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## INDIVIDUAL APARTMENT BUILDING WITH INTEGRATED ENERGY EFFICIENT STRUCTURE (GREEN HOUSE)

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The project proposal of an individual residential building with an integrated energy efficient construction (green house) is developed as social housing for a young family. The planning solution of the individual residential building is based on the principle of zoning on the residential and economic zones.

The functional purpose of the premises is differentiated by levels into 3 separate areas: green house (semi-basement), common area (ground floor) and recreation area (attic floor). The semi-basement floor is designed for growing vegetable crops. An entrance vestibule, an entrance hall with access to green house and an attic floor are on the ground floor. The composite centre of the interior space of the house is a large living room which is combined with a kitchen. A recreation area that is located on the attic floor includes a bedroom with a dressing room and two storerooms. The complete set of autonomous engineering equipment based on local systems is provided.

The following main criteria were taken into account when developing an architecturally - constructive solution of an individual residential building:

- Implementation of the largest useful area from the entire construction volume of the residential building and the separation of the functions of carrier and enclosing structures;
- Providing the flexible volume-planning solutions and increasing the comfort of the premises;
- Maximum and most effective use of physical and mechanical properties (strength, deformability, thermal conductivity, etc.);
- Maximum use of the existing local commodity and production base.

These figures show the plans of the ground floor and mansard floor.

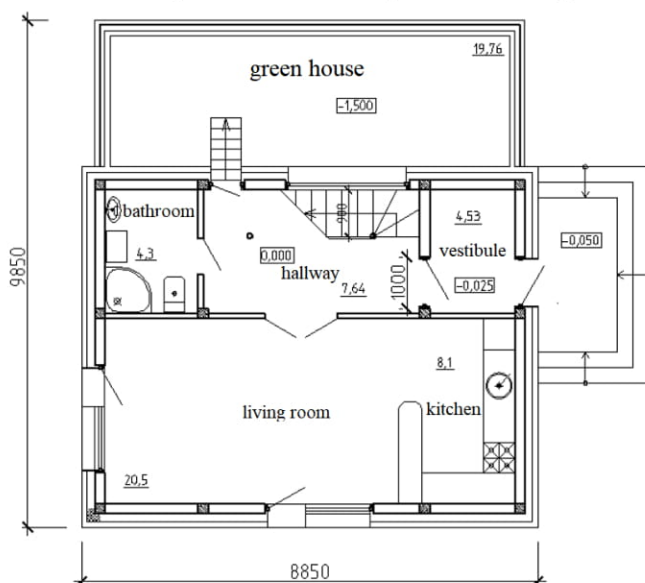


Fig. 1. Plan of the ground floor

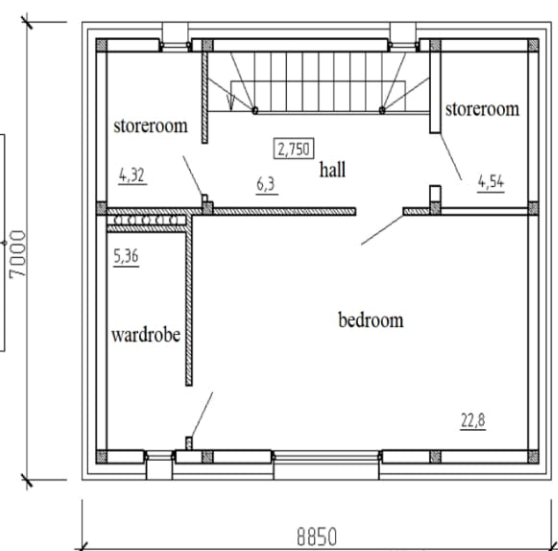


Fig. 2. Mansard floor plan

Taking into account the above mentioned criteria we can get the optimal architectural and structural solution for the individual residential building.

## NEUE THEORIEN ZUR ENTSTEHUNG DES SONNENSYSTEMS

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Die inneren terrestrischen Protoplaneten beginnen sich sehr früh zu bilden, erben einen Großteil des radioaktiven Aluminiums-26 und schmelzen dementsprechend unter Bildung von Eisenkernen und entgasen schnell ihren ursprünglichen Gehalt an flüchtigen Stoffen. Die Planeten des äußeren Sonnensystems beginnen sich später und weiter mit weniger radioaktiver Erwärmung zu bilden und behalten daher den größten Teil der flüchtigen Materie.

Die Theorie erklärt die Bildung von Planeten und vielen Meteoriten in zwei Stufen. Die Universität Bayreuth hat angekündigt, dass die Arbeit auf jüngsten Beobachtungen anderer Sonnensysteme während ihrer Entstehung und auf Laborexperimenten zum Gehalt an Isotopen, Eisen und Wasser in Meteoriten basiert. Neuere astronomische Beobachtungen protoplanetarer Scheiben und geochemische Laboranalysen von Meteoriten zeigen, dass die Entstehung des Planeten entgegen den Annahmen erst etwa 200.000 Jahre nach der Entstehung des jungen Sterns beginnt und in isolierten Regionen des jungen Sonnensystems stattfindet. Die terrestrischen Planeten wie Erde, Mars und Venus zeichnen sich in den frühen Stadien ihrer Entstehung durch eine relativ trockene Zusammensetzung aus, während äußere Planeten wie Jupiter und Saturn, Asteroiden und Kometen während ihrer anschließenden Bildung deutlich flüchtigere Substanzen wie Wasser erhielten. Das trockene innere System und das feuchte äußere System, die Kombination zahlreicher astro-geophysikalischer Phänomene während der Phase der Entstehung der Sonne und des Sonnensystems, machen deutlich, warum die Planeten des inneren Sonnensystems klein und trocken sind – sie wenig Wasser nach Masse enthalten - während die Planeten des äußeren Sonnensystems größer und feuchter sind.

