presentation, gained recognition and now has his own website, many social networks and is still actively developing in the field of graphic design and freelancing.

Painting is not very popular among designers. Most people think that this contradicts the minimalist fashion, because when people think of painting, they usually imagine detailed large paintings, which are not very popular now, giving way to easy-to-read paintings that are better suited for home interiors, will not burden and draw attention to themselves. You can use this technique in your identity by creating a handmade font and logo, reinforcing, processing, and adding details in specialized programs.

Penguin Books did a great job with the painting and graphics technique in the poster. People love the classic Penguin covers. And this award - winning campaign for Penguin Group China taps into that nostalgia to promote a series of audio books. Each of the drawings by Y&R China features an unusual sound engineer with flippers, the company's mascot invading the story unnoticed.

The elements of painting are especially striking in animation. People were very surprised to see a new style in the cartoons “Spider-Man: Across the Spider-Verse”, “Puss in Boots: The Last Wish”, and “Nimona”. The animators turned to color techniques in painting and graphic elements. This way of approaching the work transformed each frame into a work of art. This is a case where people who had access to new technologies turned to something that people have long lacked and revive old but proven techniques. Hayao Miyazaki's animated works are no less surprising, as the background landscapes could be completely painted in watercolor, giving an atmosphere that people still love and miss.

Sketching and painting can be harmoniously combined with the styles of Flat Design, Art Nouveau (Modern), Art Deco, Grunge, Psychedelic, Vintage and Retro. Nowadays, the fashion for individuality has begun, especially when the use of AI and generative elements has become popular. I see these techniques as a great way to stand out in the crowd, to show your creativity, ideas, uniqueness, and style.

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CHARACTER DESIGN IN VIDEO GAMES

In the world of video games, character design stands as one of the most vital elements in shaping the player's experience and immersion. Beyond mere aesthetics, a character’s appearance, movement, personality, and even voice all contribute to how players perceive and emotionally connect with them. Whether the character is a heroic protagonist, a complex anti-hero, or a menacing villain, their design serves as a storytelling tool that communicates narrative depth, cultural context, and gameplay function without the need for words.

As video games have evolved into one of the most influential forms of modern entertainment, the demand for compelling and believable characters has increased significantly. Developers must now balance artistic creativity with technical limitations and gameplay mechanics. A well-designed character not only visually stands out but also aligns with the game's world, genre, and player expectations. This requires careful consideration of shape language, color theory, silhouette, animation, and backstory development.

Moreover, character design in games is uniquely interactive. Unlike in films or books, players often spend dozens or even hundreds of hours with these characters, making their design critical for long-term engagement. Characters must be memorable and relatable, yet flexible enough to adapt to various story arcs or player-driven choices. In multiplayer and open-world games, customization and representation also become key aspects, allowing players to project parts of their identity into the game world.

A frequent approach to character design is to draw inspiration from a country's culture and its traditional attire. One such example is the character Aglaea from the video game "Honkai: Star Rail". She embodies an elegant and divine aesthetic inspired by Ancient Greece and its mythology. As a descendant of the Golden lineage of Amforaes and a seamstress in the city of Ochema, her character design reflects a blend of classical beauty and narrative symbolism. Her flowing golden hair and goddess-like attire reinforce her ethereal presence, while her visual presentation ties directly into the game's mythologically infused world-building.

The motifs of memory and elegance are visually expressed through refined patterns, soft yet radiant color palettes, and delicate garment textures, emphasizing her role as a figure of grace and inner strength. The fusion of lore, function, and visual storytelling in Aglaea's design makes her memorable and thematically rich character within the game's universe.

Continuing the topic of the culture of various countries, I also want to mention a character like Kaedehara Kazuha from "Genshin Impact". His design draws heavily from traditional Japanese culture, visually reflecting his identity as a wandering samurai. His outfit features kimono-inspired elements, a hakama-like silhouette, and motifs such as the crimson maple leaf — an iconic symbol in Japanese art representing impermanence and introspection. The muted yet warm color palette, combined with flowing fabrics and natural patterns, reinforces his connection to nature and the wind.

Kazuha's design balances elegance and restraint, capturing the aesthetic principles of wabi-sabi — the beauty of simplicity and transience. Altogether, Kazuha's visual presentation not only pays homage to historical Japan but also enhances his role as a calm, reflective swordsman shaped by loss, freedom, and the passage of time.

Another design that stands out is K-Angel, the online alter ego of the protagonist Ame in "NEEDY STREAMER OVERLOAD", is a striking embodiment of modern Japanese internet culture and the kawaii aesthetic. Her design — featuring pastel-colored twintails, exaggerated accessories, and angelic motifs — captures the visual language of idol culture and streamers. The bright color palette and cutesy fashion,

including oversized bows and frilly skirts, immediately signal her role as a performative “Internet Angel” crafted for online adoration.

What makes K-Angel’s design particularly compelling is its stark contrast to Ame’s offline self, who wears darker, more subdued clothing and expresses a much more vulnerable personality. This visual duality between the glamorized, idealized avatar and the insecure, struggling individual behind the screen reflects the central themes of the game: identity fragmentation, emotional burnout, and the performative pressures of internet fame.

K-Angel’s design is not just visually eye-catching, it serves as a psychological mirror, highlighting the constructed nature of influencer personas and the dissonance between self-presentation and reality. Her character encapsulates the game's commentary on digital identity, parasocial relationships, and the mental toll of constant performance in the online world.

Finally, an example of a character whose design is closely related to plants and flowers is Camellya from “Wuthering Waves”. Her design masterfully blends elegance, danger, and mysticism, reflecting her complex personality and unique combat abilities. Her visual appearance is dominated by a bold color scheme of red, black, and white these colors often associated with passion, mystery, and duality. This palette emphasizes her dual nature as both alluring and lethal, embodying a free-spirited charm that veils her formidable strength. The inclusion of black and red blossoms in her hair is not only an aesthetic choice but a symbolic one, referencing her role as a Bloom Bearer of the Black Shores and hinting at her deep connection with nature and decay. These floral elements also visually foreshadow her vine-based combat abilities, making her design both beautiful and functionally meaningful. Her attire, with its flowing fabric and sharp accents, strikes a balance between softness and intensity, further reinforcing her enigmatic aura. Overall, Camellya’s design stands out as a cohesive visual narrative, where every detail — from color to accessories — contributes to her identity as a captivating and dangerous force within the world of Wuthering Waves.

In conclusion, character design plays a crucial role in shaping the player’s connection to the game world, acting as a powerful tool for storytelling, immersion, and emotional engagement. Well-crafted designs go beyond mere aesthetics — they visually communicate a character’s personality, background, and abilities, enhancing the overall narrative experience. Through thoughtful choices in color, form, symbolism, and style, designers can create memorable and impactful characters that resonate with players long after the game ends. As video games continue to evolve as a storytelling medium, character design remains a fundamental element in bringing virtual worlds and their inhabitants to life.

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MODERN MATERIALS AND TECHNOLOGIES IN ECO-FRIENDLY INTERIOR DESIGN

Ecological interior design is an important component of global sustainable development goals. With the development of industrialization and the increase in the number of people living in cities, the understanding of sustainable use of natural resources has grown. People began to realize the need to minimize waste and harmful emissions into the environment. Ecological design is an expression of a new worldview of humanity that seeks a way out of the broken relationships with the natural environment [1, p. 151]. In view of this, modern interior design emphasizes the use of environmentally friendly materials and technologies that help to maintain the natural balance and provide comfortable and healthy living conditions.

New technologies are emerging to reduce the carbon footprint of construction and energy consumption. Let's take a look at the main modern materials used in eco-friendly interior design, as well as technologies that contribute to energy efficiency and sustainability.

It should be noted that ecological design is not limited to the choice of materials, but also covers a whole range of approaches that contribute to sustainable development. Ecological design takes inspiration from nature and rethinks the way people relate to it. A modern person can minimize damage by choosing this style. After all, eco design allows you to try to find a ‘green’ alternative to many interior items [3].

The main principles of eco-design include the rational use of natural resources, reduction of energy consumption, recycling and reuse of raw materials, safety and

health. The materials used in modern interior design should not only be natural, but also used efficiently to minimize environmental pollution.

Energy-efficient materials and technologies should be used to ensure energy savings. For example, electrochromic glass is becoming popular in modern design, as it has the ability to change its transparency depending on light or temperature and reduces the need for air conditioning. Thermal insulation panels made of hemp, cellulose or recycled paper effectively retain heat; this, accordingly, reduces heating costs. LED lighting consumes up to 80% less energy than traditional lamps and has a much longer lifespan. Smart home systems in Ukraine are not available to a wide range of consumers, but they allow you to optimize energy consumption and control heating, lighting and ventilation independently.

Instead of developing new materials, more and more attention is being paid to the use of secondary resources or materials that can be recycled. For example, recycled wood and plastic are widely used in the manufacture of furniture, metal cladding and flooring. Recycled glass is used as a raw material for windows, decorative partitions and tiles. Recycled metals such as aluminum and steel are used to make furniture frames, lamps and various decorative items.

The choice of materials that are not harmful to human health is one of the main criteria in eco-design. The modern market for eco-friendly materials offers a wide range of components that comply with the principles of sustainable development. The most popular interior materials include wood from certified forests, bamboo, natural clay, linen, recycled materials, as well as environmentally friendly coatings and paints.

Wood is a material that comes from forests that are managed sustainably. It is fully biodegradable and has a low carbon footprint.

Bamboo is a fast-growing material that is highly resistant and durable, and is also fully renewable.

Clay used to produce building materials is free of toxic elements and is considered one of the most environmentally friendly materials. Flax and other natural fibers are used to make fabrics and cladding materials.

Materials made from recycled glass, plastic, textiles or metals can significantly reduce the need for primary resources and reduce waste. For example, tiles made from recycled glass or countertops made from recycled plastic bottles are not only environmentally friendly but also aesthetically pleasing.

Conventional paints and varnishes can contain harmful volatile organic compounds (VOCs) that have a negative impact on health. Therefore, environmentally friendly design prefers natural water-based paints, lime and clay coatings, as well as oils and waxes for wood processing [4].