Zahlreiche Experimente haben gezeigt, dass diese beiden Stadien der Entwicklung und Bildung von Planeten - interne und externe Systeme - durch zwei verschiedene Phasen ihrer direkten Bildung erklärt werden können. Astronomische Beobachtungen von Planeten bildenden Scheiben haben gezeigt, dass diese Scheiben in ihrem Innenraum nur geringe Turbulenzen aufweisen. Unter solchen Bedingungen können im Gas eingebettete Staubpartikel zu viel größeren Tumoren heranwachsen und so die ersten Planetenkomponenten im inneren Sonnensystem bilden.

Die Planetesimalen des inneren Sonnensystems wurden sehr heiß und bildeten die inneren Ozeane des Magmas. Sie bildeten Eisenkerne und entgasteten ihren anfänglichen flüchtigen Gehalt, was schließlich zur trockenen Zusammensetzung der Planeten führte. Zum Vergleich: Die Planetesimalen des äußeren Sonnensystems bildeten sich später und wurden daher weniger von der inneren Erwärmung beeinflusst und begrenzten somit die Bildung des Eisenkerns und die Freisetzung flüchtiger Substanzen. Daher wurden das tro-

ckene innere Sonnensystem, das sich in den frühen Stadien gebildet hat, und das äußere Sonnensystem, das später gebildet wurde und reich an Wasser ist, auf zwei verschiedene evolutionäre Arten abgeleitet.

Das Bayerische Geoinstitut der Universität Bayreuth führt experimentelle Forschungen zu hohen Temperaturen in den Bereichen Mineralogie, Petrologie, Geochemie und Geophysik durch. Untersuchungen der Struktur, Zusammensetzung und Dynamik des Erdinneren verbessern unser Verständnis der Gesteinsbildungsprozesse.

## ART AND ARDOUR OF RICHARD ALDINGTON

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Richard Aldington was an English poet, novelist and critic. Richard Aldington is one of the founders of Imagism, a modernist literary movement of the early 20th century. A detailed acquaintance with the poetry and prose of Aldington, the study of his articles, his autobiographical book, and his letters convinces of the complex evolution of the writer's creative method, connected with the evolution of his world outlook and the search for the ideological and aesthetic ideal.

Having gone through the trials of the First World War, Aldington realized that the world of Imagist poetry was too far from true life, and the forms it offered were unable to convey the social themes his works were based on. Under the influence of the new experience Aldington's aesthetic positions change, he departed from Imagism and entered into a polemic with the modernists. His poems in *Images of War* (1919) were in sharp contrast to Aldington's early poetry. These poems reflect the heartstrings of the lyricist shaken by the cruelty and injustice of warfare.

Having overcome his fascination with Imagism, Aldington opposed the subjective extremes of modernist art and condemned its intellectual snobbery and lack of content. While in the early stage of his career Aldington argued that the artist could stand aside from the tasks of modernity and create for a narrow circle of connoisseurs, he subsequently advocated a rapprochement between art and reality.

The experience of war helped the writer to see modern bourgeois England with particular clarity, made him take a critical view of modernism and say that realist literature is no less important, as it deals with the individual in his/her social-historical relationships.

Aldington's books have been translated in more than a dozen of countries and are read throughout the world. He is rightly considered to be one of the few contemporary English writers who are truly world renowned. Aldington's works are full of life. You need to pick up any of his books to feel in a few minutes the vitality, the ardour of the soul, the energy of his mind, the words flow naturally and smoothly, and the impression is that his ability to perceive the world, to suffer and to admire is many times greater than ours. The works he creates are so personal in the best sense of the word. There is, to use his own expression, a certain "conception of life", and a heartfelt life experience.

## CONSUMERISM OR HUMAN WELLBEING

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The word “consumerism” having been borrowed from the English language is widely used in Ukrainian alongside with the English term “affluenza”, derived from the words “affluence” (meaning “wealth, prosperity”) and “influenza” (meaning “flu, viral infection”) which in some cases means unhealthy pleasure obtained from the acquisition of objects of material culture, and in general – the ideology, which establishes the need and justification of constant consumption of goods and services. Such pleasure is unhealthy as acquiring new things and goods becomes one of the main sources of emotions aggravated by a strong psychological dependence on the process of consumption.

Those viewed and molded as consumers are characterized by a desire to have a large number of unnecessary things, the desire to purchase goods of well-known brands (either due to aggressive advertising or to the recommendation of other active consumers) which brings about numerous psychological and social problems. Conspicuous consumers (sometimes unconscious) try to imitate fashion, but if the fashion for an item passes, they get rid of the old item (or stop using it) and begin to crave for a new one. And in such a change of things, as a rule, there is no practical benefit, the new thing is rarely superior in functionality and usefulness to the old one, often even vice versa. However, consumerism dictates strict adherence to fashion and calls for being like the successful in this regard.

Duncan McLaren, Mike Childs and Guy Shrubsole understand consumerism as a pre-occupation with, and an inclination toward, the buying of consumer goods and services, and the view that increasing purchases of goods and services is advantageous to the economy. It is best interpreted as a ‘cultural obsession with (material) goods as the way to a good life’ and not as an immutable label for particular behaviours, individuals or groups.

The basic principle underlying consumerism promotion technologies is the statement that a successful person needs and is able to obtain some new things of an ostensibly better quality. The idea is as simple as that: the more you consume – the more successful you are. So, we work and spend taking loans than too often overtax our financial resources and cannot be paid back. Former Treasury Secretary Timothy Geithner (the 75th United States Secretary of the Treasury under President Barack Obama, from 2009 to 2013) has explained that the government’s “biggest debate was whether to try to reduce overall mortgage loans or just monthly payments.”