An interesting material that has found wide application in construction and interior decoration is corten, or stainless rust. A hundred years ago, it was used to make containers, tanks and wagons. Today, corten is actively used for building cladding, creating paradoxical ‘rusty’ objects that do not actually corrode. Some of the most striking examples include the Leeds Metropolitan University in the north of England, designed by Feilden Clegg Bradley Studios, the headquarters of Audenasa in Spain,

designed by Vaillo + Irigaray, and the reconstruction of the Palazzo di Vogonovo by 3ndy Studio in Italy [5].

Ecological interior design not only contributes to the preservation of nature, but also has an important impact on the psycho-emotional state of a person. Studies show that people who live in an environmentally friendly environment experience less stress, sleep better and have a higher level of life satisfaction. Natural materials, live plants in the interior and natural light play an important role in this. In addition, ecological design supports social initiatives by promoting environmental awareness among a wide audience.

Eco-design and indoor climate improvement methods include the use of Phyto design and aqua design elements. These objects regulate the humidity and chemical composition of the air, enrich it with oxygen, purify it from carbon dioxide, toxic substances and dust, as well as ionize and humidify it. In addition, they provide additional sound insulation and noise absorption, and by releasing phytoncides, they have a negative effect on pathogens. This allows to comprehensively solve sanitary, hygienic, psychological and aesthetic problems. [2, p. 218].

There are many examples of the successful use of eco-friendly materials in interior design around the world. One such example is Google's office in London, which uses energy-efficient lighting, recycled furniture and live plants to create a healthy working environment.

In Ukraine, there are also examples of eco-design in public spaces, such as coffee shops and restaurants, where recycled wood materials, organic textiles and even structures made of natural stone and clay are used.

In conclusion, ecological interior design is an important element of sustainable development that helps to preserve natural resources and improve the quality of life. The use of environmentally friendly materials and modern technologies not only reduces the negative impact on the environment, but also creates a comfortable environment for people. The implementation of such solutions in everyday life contributes to the formation of a new environmental awareness and raising the level of environmental culture among the population.

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COLOR PSYCHOLOGY IN GRAPHIC DESIGN

Color psychology in graphic design is the study of how colors affect a person’s emotional and psychological state, as well as the perception of a product or brand. Colors not only determine aesthetic appeal but also carry meanings that can influence behavior, emotions, and even consumer decisions. In the context of graphic design, the correct use of color can be a vital tool for conveying messages, establishing connections with the audience, and building trust in the brand.

There are several color theories that form the foundation for understanding their impact on human psychology. One of the most well-known is Isaac Newton’s color wheel theory, which is based on primary colors (red, blue, and yellow) and their combinations, which result in secondary colors (green, orange, and purple). According to this theory, colors can be harmonious or contrasting, significantly affecting the perception of the design.

Also important is the principle of color psychology within the theory of emotional associations, where each color is linked to a specific emotional state or psychological response. For example, red can evoke feelings of energy, excitement, or aggression, while blue can create a sense of calmness and reliability.

Colors can have a powerful influence on how we perceive information, how our attitude towards a product changes, and even the decisions we make. Here are some basic colors and their psychological meaning in the context of graphic design:

Red: symbolizes energy, passion, strength, but also aggression. It attracts attention and is often used in advertising campaigns to stimulate action, such as “buy” buttons or promotional sales.

Blue: often associated with calmness, reliability, and professionalism. Brands like banks or tech companies often use blue to create a sense of stability and trust. Yellow: evokes feelings of joy, optimism, and energy, but can also be associated with danger (as in warning signs). It is used to draw attention but should not be overused as it can be too aggressive on the eyes.

Green: often associated with nature, calmness, and health. It is one of the most common colors in brands that aim to convey naturalness and ecological responsibility, such as in food or cosmetic brands.

Purple: typically associated with luxury, creativity, spirituality, and mystery. It is often used in the premium segment to create an air of elegance.

Black: associated with elegance, seriousness, and sometimes mystery. Black can be sophisticated and strict, frequently used in classic and luxury brands, as well as in uniforms or legal documents.

White: symbolizes purity, simplicity, and minimalism. White adds a sense of space and lightness. In web and print design, white is often used as a base for other colors, creating contrast and making text easier to read.

In graphic design, colors are an important tool for shaping a brand's image. Each color can add a certain emotional subtext that highlights the brand's mission and values. For example, companies specializing in health or natural products often use shades of green and brown to associate their product with naturalness and ecological purity.

In printed materials, colors are crucial for attracting attention and creating the right atmosphere. They are used to enhance the message and emotionally influence the consumer. In advertising and printing, colors can form the first impression of a product or brand, so choosing the right colors can be decisive for the effectiveness of an advertising campaign.

Bright colors like red, orange, or yellow are often used for promotions or sales to create a sense of urgency and stimulate action. At the same time, pastel tones like blue or pink are used to create a soft, calm mood, which is suitable for advertising health or family-oriented products.

In printed products, such as packaging, it is also important to consider the psychological effect of color on buyers. For instance, green can be associated with organic products or healthy eating, while black represents luxury and premium quality. Using the right colors in packaging can significantly increase the product's appeal and its chances of success in the market.

Color psychology is a significant aspect of graphic design that helps convey emotions, enhance brand messaging, and create a sense of trust and attachment in consumers. Understanding the impact of colors on perception allows designers to create effective and emotionally charged graphic solutions that support marketing strategies and help achieve business goals. The choice of color for a specific design should be well-thought-out and aligned with communication objectives to maximize its impact on the audience.

In addition, leveraging the right colors can significantly influence viewer engagement and retention. Thoughtful color selection not only reinforces the brand identity but also guides consumer behavior by triggering the desired emotional response. These strategic design decisions contribute to creating a memorable and impactful visual experience that resonates with the target audience.

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SOLAR-POWERED WATER PURIFICATION: GREEN TECHNOLOGY FOR CLEAN DRINKING WATER

This research examines the application of solar energy for water purification in regions with limited resources and infrastructure. The work focuses on analyzing affordable and environmentally sustainable solar-powered water purification systems that can be implemented in rural communities facing water scarcity and contamination issues. The field has developed promising modular systems that combine several green technologies: solar photovoltaic panels, membrane filtration, ultraviolet disinfection, and solar thermal components.

A typical experimental setup uses a 100W solar panel array connected to a control system that optimizes energy distribution between the filtration pump, UV-C LED disinfection chamber, and monitoring equipment. The multi-stage filtration system includes sediment pre-filtration, activated carbon filtration, and a semi-permeable membrane for removing contaminants of various sizes. Water quality is evaluated before and after treatment using standard methods for measuring turbidity, microbial content, dissolved solids, heavy metals, and organic compounds.

According to research results, the most effective systems demonstrate removal of up to 99.5% of bacterial contaminants (including E. coli (Escherichia coli) and coliform bacteria), 95% of common chemical pollutants, and significant reduction of turbidity from an average of 25 NTU (Nephelometric Turbidity Units) to below 1 NTU. Purification productivity ranges from 5-7 liters per hour during optimal sunlight conditions, sufficient for a small family's daily drinking and cooking needs. During cloudy conditions, integrated battery storage provides approximately 60% of maximum capacity.

One significant advantage of such systems is their ability to function without chemical additives, eliminating the need for continuous supply chains that are often unavailable in remote areas. Cost analysis shows that modern designs are 60% less expensive than commercial alternatives, with an estimated production cost of approximately $120 USD per unit when manufactured using locally available

materials. Modular designs allow for easy maintenance by users with minimal technical training, and component lifespan testing shows minimal performance degradation over the equivalent of three years of daily operation.

Environmental impact assessment indicates that solar water purification systems can prevent approximately 1.2 tons of CO2 (Carbon Dioxide) emissions per year compared to equivalent water treatment using fossil fuel-powered equipment or the transportation of bottled water. Additionally, by eliminating the need for single-use plastic bottles, each unit potentially prevents over 7,300 plastic bottles from entering the waste stream annually.

Solar water purification technologies contribute to achieving UN (United Nations) Sustainable Development Goal 6 (Clean Water and Sanitation) through the application of green chemistry principles and renewable energy. Promising directions for further research include optimizing systems for specific contaminants common in different geographical regions and developing community-based manufacturing and distribution networks.

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TECHNOLOGIES OF THE LIGHT INDUSTRY: FROM IDEA TO FINISHED PRODUCT

The aim of this study was to investigate the profession of a designer-technologist in the sewing industry, highlighting its unique combination of creativity, technical skills, and innovation. It describes the main responsibilities of specialists, including design, material selection, garment construction, and production management. The text also emphasizes the importance of adapting to market trends, technological progress, and customer needs, underlining the profession's relevance and promising career opportunities in the modern fashion industry.

A designer-technologist is one of the most interesting professions today. It can be called unique because it combines both humanitarian and technical fields. A person who chooses this career must be an artist, a designer, and a technologist all in one.

Sewing technologies are a modern and dynamic field that combines creativity, precision, technical knowledge, and innovative approaches to the production of clothing and textile products. This profession is an important component of the fashion industry and modern lifestyle. It includes the processes of designing, constructing, and decorating clothing and textile products, which make a significant contribution to the global fashion industry and everyday life. Specialists in this field must have deep knowledge of natural and synthetic fibers, textile production, and garment manufacturing methods.

A specialist in the sewing industry must be able to understand and adapt to changes in the industry and perform the following main functions:

Create sketches according to customer preferences;

Select the main fabric for sewing and lining material;

Create technical drawings;

Construct the garment on a mannequin;

Prepare and organize the entire technical process;

Organize and manage the work.

Sewing enterprises operate in two main directions: independent development of new clothing models that align with the project direction, and mass production of clothing. The second direction involves working with the technical documentation provided by foreign companies, adapting it to the conditions of a specific enterprise, and manufacturing clothing for client companies.

New working conditions in sewing enterprises require a fundamental restructuring of their independent operations, with an increased responsibility for results. The saturation of the consumer market with products from sewing enterprises increases the need for market-oriented production, in a flexible combination with improving both technical preparation and the main production process when launching

new models. Thus, the primary task is to orient all sewing production activities towards satisfying the needs of the population.

In the modern world, sewing technologies continue to evolve, adapting to new trends, technological progress, and customer needs. They remain an integral part of the fashion industry, offering vast career growth opportunities and the ability to create unique, personalized clothing for various markets.

The sewing industry is a high-tech and continuously developing field where skilled professionals play a key role in shaping the quality and style of clothing. The high demand for product customization, the improvement of production processes, and the application of cutting-edge technologies make the technologist profession relevant and promising. In today's world, adapting to market demands and technological progress is the key to success in this industry, opening up wide opportunities for career growth and the development of new innovations.

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THE USE OF ARTIFICIAL INTELLIGENCE IN GRAPHIC DESIGN: OPPORTUNITIES AND CHALLENGES

The introduction of artificial intelligence in graphic design has automated repetitive tasks and accelerated visual development. Tools powered by AI can automatically sketch, color, and arrange scenes within seconds. Algorithms can now automate the technical aspects of design work which gives the designers more time for the creative aspects of their job. However, problems with quality assurance and authorship of those solutions created by AI attempting to imitate human thinking still exist.

A shift in the approach to visual narration comes from generative neural networks that are capable of producing fully complex illustrations from written prompts. AI systems designed to interpret human prompts remove the barriers of time and imagination, enabling designers to quickly render even the most abstract ideas. Such images, however, may lack marrying automation and artistry which can lead to predictable patterns and technical flaws. As a result, designers are becoming more of curators and analysts of visuals.

In branding, artificial intelligence is widely used for examining trends and crafting identities, logos, and layouts. A machine learning approach allows systems to study markets along with the emotional responses associated with colors and visual symbols. In the commercial sphere, the effectiveness of design solutions is considerably heightened. The downside, however, is the loss of brand individuality and uniqueness due to a stronger focus on mass appeal.

One of the key benefits of AI in design is personalization - the automatic creation of design options that adapt to a specific user. This is especially important for digital marketing and UI/UX, where flexibility and adaptability are critical. However, excessive automation can lead to a loss of emotional depth in visual solutions. Artificial intelligence is still not able to fully replace human empathy in design.

AI helps to create motion design, particularly in animation, where it automates the calculation of movements, time delays, and transitions between frames. This significantly reduces the technical burden on the designer and opens up more opportunities for creativity. However, algorithms often do not take into account the artistic context and semantic relevance of the animation. As a result, the result requires careful editing and manual refinement.

With the use of AI technology, identification of errors such as improper combinations of colors and fonts in a layout can be detected, thus ensuring better quality outcomes. This capability is especially beneficial for novices and learners who are trying to grasp fundamental concepts of design. The downside is that these suggestions can inhibit the user’s imagination if they are overly reliant on them. There must be a balance between algorithm assistance and self-guided exploration of a design.

The incorporation of works of others is one of the ethical problems in artificial intelligence which involves the copyright issue. Most AI generated images rely on dataset compilations that lack adequate permission from original content creators, which can lead to issue of identity theft or unintentional imitation. For this reason, there needs to be legislation concerning the application of AI in designing.

AI design opens up new opportunities for inclusive design by automatically adapting graphics for people with visual or motion impairments. Interfaces created with universal design in mind can be made accessible by automatically generating alternative formats. This expands the product's audience and meets modern social standards. However, it requires thorough testing and human control at all stages.

AI is altering the paradigm of teaching graphic design by equipping learners with modern tools and methods of creating designs. Learners appreciate instant corrections for tasks they have done, which enhances the teaching learning process, however,

students might grasp advanced aspects of composition like color and typography superficially. It is crucial for the instructors to preserve core knowledge within this new context.

In the interplay between men and machines, new hybrid forms of creativity arise, where the human designer “directs” a generative process. This innovation shifts the traditional understanding of authorship and artmaking. In parallel, it enables greater creation and experimentation, visual metamodernism, innovation, and transmedia aesthetics. But such an approach needs a new paradigm on how to assess the design outcomes.

AI-assisted design tools are increasingly becoming available, enabling laypersons to generate visual content without design principles. This shift expands opportunities for artistic expression, and enhances visual communication. Conversely, it can lead to the overuse of low-quality digital products. This presents new challenges regarding the standards set for visual content. The further advancement of AI in design requires attention to ethics, legality, and teaching to balance machine innovation with human imagination. Graphic design has evolved beyond just visual aesthetics. It is now, at its essence, an intersection of technology, culture, and engineering. We have to put thought into how we collaborate with AI technology since it serves not just as a tool, but a co-creator.

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MODERN TREND IN ART: DESIGNER-ILLUSTRATOR

The article explores the evolving role of the designer-illustrator as a fusion of classical art techniques and digital innovation. It highlights the interdisciplinary nature of the profession, its relevance in media, advertising, and UI/UX design, and the importance of both individual artistic style and technical adaptability. The text also emphasizes lifelong learning, ethical responsibility, and the growing influence of illustrators in shaping visual communication across global and digital platforms.

Contemporary art actively merges classical artistic methods with the latest digital innovations. Today's designer-illustrator is a vivid embodiment of this fusion. Their imagination is realized through digital tools such as graphic tablets and specialized software, allowing artists to push the boundaries of traditional techniques and explore new forms of visual storytelling.

The designer-illustrator is among the most interdisciplinary professions in the creative industries. This role intersects with publishing, advertising, branding, game development, animation, and UI/UX design. An illustrator must adapt their visual language to diverse formats and contexts, often working across multiple platforms simultaneously.

Digital tools have become essential in modern illustration. Programs like Adobe Illustrator, Photoshop, Procreate, Figma, and Clip Studio Paint offer powerful features for illustration, layout, animation, and collaboration. They allow illustrators to streamline their workflow, maintain high quality, and remain competitive.

Individual artistic style remains a priority, even in the digital environment. While templates and AI-generated content become more widespread, the authenticity and recognizability of a unique hand-drawn style remain invaluable. A distinct visual identity can turn an illustrator into a recognizable brand.

Illustration is now a primary tool of visual communication. It is no longer limited to embellishing text but serves to convey emotions, narratives, and abstract ideas. Visual metaphors in illustrations help audiences grasp complex concepts quickly and intuitively.

The dominance of social media and digital media increases the demand for appealing and functional visuals. Illustrators play a central role in creating digital content for apps, websites, social platforms, and advertising. Their work is often the first element that engages users and helps build a brand's visual voice.

Many illustrators today are also social commentators. They engage with political, ecological, and cultural issues through visual activism. Illustration becomes a platform for protest, reflection, and solidarity, often spreading faster and more impactfully than textual content.

The designer-illustrator is a global communicator. Through their visuals, illustrators transcend linguistic and cultural boundaries. Their work is consumed by

international audiences and often becomes part of global conversations in art and design.

Lifelong learning is a necessity for illustrators in the digital age. The rapid pace of technological change means illustrators must constantly update their skills through courses, webinars, tutorials, and workshops, often hosted on platforms like Domestika, Skillshare, or YouTube.

Fast-paced visual culture demands flexibility and stylistic versatility. Illustrators must be able to work in a range of aesthetics — from minimalist vector graphics to expressive hand-drawn sketches — depending on audience and platform needs.

Collaborations enrich the illustrator's practice and open new creative dimensions. By working with musicians, authors, developers, and other designers, illustrators contribute to multimedia projects, immersive environments, and interactive storytelling.

Many illustrators now build personal brands and monetized platforms. Through Patreon, Etsy, Ko-fi, and online shops, illustrators sell prints, merchandise, and commission-based works. This autonomy allows them to connect directly with audiences and develop independent careers.

Ethical considerations are crucial in visual culture today. Illustrators must be aware of the cultural, political, and emotional implications of their work. In times of war or crisis, their visuals may serve as tools for resistance or propaganda — requiring conscious decision-making.

Aesthetic trends in illustration lean toward simplicity and symbolism. Flat design, limited palettes, and iconographic thinking dominate current trends. Such visuals are not only stylish but also highly adaptable to screens and digital consumption.

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MODERN DIRECTION IN ART: VIRTUAL REALITY

Virtual Reality (VR) is a technology enabling users to become fully engaged in a simulated, computer-created world and respond to it instantly. This immersive, interactive experience helps people visualize and grasp complex ideas, mimic human actions, and explore virtual landscapes. Its reach is vast; it's not restricted to a single area. It can actually link entire realms, as seen in the Metaverse.

This simulation is strongly oriented to the real world. In order to adapt the digital world to the real world as best as possible, modern AI algorithms are usually used. These have the task of projecting new and familiar elements onto a mathematically defined surface. The result is a virtual world that looks deceptively real to users.

The equipment usually consists of a headset or screen, hand-held controllers, and detectors that monitor the user's actions and hand motions as they occur. The programming side means building a digital world with computer-created visuals, sound, and other sensory data to produce a completely engaging sensation.

As VR gradually become more mainstream, an increasing number of brands are already working on developing immersive branding experiences. While immersive experiences have existed in the world of video games for a few years now, brands are just beginning to tap into the power of these experiences.

Smart brands are discovering how to craft virtual experiences. These experiences support their overall marketing efforts. The goal is to generate positive feelings, which in turn captivate audiences and strengthen their bond with the brand.

At this stage of development of VR technologies, the following types of virtual reality can be distinguished:

1. *VR technologies with the effect of full immersion,* providing a believable simulation of a virtual world with a high degree of detail. Their implementation requires a high-performance computer capable of recognizing user actions and responding to them in real time, and special equipment that provides the effect of immersion.
2. *Non-immersive VR technologies.* These include simulations with images, sound, and controllers that are broadcast to a screen, preferably a large-screen one. Such systems are considered virtual reality because they are much more immersive than other multimedia tools, although they do not fully meet the requirements for VR.
3. *VR technologies with shared infrastructure.* These include Second Life, a three-dimensional virtual world with elements of a social network, which has over a million active users, the game Minecraft, and others. Such worlds do not provide full immersion (however, Minecraft already has a version for virtual reality that supports Oculus Rift and Gear VR helmets). But in virtual worlds, interaction with other users is well organized, which is often lacking in “real” virtual reality products.

4. *VR based on Internet technologies.* These include, first of all, the Virtual Reality Markup Language, similar to HTML. Now this technology is considered obsolete, but it is possible that in the future virtual reality will be created, including using Internet technologies.