Economists from the world major universities and organization developing strategies of economic development invest their time and effort into studying the effect of debt on default and consumption (Pascal Noel, Peter Ganong from Harvard university) and trying to find explanations for borrower default decisions as well as participating in a vigorous policy debate about how to decrease defaults and increase consumption of struggling liquidity constrained borrowers.

P.F. Higgs, M. Hyde, C.J. Gilleard, C.R. Victor, R.D. Wiggins, I.R. Jones scrutinize later life consumption in the UK from 1968–2005. Preceding from the premise that the signifi-

cance of the UK's ageing population has been generally acknowledged, the authors draw attention to the fact that its implications for consumption have however been neglected. These scholars consider that consumption patterns of older people are important given that the end of the 20th century witnessed profound changes to the nature of later life, many linked to the emergence of 'consumer societies' in the UK and elsewhere. Taking into account the title of the scholars' study (From Passive to Active Consumers? Later Life Consumption in the UK from 1968–2005) the UK's ageing population has to change their status of passive consumers to active ones.

We support Duncan McLaren, Mike Childs and Guy Shrubsole who have substantiated that the problems of over-consumption are not merely environmentally detrimental, but in the form of modern consumerist cultures they undermine human wellbeing and hamper human development as the use of consumption as a false satisfier for fundamental human needs such as identity and affiliation results in harm to consumers' own wellbeing.

### GOOD PARENTING

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Good parents have good children. How often do we hear this statement, and how often do we find it difficult to explain what parents are good?

Is it possible to call those parents good who never doubt their righteousness, always have an accurate idea of what the child needs and what he can do, who claim that at every moment of time they know how to do the right thing and can predict with absolute accuracy the behavior of their children in different situations? Is it possible to call those parents who are in constant anxious doubts, who are lost every time they encounter something new in their child's behavior, good parents? Apparently, neither one nor the other can be classified as good parents. In parental work, as in any other, mistakes, doubts, and temporary failures are possible, which are replaced by victories.

The whole lifestyle of the family has a strong influence on the formation of the personality of a growing person. And if father and mother have wrong ideas about the family way of life, then this negatively affects not only the formation of individual qualities of the child, but on the level of upbringing of the child's personality as a whole. All parents bring up their children to the best of their ability and understanding of life, rarely thinking about why in certain situations they act this way and not otherwise. And parents make mistakes from time to time.

The following mistakes were frequently encountered: little attention was paid to raising children in the first years of their life; lack of clear line of education; blind, unreasonable love; the only child is the undue focus of all adult family members; undemanding and indulgent parents; poor understanding of the tasks and goals of education; excessive severity; the division of children by parents into beloved and unloved. The mistakes of family upbringing include the desire of individual parents to shift the care of raising children to educational

institutions, quarrels between parents in the presence of children, bad habits of parents (alcoholism, drug addiction).

Unfortunately, the negative impact of all mistakes extends not only to academic success, but also to many of the adolescent's moral qualities, including their social activity. In most cases, as a result of mistakes in family upbringing, a difficult personality of a teenager is formed, a child's conflict begins in the family, at school, in society.

Upbringing in a family can be very different – from absolute total control to inattention to your child in general. It is best when parents look after their child (unobtrusively), when the child and parents do something together, for example, homework. In such a way children and parents learn the art of understanding each other. And by listening to their parent's opinion, children are ready to constantly help their parents, and, as a rule, the academic performance of such children is quite good.

Family upbringing methods, like all upbringing, should be based, first of all, on love for the child. The child is entitled to humane and merciful relationship. Involve him in the life of the family, as an equal member of it. Relationships in the family should be optimistic, which will help the child to overcome difficulties in the future, to feel the "protection" of the family.

## LEXICAL PECULIARITIES OF YU. ANDRUKHOVYCH'S TRANSLATION OF SHAKESPEARE'S TRAGEDY "HAMLET" INTO UKRAINIAN

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W. Shakespeare's works are one of the most important literary sources in the translation aspect. Andrukhovych's translation became the next, postmodernist in spirit, Ukrainian interpretation of Shakespeare's most famous work.

Andrukhovych's translation of "Hamlet" strikes with anti-intellectualism, figurative simplification of expression compared to the original, the presence of extremely brutal vocabulary. Since the XVIII century, the tragedy has been repeatedly translated into Ukrainian. Initially, these were translations from French and German into Russian, but in the XIX century there were translations from the original text.

In some cases, there is an accurate translation of the paremiological unit, which conveys the material meaning of its constituent words and at the same time still retains its general meaning.

Brevity is the soul of wit. - *Стислість є душа розуму.*

Due to the literal translation of paremiological units developed by Yu. Andrukhovych, not only syntactic construction but also aphorism is not lost.

Translation from one language to another is impossible without transformations. The main task of the translator in achieving adequacy is to skillfully make the necessary translation transformations.

Lexical transformations:

Generalization and concretization:

A man may fish with the worm that hath eat of a king, and eat of the fish that hath fed of that worm. *Можна витягнути рибу на черв'яка, що пообідав королем, і пообідати рибою, яка поглинула цього черв'яка.*

Yu. Andrukhovych uses this type of lexical transformations in order to preserve the stylistic color of the work, as a word-for-word translation would lead to a significant distortion of the translation style in comparison with the original style.

Generalization of meanings is to replace the concrete with general or species concept with generic.

Whose sore task Does not divide the Sunday from the week? - *Чия тяжка праця не розрізняє свят від буднів?*

It should be noted that, despite the significant difference between the meaning of the translation and the original, the general meaning is not changed.