The most common means of immersion in virtual reality are special helmets/glasses. A 3D video is displayed on a display located in front of the user's eyes. A gyroscope and accelerometer attached to the body track head rotations and transmit data to a computing system that changes the image on the display depending on the sensor readings. As a result, the user has the opportunity to "look around" inside virtual reality and feel like they are in it, as in the real world.

VR matters a lot because it could change how we engage with and understand our surroundings. It gives a fresh way to absorb information, enabling people to study, rehearse, and discover within a secure, manage able space. Furthermore, VR can help combine real and digital interactions, crafting deep experiences applicable to training, treatment, fun, and other areas. As tech evolves, virtual reality is set to become ever more integral to our existence, touching fields from schooling and medicine to games and amusement. These engaging experiences provide a fresh way for designers to share concepts and explain the narrative of a product or company in a more impactful manner.

Virtual Reality (VR) is a cutting-edge technological advancement, providing new ways to engage with digital content and settings. With its immersive, realistic simulations, VR allows users to visualize intricate concepts, explore novel realities, and interact with information in a more profound and intuitive way. This technology encompasses everything from high-end systems using sophisticated equipment to easily accessible, non-immersive, and web-based VR experiences. Each variation is significant in making virtual environments more widely available and adaptable.

Additionally, with brands embracing VR for emotionally captivating and interactive campaigns, its potential extends beyond entertainment—becoming a vital tool in education, training, therapy, and marketing. The integration of AI improves the realism and interactivity of virtual environments, narrowing the divide between the real and digital worlds.

In conclusion, As VR continues to advance, it's set to revolutionize our everyday lives, creating new avenues for communication, collaboration, and creative expression. Its growing presence across multiple sectors suggests a future where virtual experiences become fundamental to our work, learning, and relationships.

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THE USE OF ARTIFICIAL INTELLIGENCE IN GRAPHIC DESIGN

The aim of study is to explore the growing role of artificial intelligence (AI) in graphic design. It highlights how AI-powered tools improve efficiency, support creative exploration, and enhance accessibility for designers. At the same time, to outline the potential risks of AI for the profession, such as job disruption, undervaluation of human creativity, design homogeneity, intellectual property concerns, and the loss of emotional and artistic integrity. The conclusion emphasizes that while AI can simplify routine tasks, it cannot fully replace the human imagination and personal vision of a designer.

In the modern world, graphic design has a rapid increase in the popularity of artificial intelligence tools (AI). These technologies not only change approaches to the creative process, but also significantly affect the efficiency and capabilities of designers.

Through machine learning, software makers like Adobe have automated the most tedious processes to make design work easier and faster. Before smart selection tools, for example, if you wanted to replace the background of an image in Adobe Photoshop, you had to spend a lot of time carefully outlining the subject. Just tracing a person's hair could take hours. But thanks to Auto Selection and Select Subject, that process now takes just a few minutes.

The Content-Aware Fill tool in Photoshop is another great example of AI we now take for granted. When you want to fill in an area in an image, instead of using trial and error to match the color and tone, you can instantly and seamlessly fill it with content sampled from another part of the image. This is because the app is performing incredibly fast calculations based on the values in surrounding pixels.

Just as these AI-powered features have become indispensable for designers, amazing new generative AI tools are finding their place in the designer's toolset.

Whether you're using AI or generative AI, this technology can help make your work easier, faster, and it might even help you discover new artistic directions.

1. ***Greater efficiency.*** AI tools can help you automate repetitive tasks like separating subjects from backgrounds, resizing images, and applying consistent styles, so you can focus on more complex and creative work. These tools also spare you the physical and mental strain that come with peering at the tiniest details on your screen to select the right pixels or match fonts.
2. ***Unlimited creativity.*** Generative AI is a great brainstorming tool. You can try new ideas and concepts faster than ever, so you can explore your wildest ideas and see how they work with an ai art prompt.
3. **Greater accessibility.** With automated accessibility checks, AI can find issues with readability, color contrast, and more. It's faster and more reliable than checking accessibility yourself.

There are countless reasons as to why Artificial Intelligence is hurting the job market and professions today. We want to offer some reasons as to why AI is bad for graphic designers, namely:

1. **Job Disruption.** The first and most obvious one is of course job disruption. With the massive influx of generative AI in the creative field, more and more jobs the likes of artists, musicians and designers are becoming obsolete. This is not just a problem for the graphic designers, but a whole horde of other jobs that we have already covered.

However, for graphic designers, the caveat is that their job is quite directly being taken over by a soulless string of code that might just be regurgitating the job they've already done. McKinsey claims up to 800 million people will lose their jobs by 2030 as a result of AI, which is just around 30% of the entire world's workforce. The graphic designers will be one of the first to go because it's simply too cost-effective for larger companies.

0. **Undervaluing of Human Skills.** Speaking of being cost-effective for larger companies; the AI tools that are arriving for these professions are putting a massive undervaluation of human design skills. Since Artificial Intelligence is capable of creating designs so quickly, the perceived value of human-created design is decreasing. This ripple effect is causing lower wages and fewer opportunities for professional designers who are currently relying on their amazing minds and creativity to feed themselves and their families.
0. **Lack of Creativity and Increase of Homogeneity.** All AI design tools rely on existing data sets. No matter how new and original it looks. If you have someone show you how proud they are of the AI-generated image they're prompted, know that the art generated is based on millions of other real artists' works. More and more logos, websites and advertisements are almost completely taken over by AI. This will lead to a massive homogenization of design, as AI will continuously recreate "what works" that conforms to the status quo. This will lead to a lack of diversity and originality in design outputs, the lack of breakthroughs within the design. Designers will no longer be going above and beyond about breaking barriers because the reliance on Artificial Intelligence simply won't allow for it. This will hurt the graphic designers who actively take part in AI to help their process. By relying too heavily on AI-generated outputs, designers will stunt the development of their skills and creative problem-solving abilities.
0. **Intellectual Property Issues.** All AI-generated content is the product of millions of other results that it has found online. This is going to lead to eventual plagiarism and lack of originality in design outputs.
0. **No Human Touch = Bad Content.** Up until this point, every logo or design decision had some form of backstory. Maybe it was because the designer just thought it would look cool, sure, but a lot of the time it comes from a story of the company.
0. **Lack of Confidentiality.** All AI systems require insanely large amounts of data to operate and produce content, which means that they also have access to a lot

more than they should. This means that there'll always be an underlying risk that the confidentiality of client projects or personal data can be leaked at any point because its access points aren't restricted to disallow this. The controversy around data and privacy is no doubt one of the biggest topics that surrounds Artificial Intelligence today.

0. **The Ruin of Artistic Integrity.** The authenticity of art is now constantly coming into question. It's becoming so difficult to tell what is real and what is not, that the integrity of real artists is being put at stake. When it comes to graphic design, we are now looking at AI-generated art designed to earn money. This puts a certain value on the project, and there's no doubt that AI lowers the value of anything. There are tons of statistics showing that people simply do not value artificially generated art or writing as high as human-generated ones, and most people won't even trust it.

As a conclusion, AI definitely has a place in the design process. But we know one thing, AI will not be able to depict all the ideas and feelings that were put into the work of a graphic designer.

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ARTIFICIAL INTELLIGENCE AND AUTOMATION IN GRAPHIC DESING

AI plays an important role in industries across the globe and the graphic design world is no exception. There are ongoing conversations between designers and developers around the future impact of AI, machine learning, deep learning, VR, AR, and MR (virtual, augmented, and mixed realities), and how graphic design is changing. Recently, AI has entered the creative arena of the graphic designing industry with its cognitive abilities. Companies use it as a design tool that helps to optimize and speed

up project completions. AI's power lies in its speed to analyze arrays of data and output alternative designs for the graphics industry rapidly.

Businesses can use AI to generate or enhance design elements such as layouts, color palettes, typography, and imagery. AI is still in its early stages of development in the field of graphic design, and human designers will continue to play a critical role in the design process for the foreseeable future. AI can streamline the graphic design process and improve the quality of the final product by automating repetitive tasks and offering insights that might not be immediately obvious to a human designer.

One of the most significant benefits of using AI in graphic design is that it can automate repetitive tasks. Designers often spend a lot of time on tasks like resizing images, selecting color schemes, and creating layouts. With AI-powered tools, these tasks can be automated, freeing up designers to focus on more creative work.

AI is expanding the creative capabilities of designers. With AI-powered tools, designers can generate new design ideas and concepts that they may not have considered otherwise. This can help designers create more unique and innovative designs that stand out in a crowded market.

Personalization is becoming increasingly important in design, and AI is helping designers create personalized designs. By analyzing user data, AI-powered tools can create customized experiences for individual users. For example, Netflix uses AI to personalize the graphics of their user interface to match individual user preferences.

AI is being used to create generative art, which is a type of art that is created through a set of rules or algorithms. This type of art is unique in that it can be constantly evolving and changing. For example, artist Joshua Davis uses algorithms to create complex geometric designs that vary each time they are generated.

By automating repetitive tasks, AI-powered tools can significantly improve efficiency in the graphic design process. This can save designers a lot of time and allow them to focus on more complex and creative tasks. This increased efficiency can also help designers meet tight deadlines and complete projects more quickly.

Although artificial intelligence holds great potential in graphic design, there are certain challenges and limitations that should be considered. One of the main issues is that the effectiveness of AI-based tools depends on the quality of the data they are trained on. If this data contains biases or is incomplete, the outcomes produced by AI can be inaccurate or flawed. Moreover, current tools are not yet capable of fully replicating the creative intuition and professional experience of a human designer. While AI can automate many technical aspects of design, it cannot replace human creativity and out-of-the-box thinking.

In conclusion, we believe that artificial intelligence has a significant impact on the design industry by simplifying the design process and enhancing the interaction between humans and AI, where AI serves as a supportive tool while the designer remains the main driving force behind ideas, emotions, and visual thinking.

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MODERN DIRECTION IN ART: GRAPHIC DESIGN AS A PATHWAY TO DIVERSE CAREER OPPORTUNITIES

The study highlights graphic design as a modern, interdisciplinary, and future-oriented profession that combines art, technology, and communication. The text outlines the wide range of career opportunities for designers, from branding and marketing to UX/UI design and motion graphics. It also emphasizes the growing importance of digital platforms, remote work, and ethical design, showing how the field adapts to global trends and technological progress. Graphic design is presented not only as a creative pathway but also as a stable and in-demand profession in the modern labor market.

Graphic design stands at the intersection of art, communication, and technology, evolving into a dynamic field that offers a wide range of professional opportunities in today's visually-driven world. As a discipline, graphic design is the process of visual communication and problem-solving through the use of typography, imagery, color, and layout. It plays a crucial role in marketing, branding, advertising, publishing, web development, and user interface design, making it an indispensable tool across industries.

One of the most appealing aspects of pursuing a career in graphic design is the versatility it offers. Skilled designers are in high demand not only in creative agencies but also in corporate environments, startups, nonprofit organizations, and tech companies. The rise of digital media has further expanded the scope of graphic design, leading to emerging roles such as UX/UI designers, motion graphic artists, 3D modelers, brand strategists, and even AI-based content designers. According to Linearity, graphic designers can choose from over 20 career paths, reflecting the field's adaptability and integration into diverse sectors.

Educational institutions and online platforms offer accessible pathways to enter the field, making graphic design an attainable career for many. Platforms like Adobe Creative Cloud, Canva, Figma, and Procreate have democratized design tools, allowing beginners to practice and professionals to innovate. As highlighted by Demodern,

strong visual storytelling skills—often cultivated in graphic design—are essential not only in entertainment but also in product design and user experience.

Moreover, the global shift toward remote work has opened international opportunities for designers. Freelance platforms such as Upwork, Fiverr, Dribbble, and Toptal have enabled designers to work with clients worldwide, creating flexible work environments and high-income potential. According to Dream Farm Studios, graphic design also plays a psychological role by influencing consumer perception and brand identity, thus making designers key players in business strategy.

Furthermore, statistics from the U.S. Bureau of Labor Statistics show that graphic design maintains a steady employment rate, with tens of thousands of job openings expected annually due to career shifts and retirements. Even more compelling is the reported median annual salary for graphic designers in 2024—around $66,000—with specialized roles like UX designers earning upwards of $113,000 (GDUSA).

Sustainability and ethical branding have also brought new relevance to graphic design. Designers now participate in promoting social change and environmental awareness by creating impactful visuals that inspire action. This aligns with findings by CG Spectrum, which emphasize that visual identity influences not only consumer behavior but also societal values.

In conclusion, graphic design is more than an artistic discipline—it is a gateway to diverse and sustainable career opportunities. Its relevance across industries, along with the freedom to work independently or collaboratively, makes it a valuable choice for students and professionals alike. As visual communication continues to dominate the digital age, graphic design remains a future-proof profession, empowering individuals to shape culture, brand identity, and innovation.

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INNOVATIVE MATERIALS IN THE LIGHT INDUSTRY: CHALLENGES AND PROSPECTS

The study explores the role of innovative materials in the transformation of the light industry, focusing on their contribution to sustainability, enhanced functionality, and creative design. It highlights biodegradable fibers, smart textiles, recycled materials, and nanotechnology as key trends reshaping production processes and product quality. Despite challenges such as cost and technological adaptation, innovative materials are driving progress toward a more eco-friendly and technologically advanced future for the textile and clothing industries.

The light industry is currently undergoing a significant transformation driven by technological progress and growing demands for sustainability. One of the most impactful developments in recent years is the introduction and integration of innovative materials in the production of clothing and other textile goods. These new materials offer a wide range of benefits, including environmental friendliness, enhanced performance, and unique aesthetic properties.

In the past decade, the textile and clothing industries have faced increasing pressure to adapt to global environmental standards, reduce waste, and improve product functionality. As a result, the focus has shifted toward innovative materials that align with these goals. Among the most popular and widely used materials are:

1. Biodegradable and Eco-Friendly Fibers – such as organic cotton, bamboo, hemp, and lyocell. These materials are renewable, decompose naturally, and require less water and energy for production.

2. Smart and Functional Textiles – These include temperature-regulating fabrics, moisture-wicking textiles, UV-protective materials, and even fabrics with integrated sensors or antimicrobial properties.

3. Recycled Fibers – Produced from post-consumer waste such as plastic bottles or old garments, these materials help reduce the environmental footprint of textile production.

4. Nanotechnology in Textiles – The application of nanomaterials enhances fabric performance, providing stain resistance, water repellence, odor control, and even self-cleaning properties.

The integration of such materials requires significant adjustments in the technological processes of light industry enterprises. This includes changes in equipment, adaptation of cutting and sewing technologies, and staff training to work with materials that may behave differently than traditional fabrics.

Moreover, innovative materials allow designers to explore new creative possibilities. For example, shape-memory fabrics and color-changing textiles introduce interactive elements into fashion, merging art with science. Despite their benefits, the use of innovative materials presents some challenges. The cost of production can be

higher due to advanced technologies and limited availability. Additionally, there may be compatibility issues with existing manufacturing systems and difficulties in quality control.

Therefore, innovative materials are revolutionizing the light industry by promoting sustainable practices, enhancing product functionality, and stimulating technological advancement. While challenges remain, the potential of these materials is vast, and their continued development will play a crucial role in shaping the future of textile production.

Their implementation marks a key step toward a smarter, more responsible, and innovative industry that meets the demands of both consumers and the environment.

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IMPLEMENTATION OF GREEN CHEMISTRY IN BIOGAS PRODUCTION INDUSTRIES

Biogas production is one of the most sustainable ways to obtain energy without significant damage to the environment. The most popular way of biogas production is utilizing organic remains of urban and agricultural activities. Production facilities may be present on a small scale such as the implementation of biogas production on a small farm with a few decades of cattle, or huge specialized farms focused on energy crops

growing for energy needs and cities with millions of people that produce hundreds of tons of organic waste.

Regardless of the source and the type of biomass, everyone faces the same challenges in biogas production, such as the long decomposition time of waste, low activity of methanogenic bacteria, a high percentage of undesirable byproducts (CO_2, H_2S, N_2, NH_3), or some problems with biogas treatment [1, c. 277]. Green chemistry can help solve these problems by focusing on the most effective, waste-free and sustainable chemical processes.

Green chemistry can help enhance biogas production at each stage of the methanogenesis process. At the beginning, we deal with raw materials such as domestic, organic waste, specialized organic, waste from water treatment plants etc. We mainly deal with unshredded materials that require more time for decomposing and are less available for bacteria. When the waste particle size is shredded up to 25 μm, methane yield increases, so the particle size of the material is directly related to the difference in the total number of microbes exposed [4, c. 23]. Accessibility can be increased by chemical treatment using acidic or alkaline chemicals for instance, using potassium ferrate (K_2FeO_4) leads to increased hydrolysis and the elimination of antibiotics in activated waste sludge, or using highly corrosive substances can increase decomposition of lignin-containing materials by damaging the lignocellulosic cell walls [5, c. 45].

Another approach to implementing green technology is mixing raw materials with some additives that are able to decrease undesired byproducts and improve biogas and methane yield. A good example of implementation of this method is shown in a study by Farghalia (2019) about impacts of iron oxide and titanium dioxide nanoparticles on biogas production. This study shows that iron and titanium oxide can prevent formation of H_2S by 62% compared with control group. To reach these results fresh cattle manure was taken and mixed with concentration of Fe_2O_3 20 mg/L and TiO_2 500 mg/L. This study also shows that this method increases biogas and methane yield by 1.1 times. These additives do not negatively impact the biogas production process and enhance the anaerobic decomposition of cow manure by reducing H_2S concentration while increasing biogas and methane yield [2, c. 165].

Green chemistry techniques can be used in biogas treatment. It can be implemented in processes of removing any type of pollutant. Innovations in green chemistry allow for the removal of VOCs, which are mainly present in biogas from sewage treatment plants and landfills. Removal occurs through the use of DES compounds which are composed of syringol and levulinic acid. For instance, 1 gram of DES may adsorb approximately 420 milligrams of Chloroform ($CHCl_3$) with capacity up to 10 absorption–desorption cycles without losing effectivity [3, c. 4825].

Green chemistry plays a crucial role in improving biogas production by introducing innovative and sustainable technologies that enhance efficiency and product quality. Implementing these technologies is attractive to industries involved in chemical processes, due to the global trend in green technology, which helps enhance the process, minimize raw material consumption and waste generation. Additionally,

implementing green technology can provide companies with various benefits, such as preferential lending, grants or other forms of economic support.

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WETLAND RESTORATION AS A MEANS OF CLIMATE CHANGE ADAPTATION

Climate change is a global issue that negatively impacts agriculture, human health, and ecosystems, leading to extreme weather phenomena and rising sea levels. In this context, wetland restoration gains special importance [1].

The prolonged drainage of wetlands for agricultural use has led to catastrophic loss of biodiversity and the deterioration of ecological conditions in affected areas. ca

Restoring wetlands is a nature-based solution for enhancing Ukraine’s water security, as these systems act as natural filters and reservoirs, sustaining the flow of small rivers [2].

Wetlands mitigate floods, prevent erosion, and provide habitat for many rare species. They also offer ecosystem services, including clean water and recreational spaces [3]. The primary factors contributing to their degradation include peat

extraction, drainage, and pollution; however, some anthropogenic impacts can also lead to the formation of wetlands [4].

Successful wetland restoration necessitates a comprehensive approach that integrates scientific research, engineering solutions, and community engagement [5].

Ukraine's priority is to harmonize its legislation with that of the EU in the field of water management, which will help preserve natural resources and promote the development of ecosystems.

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STRATEGIC WASTE MANAGEMENT IN THE MINING AND STONE PROCESSING INDUSTRY: ENVIRONMENTAL SUSTAINABILITY AND INTERNATIONAL EXPERIENCE

The growth of mining activities to meet global demand for minerals necessitates strategic waste management that considers environmental sustainability, energy requirements, and associated environmental risks. Mining poses significant

environmental risks through the generation of various waste products, such as tailings and sludge, which require research to assess and mitigate impacts on soil, water, and ecosystems [1].