Indifference is a specific feature of Ukrainian postmodernism, which only declares ethical amorphousness and apoliticalism.

## **POURQUOI LE FRANÇAIS S'OPPOSE-T-IL À L'ANGLAIS DANS LE SCIENCES?**

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On pense souvent que toute la science se fait en anglais. Non, car certaines langues résistent encore et toujours à l'exclusivité d'une langue dominante. À l'heure actuelle, la langue française se trouve dans une position complexe par rapport aux autres langues. D'une part, elle cède du terrain à l'anglais, langue scientifique dominante. D'autre part, elle continue à être la langue de référence entre scientifiques francophones. Dès lors, doit-on demander aux francophones de toujours produire, diffuser et enseigner la science en français? Ou doit-on accepter que tous les travaux et conférences se fassent en anglais, au risque de ne plus pouvoir discuter de certains concepts scientifiques dans les langues officielles des pays? La Suisse est concernée au premier plan par ces interrogations.

Les langues dans les sciences : problèmes d'analyse et d'aménagement linguistique. Dans le courant du XX siècle, la communauté scientifique internationale est passé d'un modèle plurilingue restreint, mais équilibré entre trois langues, à savoir l'allemand, l'anglais et le français, à un modèle vertical, marqué par l'usage hégémonique de l'anglais. Cela signifie que de plus en plus de scientifiques non anglophones publient en anglais alors qu'ils poursuivent leurs recherches et leurs enseignements dans leurs propres langues: le français, le japonais, l'allemand, le russe, le chinois, l'espagnol, l'italien, le portugais et bien d'autres. Depuis les années 1990, nous observons aussi une tendance, surtout en Europe, d'inclure une partie de l'enseignement de troisième cycle (postgraduate) en anglais dans quelques disciplines des sciences naturelles et des technologies dans les pays non anglophones.

Aujourd'hui, nous nous trouvons au moment probablement déterminant où un modèle de plurilinguisme réduit, marqué par une forte hégémonie de l'anglais, mais plurilingue malgré tout, risque de passer au monopole de l'anglais. Pour plusieurs acteurs et observateurs, ce passage est déjà accompli pour les publications en sciences naturelles. À

l'année 2000, on établit que le 82% des publications en sciences sociales et humaines et le 95% des publications en sciences dites naturelles paraissent en anglais, à présent la seule langue hyper-centrale et mondialisée.

L'anglais n'est pas le vecteur " préféré " des scientifiques. Pasteur (dont la thèse fut rédigée en latin) ou les époux Curie n'ont jamais écrit un mot en anglais. Einstein rédigea sa théorie de la Relativité en allemand. Le mathématicien Poincaré ne s'exprimait qu'en français lors de ses conférences, qu'elles fussent en France, en Allemagne, en Suède, en Angleterre ou aux Etats-Unis. Le petit Maître de conférences qui débute sa carrière dans une université française ne préfère pas spontanément l'anglais au français comme langue de publication pour ses travaux, mais il sait que ses publications de langue anglaise seront davantage valorisées dans son parcours professionnel et qu'elles conditionneront à la fois ses promotions et ses augmentations de salaires. En France ou ailleurs, le chercheur ambitieux sait très bien, sauf exception, que la reconnaissance de ses talents se fera d'abord à l'échelle nationale avant de se faire à l'échelle internationale.

La diffusion dans une langue dominante, comme l'anglais, influence nécessairement la production des connaissances. Pour maintenir sa place dans la science mondiale, la Suisse doit publier et former ses chercheurs en anglais. Pour pouvoir discuter de concepts scientifiques dans les langues de la Confédération, elle doit demander à ses chercheurs de préserver leur diversité linguistique. Cela nécessite du temps: il faut rédiger les protocoles de recherche ou les comptes-rendus d'expérience en français, puis systématiquement passer à l'anglais pour diffuser internationalement les connaissances.

Cependant, ces efforts ont des conséquences positives. En effet, à poser les questions scientifiques en différentes langues, on réfléchit différemment. Car les concepts ne sont pas définis de la même manière dans les différentes cultures. Pour discuter de sciences, il faut d'abord en parler. Et cela ne va pas de soi, même à l'intérieur d'une communauté linguistique plus ou moins homogène. Formuler correctement les concepts devient alors une phase importante d'élaboration de la science. La reformulation des connaissances contribue à améliorer et étendre les structures théoriques. La science est donc de meilleure qualité quand les concepts ont été affinés en plusieurs langues.

Il s'agit donc de sensibiliser les scientifiques à l'importance de la diversité linguistique dans leur domaine. Et du rôle qu'ils ont à jouer pour définir des concepts clairs et facilement compréhensibles par le public. Face à ces réalités, le Fonds national suisse de la recherche scientifique (FNS) met en oeuvre une nouvelle politique des langues. Celle-ci stipule que la place scientifique suisse doit s'ouvrir encore davantage à l'international sans perdre pour autant son ancrage dans le pays. "Le FNS entend encourager une culture scientifique plurilingue, ou l'anglais 'lingua franca' est considéré comme nécessaire mais comme non suffisant". Cette politique appelle à innover. Il faut tester de nouvelles modalités de communication scientifique, en respectant la richesse que la diversité linguistique représente pour la science.

## GRAMMAR NAZISM AS A WAY OF SNOBBISH WEB COMMUNICATION

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Grammar Nazis is a slang name for people who loves pointing out other people's grammar errors, in an attempt to 'preserve' a language. This name came to the Internet from the West. On both sides of the ocean, such people are compared with the Nazis, but it is no longer possible to establish who exactly the first to call them that was. The name has been in use since 2003.

Grammar Nazism usually destroys the atmosphere of friendly conversation or cooperation and often leads to personal attacks. This is often the goal of Grammar Nazis who make it possible in certain cases to consider them as one of the varieties of the Internet trolls.

Grammar Nazis are those people who, after reading a long article and discovering spelling errors, completely lose the ability to understand the meaning of the text itself, because their perception and emotions are based on the errors, and then these people are only ready to discuss them, using vehement language. Grammar Nazis make a rather bad showing.

Firstly, this is the impression of stupidity and narrow-mindedness because of the inability to discuss important things once an error appears. Secondly, it is because of the vicious and antisocial aggressiveness. Grammar Nazis are ready to make a song and dance about any misused comma. The degree of accusations of illiteracy and the lack of culture boggles the imagination of an outside observer. Thirdly, and this is probably the most interesting, in about 90 % of cases, the original grammatical rule for which Grammar Nazis are willing "to die and kill" does not exist in a language. It either never existed or it has long been given in dictionaries with the mark out of date.

Those grammatical rules about which psychoses and phobias developed in people are rooted in distant childhood. They feed on their fears of a stupid and evil teacher, a dominant grandmother, and the ridicule of classmates.

It was this child trauma that so firmly imprinted in the minds of future Grammar Nazis all their funny and ridiculous borrowed ideas that a language was once and for all fixed in the rules that teachers and grandmothers hammered into their heads in childhood. Of course, this child trauma is especially severe in people without natural literacy.

A person who did not have a psychological trauma cannot understand either the aggressiveness of Grammar Nazis or their narrow-mindedness. It is especially difficult to understand why they react so inadequately when you quote rules from dictionaries that prove that the rule they are defending is wrong.

It seems like adults should not react that way. The truth is that Grammar Nazism has nothing to do with maturity and adequacy. This is a painful projection into adulthood of cruel child insecurities and phobias, completely drowning out the voice of reason.

## UNIQUE LANGUAGE STYLE OF OSCAR WILDE'S *THE PICTURE OF DORIAN GRAY*

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The style of the novel by Oscar Wilde *The Picture of Dorian Gray* is very peculiar. First, it combines an exquisite literary language with impeccable syntax and a balancing act of words. The work contains many descriptions of wonderful things, exotic values, a brilliant language game. The work engulfs the reader with fireworks of thoughts, beauty of aphorisms, sharp contrasts, and convincing language techniques.

The style of the novel is characterized by paradox. A paradox is a judgment that is at odds with the generally accepted, traditional opinion. This property is distinguished by both plot situations and the speech of the characters. Heroes speak in paradoxes. Many paradoxical judgments in the novel are directed against the hypocritical morality and other social phenomena of English life. For example, in Chapter 6, Basil Hallward says: "There is hardly a single person in the House of Commons worth painting; though many of them would be the better for a little whitewashing." By saying this, he denotes members of the House of Commons are not only not picturesque, but also often have a bad reputation.

Wilde skillfully uses a variety of stylistic devices that give his style grace, and the narrative figurative and metaphorical. Very often in the novel, there is a detailed and elegant description of the clothes. Luxurious things are often mentioned in the characters' everyday life. As well as the description of the dresses, this is a tribute to the graceful style, dandyism, and aestheticism. Also, Wilde uses a comparison technique in order to more accurately characterize an object or phenomenon: "Talking to him was like playing upon an exquisite violin"; "Then it became louder, and sounded like a flute or a distant hautbois"; "She makes them as responsive as a violin." In the above expressions, Wilde resorts to comparisons with musical instruments. Figurative comparison presupposes the assimilation of several, as a rule, completely dissimilar objects to each other. This stylistic technique is based on the intensification of a certain feature of an object or phenomenon, thus serving as a way to convey additional information. The feature, which is the basis for a figurative comparison, is not always perceived as leading, but at the same time, thanks to the author, it comes to the fore. Also, in the novel, there are comparisons with flowers and a comparison of the colors themselves, which is especially characteristic of Oscar Wilde: "The tulip-beds across the road flamed like throbbing rings of fire"; "She trembled all over, and shook like a white narcissus." Thus, it can be noted that figurative comparison is one of the author's favorite techniques. The considered expressive lexical means is one of the most expressive means of depiction, capable of conveying the philosophical and aesthetic views of the great artist, it plays an essential role in the construction of a system of images of the work.

The expressive potential of his works provides material for an even deeper study and understanding of the expressive capabilities of the language. The author skillfully uses expressive lexical means to add more sophistication and richness to the text. Thus, the analysis of the novel by Oscar Wilde *The Picture of Dorian Gray* showed that in the text, figurative means are regularly used as a bright means of intensifying a certain quality and, therefore,

can be considered as necessary components of an individual style. Being a masterpiece, this literary work is exceptionally bright in language.

## GENDER LEITMOTIV IN JANE AUSTEN'S *PRIDE AND PREJUDICE*

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Gender leitmotiv is manifested in the author's text at the verbal and semantic levels. It helps to choose lexis, topics, and communication strategies. The women authors usually emphasise the gender roles of female characters, trying to reveal the inner world of these characters. As a rule, the texts of female authors contain indications of the love experiences of the characters or related to them by the emotional manifestation of experiences due to the lack of love. In Jane Austen's *Pride and Prejudice* there is a problem of the adaptation of love to the *rules* of marriage is raised.

The first line of the novel introduces the concept of marriage in terms of money: "It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife" (*Pride and Prejudice* Jane Austen, 2009). The author continues that such a man "however little known the feelings or views" but "he is considered the rightful property" (*Pride and Prejudice* Jane Austen, 2009) of neighbors' daughters. Readers are proposed to guess whether this applies to Mrs. Bennett and others of her surrounding, who do not burden themselves with this feeling, as they are determined to *decent marriages*, or it is a universal rule.