The increase in natural stone production worldwide (China - 20.82 million tonnes, Italy - 11.93 million tonnes, India - 9.64 million tonnes annually) and in Ukraine (over 10 million tonnes of solid minerals) is accompanied by the generation of a significant amount of waste in solid, powder, and liquid forms. The technological processes of processing natural stone (cutting blocks, chipping, sawing, grinding, and polishing) generate dust waste in an amount exceeding 30% of the original mass of raw materials, and the degree of their utilization is extremely low, only 10%. The accumulation of this biodegradable waste causes significant environmental problems, including the blockage of water flows, air pollution with fine particles, land degradation, aquifer contamination, and reduced soil fertility. Given the scale of the stone mining industry in Ukraine and the environmental threats associated with it, the introduction of integrated technologies for the utilisation of stone mining and stone processing waste, in particular in the production of geopolymer concrete and other construction materials, is not only a pressing task in the context of resource conservation, but also an economically viable solution that meets the modern principles of the circular economy[2].

The slurry generated during mining operations, which accumulates in large volumes in tailings ponds, poses a significant environmental threat. It not only occupies large areas, taking them out of economic circulation, but also creates risks of soil, groundwater, and surface water contamination with heavy metals and other harmful substances. However, thanks to modern technological advances and innovative approaches, pulp can be transformed from an environmentally hazardous waste into a valuable secondary resource.

The use of acceptable stone processing waste from the Zhytomyr region in the production of geopolymers and concrete is a promising area of resource conservation, as the optimal concentration of up to 25% ensures acceptable material strength. Geopolymer concrete made from such waste has environmental benefits, including reduced CO2 emissions and energy consumption, and demonstrates improved performance compared to traditional concrete. Additionally, slurry and other low-hazardous mining waste can be utilized in the production of building materials and for quarry reclamation.

As a leader in Ukraine in terms of reserves and production of decorative stone, Zhytomyr region faces significant environmental challenges due to the accumulation of industrial waste. Still, it has considerable potential to introduce technologies for recycling this waste, particularly in the production of geopolymer concrete, which aligns with the principles of the circular economy.

Table 1: Mining and stone processing industry in Zhytomyr region

Features	Data
Decorative stone reserves as a share of total reserves in Ukraine	~35%

The share of high-strength stone types in the total Ukrainian indicator	60%
Annual output of stone products	~400 000 m²
Annual export volume of block raw materials	~1,500 m³
Share of Ukraine's crushed stone reserves	20%
Stone processing waste (2016)	40,95 thsd tonnes
Losses from land pollution (stone pulp)	> 2,1 million UAH
Waste dump volume in Korostyshiv, Zhytomyr region (August 2022)	~24,5 000. m³
Damages from the waste dump in Korostyshiv (August 2022)	14,5 million UAH
Optimal concentration of acceptable stone processing waste for geopolymers	Up to 25%

The use of pulp in the production of building materials, such as ceramic bricks and geopolymer concrete, is a promising area of application. It not only reduces the amount of waste accumulated, but also creates environmentally friendly and durable building materials with improved characteristics. The production of geopolymer concrete using a slurry has significant economic benefits, as it reduces the cost of extracting primary raw materials, lowers the cost of waste disposal, and decreases the energy intensity of production. Additionally, it contributes to the creation of new jobs and the development of a circular economy, where waste from one industry becomes a raw material for another [3].

The successful experiences of EU countries demonstrate the high potential of utilizing industrial waste in road construction. In 2016, 2.3 million tonnes of ash and slag were used for this purpose, accounting for 17.2% of the total volume of waste utilisation. In Finland, this figure reaches 40%. Waste from the stone processing industry, such as granite dust, screenings, and sludge, has similar properties to ash and slag and is also successfully utilized. The use of this waste not only addresses the environmental problem but also enhances the physical and mechanical properties of the road surface, reducing the cost of road construction [4].

A study conducted in Gorno, Italy, demonstrates an effective technology for recovering valuable metals from abandoned mine waste. Using a combination of wet shaking table and froth flotation, the researchers were able to separate the waste into concentrate and nonconcentrate, followed by chemical and mineralogical analysis. The froth flotation with preliminary sub-sample preparation and pH adjustment proved to be particularly effective, achieving a high degree of sulphide mineral recovery. The use of multiple reagent dosing for more significant fractions further improved the results. This technology not only helps to reduce the environmental burden of waste dumps, but also ensures the recovery of valuable resources, demonstrating a practical example of the circular economy in the mining industry [5].

An analysis of international experience reveals that the utilization of pulp and other waste from the mining and stone processing industries is not only

environmentally sound but also economically viable. Technologies such as the wet shaking table and froth flotation enable the efficient separation and recovery of valuable metals, thereby reducing the environmental footprint and promoting resource conservation. Examples from Italy and EU countries highlight the potential of these approaches, demonstrating that industrial waste recycling can be transformed from a costly item into a profitable industry, thereby contributing to the development of a circular economy.

Despite the environmental problems caused by the accumulation of stone processing waste in the Zhytomyr region, research confirms the potential for its practical use, particularly in the creation of geopolymer concrete with enhanced characteristics and reduced environmental impact.

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FINE-DISPERSED STONE PROCESSING WASTE IN ZHYTOMYR REGION: ENVIRONMENTAL CHALLENGES AND SOLUTIONS

The relevance of the problem stems from the unique geological potential of the Zhytomyr region, which has 156 deposits of facing and decorative stone within the Ukrainian Shield with shallow occurrence of Precambrian crystalline rocks.

The primary sources of fine-dispersed waste (slurry) are enterprises engaged in extracting and processing facing stone. The scale of the problem is confirmed by 84 special permits for subsoil use and a total development area of about 660 hectares, which creates significant environmental pressure [1, p. 40].

Environmental consequences manifest in the complex degradation of natural systems through waste heap formation, changes in the hydrogeological regime of the territory, and negative impact on public health due to crystalline silica content in the waste [2, p. 31].

In Zhytomyr region, a systematic approach is being implemented through the creation of "Eco-Service" municipal enterprise (15.5 hectares near Korostyshiv) for comprehensive waste processing: production of crushed stone (up to 40,000 thousand tons annually) and manufacturing thermal blocks from a slurry.

Economic losses include land resource losses and reduced investment attractiveness of the region. The solution requires implementing international experience through technological modernization, economic incentives, and strengthened environmental control using circular economy principles.

Comprehensive intervention at state, regional, and enterprise levels, including technological modernization, strengthening the regulatory framework, and raising environmental awareness among all process participants is needed to solve the mentioned above multifaceted problem effectively.

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A COMPARATIVE STUDY OF STEREOLITHOGRAPHY AND FUSED DEPOSITION MODELING: ADVANCEMENTS, CHALLENGES, AND FUTURE DIRECTIONS IN ADDITIVE MANUFACTURING

Additive manufacturing has transformed design and production across many industries. This review compares two prominent 3D printing methods—stereolithography (SLA) and fused deposition modeling (FDM). SLA uses a UV laser to cure liquid resin for high-resolution parts with smooth surfaces, while FDM extrudes thermoplastic filaments, offering cost-effectiveness and material versatility. Both techniques are finding innovative applications in medicine, aerospace, automotive, consumer products, and even architecture. Despite their benefits, challenges such as high material costs, post-processing requirements, surface quality issues, and mechanical anisotropy persist. Ongoing research is focused on sustainable materials, process optimization, and even hybrid systems that combine the strengths of both methods. The continued evolution of these technologies is expected to enhance further personalized production, lightweight structural design, and sustainable manufacturing practices [1, p. 5; 6].

Recent advances in additive manufacturing have enabled designers and engineers to break away from traditional, subtractive methods. SLA and FDM are at the forefront of this transformation. SLA employs a UV laser to selectively cure resin layer by layer, achieving exceptional detail and finish. In contrast, FDM extrudes melted thermoplastics such as PLA or ABS to build parts layer by layer, making it a practical and accessible option for rapid prototyping and low-volume production [1, p. 5; 6]. These complementary techniques offer varied benefits that are increasingly exploited across several fields [2, p. 7; 8].

Overview of SLA and FDM Technologies

Stereolithography (SLA) builds parts by curing layers of liquid photopolymer resin using a UV laser (or LCD), and it is renowned for its ability to produce components with extremely fine details and smooth surfaces—ideal for applications such as dental models, surgical guides, and microfluidic devices. However, the high-quality finishes come at the cost of expensive resins and additional post-processing, including cleaning and secondary curing, as well as concerns about resin waste, with recent trends focusing on improving curing speeds and reducing waste without compromising on quality [7, p. 2; 3].

Fused Deposition Modeling (FDM) constructs objects by extruding thermoplastic filaments (e.g., PLA, ABS, PETG) through a heated nozzle and is known for its low material costs, ease of use, and flexibility—including the use of biodegradable materials—which makes it widely adopted for rapid prototyping, tooling, and even limited production runs. Although the layer-by-layer process can leave visible striations and lead to anisotropic mechanical properties, meaning that strength may vary by direction, research is focused on developing composite filaments

and optimizing printing parameters to enhance both surface quality and mechanical properties [4, p. 10; 11].

Both SLA and FDM have significant roles in the medical sector; SLA's precision is critical for fabricating detailed dental restorations, surgical guides, and orthopedic devices, while FDM offers a cost-effective approach to producing patient-specific prosthetics, anatomical models, and tissue scaffolds, with emerging hybrid techniques and biocompatible materials further pushing the boundaries of personalized medicine [3, p. 12; 13]. In the aerospace and automotive sectors, SLA's precision supports the production of complex, lightweight components with tight tolerances, and FDM is extensively used for rapid prototyping and tooling, enabling faster design iterations and the customization of components to reduce lead times and costs, which is crucial for achieving optimized strength-to-weight ratios in high-performance applications [7, p. 2; 3].

FDM also facilitates on-demand production and customization in consumer products, making it ideal for wearable accessories and personalized household items, while large-scale 3D printing using these methods is being explored in architecture to build complex, environmentally friendly structures with minimal waste, driving innovation through a combination of customization, material efficiency, and cost-effectiveness [9, p. 6; 7].

Despite these advances, technical challenges remain for both processes; SLA faces issues such as high material and equipment costs, intensive post-processing steps, and environmental concerns related to resin waste, whereas FDM must contend with visible layer lines, mechanical anisotropy, and the potential for part warping. Addressing these issues through improvements in material science and process control is critical [6, p. 9; 10]. Research is expected to focus on innovations in sustainable resins for SLA and enhanced composite filaments for FDM, the exploration of hybrid systems that combine the precision of SLA with the cost-effectiveness of FDM, and the integration of digital design tools and automation to further optimize printing processes and expand applications in personalized manufacturing and sustainable construction [10, p. 5; 6].