There is an analogue of such a rule that rich single young men want to have wives is the following: a woman without a fortune needs a husband. Jane Austen does not support this rule. It is transparent that Elizabeth Bennett, for example, will never marry for money. However, in *Pride and Prejudice* is shown Jane Austen's awareness of the following: the need for money is a problem for a failing woman. Mister Collins speaks rudely to Elizabeth: «Your portion is unhappily so small that it will in all likelihood undo the effects of your loveliness and amiable qualifications» (*Pride and Prejudice* Jane Austen, 2009). Her mother, Mrs. Bennett, warns Elizabeth what results if she does not accept Mr. Collins' marriage proposal "I am sure I do not know who is to maintain you when your father is dead" (*Pride and Prejudice* Jane Austen, 2009). Money and social status pose a problem for marriage and also for the feeling itself. The differences that arise between Elizabeth and Darcy are what lead to her prejudice and his pride. If she were as rich as he is, it would be much easier for him to propose to her, as well as for her to accept it. He has to understand the prevailing circumstances before Elizabeth can marry him. She views love as something that complements the human being with an aesthetic value. The girl is confident that she and Darcy can bring to each other's characters the traits they lack: "She began now to comprehend that he was exactly the man, who, in disposition and talents, would most suit her. His understanding and temper, though unlike her own, would have answered all her wishes. It was a union that must have been to the advantage of both" (*Pride and Prejudice* Jane Austen, 2009).

When Elizabeth's sister Jane asks her how much she loves Darcy, she speaks ironically: "I believe I must date it from my first seeing his beautiful grounds at Pemberley" (*Pride and Prejudice* Jane Austen, 2009). Polhemus supports an idea that Jane Austen has not written about a desire to get wealth, but there are aesthetic reasons: "The estate is a perfect blend of natural beauty with civilized taste and art. It combines utility with real elegance, delightful scenery with lovely architecture, wealth and physical substance with idealistic spirit and the good of its dependents" (*Erotic Faith. Being in Love from Jane Austen to D. H. Lawrence* R. Polhemus, 1990, p. 394).

Pemberley represents everything that is lacking in her life and what she aspires to. It is an embodiment and a symbol of what their life with Darcy could be like.

Elizabeth takes marriage very seriously. She has turned down two marriage proposals before. Elizabeth is as shocked by Darcy's accusations against Wickham as by Lydia and Wickham's illegal marriage. She is sure that "neither Lydia's virtue nor her understanding would preserve her from falling a ready prey" and regrets they should be married because "how little of permanent happiness could belong to a couple who were only brought together because their passions were stronger than their virtue" (*Pride and Prejudice* Jane Austen, 2009).

Elizabeth worries that a woman should get married to save face. She cannot approve of being married to someone whose lack of dignity and true love is so obvious. When Lydia proposes to find husbands for all the sisters, Elizabeth replies: "I thank you for my share of the favor, but I do not particularly like your way of getting husbands" (*Pride and Prejudice* Jane Austen, 2009). She believes that marriage is not a necessity for a woman.

An analysis of Jane Austen's prose convinces that the gender leitmotiv's signs can be quite reliably established in the novel. It is reflected in a special point of view on the world, a special system of characters, and the author's consciousness. In her novel, Jane Austen, proclaiming love, reflects on family relationships, establishes connections between love and the lust for power and wealth, reveals the ambiguous nature of passion and the need to suppress it.

## THE PROSPECTS OF GENETIC ENGINEERING

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Imagine that several years ago you were told that soon computers would deal with absolutely all spheres of life, that billions of people would be connected by a special network, that everyone would have a hand-held device many times more powerful than supercomputers. Would you have believed that? But all this has happened and become part of our daily life. Today, this is the case with genetic engineering.

But how far has genetics gone forward? In every study, there are some elements of innovation that have been discovered for the first time. Of course, globally speaking, genetics has stepped far forward and does not stop moving on. People have been trying for centu-

ries to improve lives, create life, or extend life. There have been, of course, both successful attempts and failures. But man is not used to being satisfied with what has already been achieved. Some people want to get improved qualities in the future. For example, the dog's sense of smell, or the eagle's sight.

With the help of selection, the scientists improve the beneficial properties of plants and animals. And they manage to do this very well, but they had never fully understood how it worked until DNA was discovered. DNA is a complex molecule that controls the growth, development, work and reproduction of all living things. The information is encoded in the structure of the molecule. If you change the structure, the creature that carries it in itself will also change.

Today, many substances are produced using modified organisms, for example, growth hormones and insulin, which previously had to be obtained from animal organs. Everything changed with the revolutionary CRISPR (which is an acronym for clustered regularly interspaced short palindromic repeats) technology. This system consists of two key molecules that bring about changes in DNA. The first enzyme is called CAS9. This molecular pair acts like a pair of molecular scissors. CAS9 can cut DNA strands at a specific location in the genome so that DNA fragments can then be added or removed. At the moment, CRISPR technology is the simplest universal and accurate method of genetic manipulation. After the discovery of this technology, the cost of genetic engineering fell by 99%.

Does this mean that now we can treat incurable diseases? Yes, you are absolutely right. In 2015, scientists used CRISPR for the first time to remove the HIV virus from patients' cells, and thus proved that it was possible. A year later, they conducted a more ambitious experiment with rats and the HIV virus in their cells. Scientists injected CRISPR into the tails and were able to remove more than 50% of the virus from their cells. Perhaps in a few decades, a person will be able to permanently get rid of HIV and other viruses that hide inside human DNA, such as herpes.

If that technology spreads, then cancer treatment will consist of just a few shots with several thousand of your own cells created in the laboratory. A means of altering the DNA of a human fetus already exists, but the technology is still at an early stage of development.

By the way, regardless of our views on genetic engineering, it will affect everyone. Modified people will be able to change the genome of our entire species and this will be passed on to their children, slowly spreading and completely changing the genomes of mankind. And the main difference between us and modified people will exist. At first, these people will not be very different from us. Most likely, their genes will be changed to get rid of fatal hereditary diseases. As technology advances, more and more people will begin to think that abandoning the use of genetic engineering dooms children to terrible diseases that could be prevented. And it will become commonplace, like a vaccination in a children's clinic.

So, we have already opened the door, letting genetic engineering into our lives, and it is no longer possible to refuse it. It remains only to observe further research and believe that it will only benefit all of humanity.

## SOME ASPECTS OF THE DISCOURSE IN THE INTERCULTURAL COMMUNICATION

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Contemporary culture of Ukraine is developing in a globalized society as an "artistic media", as an important factor in the intercultural communication. According to the Swiss theater historian K. Balme, it acquires the characteristics of performance and embodies the artistic meanings of national synergetic existence. The latter develops in three perspectives: nonlinearity, instability, inconsistency.

Theatrical communication generates a very interesting, associatively rich, unique type of discourse, which is positioned in the stage actions of actors, directors, playwrights, as well as in the form of journalistic translation of the concepts of the stage life. The genre of theatrical interview most adequately reflects the essence of the "proposed circumstances" (according to K. Stanislavsky), which is the quintessence of the acting profession. In our opinion, the genre of theatrical interview, positioned today in the specialized publications of Ukraine: "Cinema-theater", "Proscenium", "Theatrical-concert Kyiv", effectively builds a communication chain: communicator (journalist) - communicant (viewer, reader). Among the genre varieties of interviews in the theatrical and artistic plane, the following types are distinguished: leitmotif interview, monologue interview, biographical interview, portrait interview.

The most organic in the presentation of the theatrical world of Ukraine is an interview-monologue, which testifies to the drama of the heroes' worldview, their inner honesty, the nobility of nature. For example, Honored Artist of Ukraine V. Zhdanov thinks: "Have I become smarter or wiser, but now what I do ... This is a small mission that leads to human harmony - with the world, with others" ("Cinema", 2020.- No4.- p.23).

A theatrical interview can be defined as a verbal action of a predominantly informational nature, which occurs under specific conditions as a tool to influence the thoughts and actions of the readers. This genre variety to some extent depends on the artistic and socio-cultural positions, the worldview of the participants in the communicative process.

The direct genre of interviews involves the cooperation of all participants in communication. Modern Ukrainian journalism has in its arsenal a system of communication rules for conducting interviews, in connection with which three main models of communication are identified: cooperation, rivalry and confrontation. Depending on the intentions of communicators, these models are used in combination by all participants in the dialogue. The process of communication in the genre of interviews involves the interaction of participants, respectively, it is aimed at achieving a positive goal, effective communication.

Accordingly, the genre of interviews is an argumentative kind of journalistic discourse. The theatrical interview is maximally devoid of speech aggression (according to O. Fadeeva) and uses a non-rigid method of speech influence (G. Sagach). Thus, theatrical discourse assumes voluntariness as the main characteristic of speech influence: participants of communication provide the necessary information, share emotions, etc. When studying

texts of a theatrical interview as a part of the public media space, it should be borne in mind that such a text is a communicative act.

Dialogue in the genre of the theatrical interview consists of several structural levels (external and internal). That is why it is necessary to turn to the analysis and selection of communicatively significant parameters of the situation of speech interaction in the genre of theatrical interview.

Speech interaction takes place with the help of a certain tactical-strategic complex, which is formed during speech interaction. This involves establishing the status and role positions of communicators, and hence the acceptance of the types of linguistic personalities of interlocutors, determining the level of speech activity of participants in the communicative process. We will consider the genre of interview as a kind of dialogic interaction, where all interviewees can take an active part in constructing the discourse.

The theatrical interview provides an opportunity to present in the pages of the periodical press the joint activities of a group of communicators who have determined the form, structure and content. The authors and participants of the dialogue set temporal and spatial limitations of the respondents' speech and speech movements. The journalist complements, summarizes or corrects the answers, regulates the process of alternation of remarks, and also actively influences the processes of topical control.

We understand the concept of "strategy" in the genre of theatrical interview as the most effective realization of the intentions of the speaker, which takes into account the personal (status-role and psychological) characteristics of the interlocutors. These intentions are aimed at achieving a specific goal of communication, dictated by communicative experience. All this subordinates the interviewees to the laws and norms relevant in the study of theatrical communication and in the simulated communication situation.

It should be noted that the system of tactics of the genre of theatrical interview is not limited to the above parameters and is an open to the constantly updated system. It builds an interesting discursive framing of thought, programming the deep culturological context of the globalized epoch in Ukraine.

## MANCHES ÜBER ERFOLGE UND PROBLEME DER HEUTIGEN WISSENSCHAFTLICHEN MEDIZIN

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### *Neues Ersatzmaterial bei Brüchen*

Hoch erhitzte Tierknochen, chemisch behandelte Korallen, Kalkalgen oder Keramik: Forscher haben schon so ziemlich alles getestet, um Knochenbrüche besser heilen zu lassen. Doch all diese Hilfsmittel haben Nachteile; als „steife“ Materialien konnten sie den eher elastischen Knochen nicht gut ersetzen. Auch die bio- logisch abbaubaren Kunststoffe, die etwa aus Polylactid bestehen - einem Produkt aus Milchsäuremolekülen - machen Probleme, wenn größere Mengen von ihnen im Körper eingebaut werden, weil sich dann konzentrierte Milchsäure in das frisch gebildete Gewebe. ergießt. Nun hat ein Team um den

Chemiker Matthias Epple von der Ruhr-Universität Bochum einen hoch porösen Kunststoff entwickelt, der all diese Nachteile nicht haben soll: Der Stoff ist ein Gemisch aus dem Kunststoff Polyglycolid, Kochsalz und dem biologisch gut verträglichen Kalziumphosphat, das dem natürlichen Knochenmineral sehr ähnelt. Statt Milchsäure entsteht dabei ungiftige Glykolsäure. Wenn das eingelagerte Salz aus dem Gemisch ausgewaschen wird, bleibt ein hoch poröses Plastikskelett zurück, in dessen Poren Knochen bildende Osteoblasten gut wachsen können.