SLA and FDM are reshaping modern manufacturing by providing unique advantages in resolution, cost, and material versatility. While SLA is unmatched in delivering fine details and smooth finishes, FDM remains a go-to method for rapid, cost-effective prototyping. Despite their current challenges—such as high post-processing demands for SLA and anisotropic properties for FDM—ongoing innovations in material science and process engineering are paving the way for broader industrial applications. As these technologies mature, they are set to play an even greater role in personalized medicine, aerospace design, automotive manufacturing, and sustainable consumer products [2, p. 7; 8].

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GREEN CHEMISTRY PROSPECTS OF GLYCOLIC ACID ESTERS: SYNTHESIS AND APPLICATIONS

Research into glycolic acid is attracting more and more attention because it can be used both in everyday life and in industry. It also serves as a basis for developing new materials and technologies and is used in the food, pharmaceutical, metallurgical, cosmetic and textile industries, which indicates its considerable versatility.

Of particular interest is its use in green chemistry, which is gaining popularity due to its biodegradability, adaptability and low toxicity.

In reality, glycolic acid is a naturally occurring substance, meaning that plants naturally produce it and may be found in nature. During photosynthesis, it is formed. Blends of glycolic acid are made by the extraction of plant materials but may be standardized by the addition of man-made chemicals. Petroleum and renewable resources, such as sugar cane, sugar beets, pineapple, oranges and grapes, can provide glycolic acid [1, p. 63].

Glycolic acid can be produced artificially through various methods: chemical synthesis, microbial fermentation, and enzymatic conversion are the main processes used for its production. One such method is CO2 hydrogenation to methanol, as described by the reaction: $CO2 + 3H2 \rightleftharpoons CH3OH + H2O$ followed by the catalytic oxidation of methanol to formaldehyde: $CH3OH \rightarrow CH2O + H2$ and finally, the carbonylation of formaldehyde to glycolic acid: $CH2O + H2O + CO \rightarrow HOCH2COOH$ [2, p. 7].

Fermentation is a straightforward biological process for using microorganisms to produce potent, high-purity glycolic acid compounds. Making wine or beer is comparable, but the microbes create glycolic acid rather than alcohol.

Enzymatic conversion is another method of obtaining glycolic acid and is facilitated by certain chemo-lithotrophic iron and sulfur-oxidizing bacteria or Alcaligenes sp. Nitrilase enzyme activity hydrolyses glycolinitrile to create glycolic acid naturally.

Purification methods play an essential role in obtaining high-quality glycolic acid. Crude glycolic acid is purified through distillation, crystallization, ion exchange, and activated carbon treatment.

In its purified form, glycolic acid is a member of the class of tiny compounds that can have a variety of intramolecular hydrogen bonding conformations. Hydrogen bonding between the carbonyl oxygen and the hydroxyl proton is the lowest energy structure experimentally determined.

The tiny acid molecule reduces corneocyte adhesion and can penetrate the epidermis outermost layer. It simply indicates that glycolic acid aids in the removal of the matrix that holds the dead cells on the epidermis outermost layer together. When

these dead cells begin to decompose, it stimulates the renewal of new skin cells. These new skin cells give a fresh, youthful look to the skin.

Glycolic acid is used in many different sectors, primarily for pH control or when a cheap organic acid is required. Because of its antibacterial qualities and tendency to not corrode, it is frequently used in acidic cleaning solutions. In particular, it prevents the development of microorganisms that oxidize iron. In addition, glycolic acid is used to purify water and remove scale and rust from pipes and heat exchangers [1, p 63]. Moreover, it is employed in fur processing and in the textile sector for crease-proofing, printing and textile dyeing [2, p. 2].

Esters of glycolic acid are synthesized through esterification. With the formula $CH_2OHCOOR$, glycolic acid esters – also referred to as hydroxyl acetic acid esters and ethanolic acid esters are typically made by esterifying glycolic acid with alcohol ($HOCH_2COOH + ROH$). An example of such an ester is methyl glycolate, which is synthesized through dimethyl oxalate hydrogenation over Cu-Ag/SiO_2 catalysts.

Glycolic acid esters are widely used in pharmaceuticals as prodrugs, solubility enhancers, permeation enhancers, and cosmetics such as skin care products, moisturizers, and exfoliants. They are also used in agriculture as plant growth regulators, insecticides, and herbicides.

Thus, glycolic acid is essential in daily life and industrial processes. It can be sustainably produced using green chemistry approaches, and esters of glycolic acid hold great potential for medical, agricultural, and polymer applications.

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Session work № 6

CURRENT RESEARCH IN THE FIELD OF MEDICINE

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MODERN DIAGNOSTIC METHODS OF PULMONARY TUBERCULOSIS: FROM CLASSICS TO INNOVATIONS

Tuberculosis remains one of the most serious infectious diseases worldwide, particularly in low- and middle-income countries. According to the "Global Tuberculosis Report 2024", 10.8 million new cases of tuberculosis were registered globally in 2023, with an incidence rate of 134 per 100,000 of population, the highest one since the global monitoring began in 1995.

The largest number of tuberculosis patients is recorded in India, Indonesia, China, the Philippines, and Pakistan. These five countries account for 56% of all tuberculosis cases worldwide [6].

Regarding the situation in Ukraine, only in February 2025, 1319 individuals were registered with tuberculosis: 1009 new cases of the disease; 250 patients with relapse; 60 other cases (among them: individuals who resumed treatment; patients after unsuccessful treatment courses; patients with an unknown history of prior treatment). 254 individuals from the total number had a drug-resistant form of tuberculosis. Pulmonary tuberculosis was detected in 1225 people with tuberculosis, and extrapulmonary tuberculosis in 94. Out of the total number of tuberculosis cases in February 2025, 1013 were men and 306 were women. 214 patients were HIV-positive. The figures for tuberculosis cases are regrettably increasing monthly, which underscores the relevance of this disease and indicates the necessity of prevention, timely diagnosis, and treatment of this condition [4].

Tuberculosis is an infectious disease caused by the bacterium Mycobacterium tuberculosis (MTB). The primary route of transmission is airborne droplet and airborne dust. Mycobacteria are present in tiny droplets released during talking, coughing, and sneezing by an infected person.

Key risk factors for developing tuberculosis include: contact with a person with active tuberculosis; weakened immune system (HIV infection, immunosuppressive therapy); chronic diseases (diabetes mellitus, autoimmune diseases); oncological diseases; advanced age; malnutrition and poor socio-economic conditions; smoking and alcohol abuse; prolonged stress.

Special attention is warranted for children, whose immune systems are not yet fully formed, and individuals in adverse conditions due to military actions, forced displacement, and limited access to adequate nutrition and medical care [3].

Tuberculosis is a disease that can affect various organs and systems. Specifically, it can involve different organs and systems, including: the respiratory system, the meninges and nervous system, the intestines, the peritoneum, the mesenteric lymph nodes, bones and joints, the kidneys, the urinary tract, the genital organs, the skin, the subcutaneous tissue, the eyes, and other organs.

The current classification of pulmonary tuberculosis includes the following forms:

1. Clinical-radiological manifestations: primary tuberculosis complex; tuberculosis of intrathoracic lymph nodes; disseminated pulmonary tuberculosis; focal pulmonary tuberculosis; infiltrative pulmonary tuberculosis; caseous pneumonia; pulmonary tuberculoma; cavernous pulmonary tuberculosis; fibrocavernous pulmonary tuberculosis; cirrhotic pulmonary tuberculosis; tuberculous pleurisy; tuberculosis of the bronchi, trachea, and upper respiratory tract
2. Bacterial excretion: with Mycobacterium tuberculosis excretion (MTB+); without Mycobacterium tuberculosis excretion (MTB-).
3. Drug resistance: drug-susceptible tuberculosis; monoresistant tuberculosis; polyresistant tuberculosis; multidrug-resistant tuberculosis (MDR-TB); extensively drug-resistant tuberculosis (XDR-TB) [2, c.178].

Symptoms of tuberculosis can vary significantly from minimal to pronounced, depending on the form of the disease, the extent of the process, and the patient's immune status.

Primary tuberculosis is characterized by a gradual or acute onset and course, paraspecific reactions, positive tuberculin skin tests, and involvement of the lymph nodes in the pathological process. The following forms of primary tuberculosis are distinguished: early and chronic tuberculous intoxication in children and adolescents, primary tuberculous complex, bronchoadenitis (tuberculosis of the lymph nodes), and disseminated pulmonary tuberculosis.

Tuberculous intoxication manifests as an increase in body temperature to subfebrile levels, increased sweating, headache, dizziness, general weakness, pallor of the skin, impaired appetite, emotional lability, and enlargement of peripheral lymph nodes.

The primary tuberculous complex begins acutely, with an increase in body temperature to 38-39°C, the appearance of symptoms of tuberculous intoxication (weakness, loss of appetite, sweating), severe cough, chest pain, and shortness of breath [2, p.178; 4].

It should be noted that tuberculosis can be asymptomatic, especially in the early stages, which complicates timely diagnosis and underscores the importance of preventive screenings in risk groups.

Early and accurate diagnosis of tuberculosis is critical for effective treatment, prevention of infection spread, and reduction of mortality. Modern diagnostic methods for tuberculosis are constantly improving, allowing for better detection of the disease at early stages and ensuring more effective treatment.

According to current recommendations, tuberculosis diagnosis should be comprehensive and include the following methods:

1. Screening methods:

a) clinical screening – involves the identification of symptoms that may be indicative of tuberculosis, such as a persistent cough (lasting over 2-3 weeks), fever, night sweats, weight loss, fatigue, chest pain, hemoptysis, etc;

b) chest X-ray (radiography) – allows to detect changes in the lungs characteristic of tuberculosis, such as infiltrates, cavities, foci, and pleural effusion;

c) tuberculin skin test (TST or Mantoux test) for children – involves the intradermal injection of tuberculin and the assessment of the reaction after 72 hours. An indicator of infection is the size of the the papule (induration) at the injection site. It is important to consider that results may be false-positive due to BCG vaccination or other factors;

d) immunological tests (interferon-gamma release assays or IGRAs) – QuantiFERON-TB Gold test or T-SPOT.TB test – measure the immune system's response to specific Mycobacterium tuberculosis antigens. An indicator of infection is a positive test result. These tests are more specific than the TST and do not give false-positive results due to BCG vaccination.

2. Diagnostic confirmation methods:

a) microscopic examination of sputum for acid-fast bacilli (AFB smear) – allows to detect Mycobacterium tuberculosis under a microscope. An indicator of the disease is the identification of acid-fast bacilli in the sputum;

b) culture studies – involve growing Mycobacterium tuberculosis on a specialized culture medium. This method is more sensitive than microscopy and allows to define an accurate diagnosis;

c) molecular genetic methods (Xpert MTB/RIF, Line Probe Assay) – allow the rapid detection of Mycobacterium tuberculosis DNA and determination of resistance to rifampicin (Xpert MTB/RIF) or other anti-tuberculosis drugs (Line Probe Assay). An indicator of the disease is the detection of Mycobacterium tuberculosis DNA;

d) drug susceptibility testing (DST) of mycobacteria – allows to determine which anti-tuberculosis drugs the mycobacteria are susceptible to and which they are resistant to. This is necessary for prescribing effective treatment.

3. Additional investigations:

a) computed tomography (CT) of the chest – allows to obtain more detailed images of the lungs than a chest X-ray and can reveal changes not visible on a standard radiograph;

b) complete blood count (CBC) with erythrocyte sedimentation rate (ESR) – helps to assess the overall condition of the body and the presence of an inflammatory process. An elevated ESR may indicate the presence of inflammation but is not specific to tuberculosis;

c) biochemical blood tests (C-Reactive Protein (CRP), Alanine Aminotransferase (ALT), Aspartate Aminotransferase (AST), Lactate Dehydrogenase (LDH), Electrolytes) – help to assess the function of the liver, kidneys, and other organs, as well as detect signs of inflammation;

d) bronchoscopy with biopsy, if necessary – allows to visualize the internal surface of the bronchi and the collection of tissue samples for examination. It is used in complex cases when other methods do not allow to establish a diagnosis [1].

It is important to note that modern molecular diagnostic methods (Xpert MTB/RIF) allow for simultaneous detection of Mycobacterium tuberculosis and determination of its resistance to rifampicin within a few hours, which significantly accelerates the initiation of adequate therapy.

Modern methods for diagnosing pulmonary tuberculosis improve disease detection at early stages, determine antibiotic resistance, and ensure more effective treatment. The implementation of innovative technologies, such as molecular genetics methods, is the key to combating tuberculosis and reducing its spread.

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PRETERM LABOUR: RISK FACTORS, PREDICTION AND PREVENTION

Preterm labour is a leading cause of neonatal mortality and the most common reason for antenatal hospitalization. Despite significant progress in neonatal care, the consequences of preterm labour for newborns remain a serious problem. Therefore, the study of risk factors, the development of prediction methods, and the implementation of effective prevention measures are extremely relevant.

According to the World Health Organization (WHO) criteria, birth is considered preterm if the child is born before 37 weeks of gestation, with a weight of up to 2.5kg and a height of up to 45 cm. In Ukraine, preterm labours are considered those that occurred between 22 weeks and 36 weeks and 6 days of gestation [1, p. 62; 2, p. 8; 3, p. 57].

Preterm labour can cause the following long-term health problems for the child: retardation in physical and mental development; diseases of the central nervous system (cerebral palsy, epilepsy); respiratory pathologies; digestive system disorders; vision and hearing problems.

Risk factors for preterm labour include: history of preterm labour; recent childbirth (no more than 3 years ago); previous cervical interventions (biopsy, conization); multiple dilation and curettage; uterine malformations; maternal age less than 17 or more than 35 years; low socioeconomic status; body mass index (BMI) (overweight or underweight); excessive physical exertion; injuries, falls; multiple pregnancy; polyhydramnios or oligohydramnios; fetal malformations, placental pathologies; intrauterine infection; pregnant woman's chronic diseases: hypertension, endocrine diseases (diabetes mellitus, thyroid diseases); infectious diseases suffered by the pregnant woman (influenza, angina); severe preeclampsia (late-stage toxemia); chronic stress; use of assisted reproductive technologies; cervical insufficiency; bleeding in the 1st and the 2nd trimesters of pregnancy; maternal drug use (cocaine, heroin), alcohol abuse and smoking [2, p. 8; 3, p. 57].

The pathophysiology of preterm labour involves at least four major pathogenetic mechanisms: premature activation of the maternal or fetal hypothalamic-pituitary-adrenal axis (HPA), inflammation or infection, decidual hemorrhage and pathological uterine overdistension [3, p. 57; 4, p. 402].

The diagnosis of preterm labour is based on the determination of the presence of regular uterine contractions, which are necessarily accompanied by cervical changes. Vaginal bleeding and/or rupture of membranes only increase the likelihood of this diagnosis.

To confirm the onset of preterm labour, it is advisable to use the following specific criteria: uterine contractions (≥4 every 20 min or ≥8 per 1 hour) plus cervical

dilation ≥3 cm or cervical length <20 mm during transvaginal ultrasound (US) examination, or cervical length from 20 to 30 mm during transvaginal ultrasound and a positive fetal fibronectin test [2, p. 8; 3, p. 57].

Correct identification of women who will give birth prematurely allows for timely measures aimed at improving the prognosis of the newborn, namely: a course of prophylaxis of neonatal respiratory distress syndrome (RDS) with corticosteroids; prophylaxis of group B of streptococcal infection; magnesium therapy for fetal neuroprotection; transportation to a level III of perinatal care facility. The chosen tactics and the scope of interventions depend on the gestational age.

Preventive and therapeutic measures for women at high risk of preterm labour include: progesterone administration, cervical cerclage, and the use of an obstetric pessary [3, p. 57; 4, p. 402].

Thus, preterm labour is a complex and multifactorial problem. Its solution requires a comprehensive approach, including: identification of women at high risk of preterm labour; implementation of effective prediction methods; application of modern preventive methods. Further research in this area will reduce the incidence of preterm labours and improve perinatal outcomes.

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THE IMPACT OF BREAST FEEDING ON MATERNAL AND CHILD HEALTH

The public health system faces the task of preserving and improving the health of the population, protecting individuals of all age groups from infectious and non-communicable diseases, and increasing life expectancy. The healthcare of newborns and infants requires special attention, including the organization of proper nutrition. Breast feeding is recognized as the gold standard for healthy infant growth and development due to its nutritional, immunological, and psychological benefits [6].

Despite numerous studies dedicated to the advantages of breast feeding, this matter remains relevant, as breast feeding rates in many countries, including Ukraine, are still insufficient.

The World Health Organization (WHO) and UNICEF have clearly defined recommendations for ensuring breast feeding: initiation within the first hour of birth; exclusive breast feeding without any other food or fluids, including water, for the first six months of life; introduction of complementary food at six months; continuation of breast feeding up to two years or beyond [7].

It is known that breast feeding has numerous positive health outcomes for children throughout their future life such as: providing a balanced diet and nutrients; protection against diseases; sensory, cognitive, and intellectual development; a sense of security.

Breast milk is a unique natural food for newborns. It contains all the nutrients necessary for the child's development and growth during the first months of life. Except for specific contraindications, breast milk is the safest source of nutrients, vitamins, and energy, as it does not contain any additional, harmful, or contaminating substances.

Breast milk fully meets the child's nutritional needs for the first 6 months of life, continues to meet at least half of the child's nutritional needs from 6 to 12 months, and covers one-third of these needs during the second year of life.

Early initiation of breast feeding, within an hour of birth, provides a high level of protection for the infant against infectious diseases, particularly gastrointestinal infections. According to the WHO data, exclusive breast feeding significantly reduces the risk of death from diarrhea, pneumonia and other infectious diseases, and children recover faster when being ill.

Breast feeding can provide future immunity for the child against dangerous diseases such as asthma and diabetes. Additionally, children and adolescents who received breast milk in infancy are less likely to suffer from overweight or obesity in adulthood [1; 5].

Breast feeding promotes the sensory and cognitive development of the infant and lays the foundation for further intellectual development. Studies show that breastfed children demonstrate higher academic achievement and intellectual development [2].

An important aspect of breast feeding is its benefits for maternal health, as this practice reduces the risk of cardiovascular diseases, hypertension, type 2 diabetes, ovarian cancer and breast cancer among women who are breastfed. Breast feeding reduces the risk of postpartum depression and strengthens the mother-child bond, promoting improved and strengthened family relationships. Breast feeding provides safety and comfort, as it is the most reliable, safe and accessible method of infant feeding. Breast feeding is a natural, though not 100% reliable, method of pregnancy prevention, known as the lactational amenorrhea method [4].

Breast feeding may be contraindicated in rare cases, such as when the infant has classic galactosemia, a form of inherited metabolic disorder; the mother is infected with the human T-lymphotropic virus of type I or II; or the mother uses illicit drugs. HIV-infected mothers can breast feed their children, provided they receive antiretroviral therapy and follow medical advice.

Temporary cessation of breast feeding is recommended if: the mother has untreated brucellosis; the mother is taking certain medications not recommended during breast feeding; the mother is undergoing digital radiography with radiopharmaceuticals; or the mother has an active herpes simplex virus (HSV) with lesions in the breast area.

Mothers can resume breast feeding after consulting with a doctor who will determine when it is safe for the infant. These mothers should receive lactation support, learn how to stimulate and maintain milk production and feed their infants with pasteurized donor breast milk or formula during temporary cessation of breast feeding [1].

The main barriers supporting breast feeding, which can significantly affect a mother’s decision, desire and ability to continue, include: the influence of social media and mass marketing of breast milk substitutes, the lack of breast feeding facilities in the workplace, short maternity leave, and the availability of accurate information on lactation.

In general, overcoming these barriers and improving support systems at the community and family levels are essential for promoting and supporting breast feeding practices. Enhancing the skills of healthcare professionals in breast feeding support, providing reliable information on its benefits, and assisting in resolving problems mothers may encounter can significantly improve breast feeding support rates [3; 8].

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