#### *Tote durch Autoabgase*

Durch saubere Luft ließen sich in Westeuropa jährlich tausende von Menschenleben retten. Das ist die Schlussfolgerung von Wissenschaftlern, die Daten aus Österreich, der Schweiz und Frankreich ausgewertet haben. Ihrer Studie zufolge ist die Luftverschmutzung für rund sechs Prozent aller Todesfälle verantwortlich. Das bedeutet, dass allein in den drei untersuchten Ländern etwa 40.000 Menschen pro Jahr an den Folgen schlechter Luft sterben. Rund die Hälfte dieser Todesfälle hängt der Untersuchung zufolge mit Autoabgasen zusammen. Mehr als 25.000 Erwachsene erkranken jährlich an einer chronischen, über 290.000 Kinder an einer akuten Bronchitis, weil der motorisierte Verkehr die Luft verpestet. Er ist auch die Ursache für mehr als 500.000 Asthma-Anfälle pro Jahr. Die Wissenschaftler meinen ein, dass es schwierig sei, den exakten Anteil der Menschen zu bestimmen, die durch verschmutzte Luft krank werden. Dass ähnliche Zahlen auch für Deutschland gelten, meint Thomas Hagbeck vom Umweltbundesamt in Berlin. Die Studie zeige, dass dringend etwas gegen die verpestete Luft getan werden müsse.

## **DEVELOPING GOOD MORAL CHARACTERS**

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The state of spiritual culture and morals of society both in the world and in Ukraine is an issue of major concern. Corrosion of established spiritual values is a consequence of dominant pragmatic attitudes, neglect of legal, moral, social norms.

Modern psychological and pedagogical sciences consider the system and hierarchy of internal values to be the source of motivation of human actions. In a psychologically healthy person, this system has three levels: personal and material values (one's own needs) are at the lowest level; at the intermediate level there are cultural values (art, science, national heritage, law and social order) and spiritual and moral values (ideals) form the highest level. Morality is the set of spiritual qualities that guide a person as well as the ethical norms, rules of conduct which are determined by these qualities. A person's moral stance is largely determined by their attitude to themselves, other people and the world around them, in general, their attitudes.

I believe it is absolutely vital that we pay as much if not more attention to our moral development as we do intellectual development. Intellectual and moral development really should go hand-in-hand, but moral development is significantly lagging. It seems as if people just take it for granted or expect people to figure it out on their own. It's not happening

and something needs to change because not attending to one's moral development leads to some serious challenges on personal, interpersonal, and broader social fronts.

There are four categories of moral virtues. They are:

Useful to self: Discretion, industry, frugality, caution, strength of mind, wisdom, memory, enterprise, assiduity, good sense, discernment, temperance, patience, constancy, perseverance, forethought, judgment, considerateness, peace of mind.

Useful to others: Benevolence, justice, gratitude, friendliness, truthfulness, fidelity, honor, allegiance, chastity, charity, affability, moderation.

Immediately agreeable to self: Cheerfulness, greatness of mind, courage, humility, dignity, tranquility, poetic talent, serenity, refined taste.

Immediately agreeable to others: Good manners, wit, ingenuity, eloquence, affability, modesty, decency, politeness, gentility, cleanliness.

Some of this language is unfamiliar; some of these words have largely disappeared from our common vocabulary. We've let some good concepts wither away from lack of use.

The language of virtue and character has largely disappeared from our common ways of speaking and making moral judgments. Generosity, charity, and honesty are all virtues. But ask most people to make a list of virtues, and most likely you will be greeted with very short lists if not some blank looks. What we need is a robust list of virtues.

A moral person is characterized by the following features:

- does good deeds not expecting any reward;
- respects themselves not losing their sense of humor;
- has a high level of acceptance of themselves and others;
- has a keen sense of justice, admits their mistakes, and is able to take responsibility for them without blaming others;
- is optimistic, good-natured, cheerful, balanced, loves life and meets its requirements;
- has the ability to establish close emotional and communicative relationships with other people through sincerity and is ready to communicate, regardless of the social status of others;
- receives vital energy enjoying nature, art, beauty of our life.

Of great importance in the context of mental health is the nature of thinking as a cause of physical or mental health, inner comfort, the cause of success or failure in life. Aggressive thinking can lead to the death not only of an individual but also of hostile nations, especially at the turning points of history. That's why everyone needs to learn the art of thinking that gives health and success.

In my opinion, there are few things that contribute more to your sense of self and overall image than your moral character. By definition, moral character is the existence or lack of virtues such as integrity, courage, fortitude, honesty and loyalty. In other words, it means that you're a good person and a good citizen with a sound moral compass.

We all should ask ourselves "Are you a person of good moral character? Are you consistently trustworthy, honest, respectful, responsible and fair, or do you tend to falter a bit in

these areas?" If you don't score as high as you'd like on the moral character scale, why not start putting a new face on your character. After all, you build your character through your actions, which shapes who you are as a person. So what kind of character are you presently developing?

## DER ANTHROPOGENE TREIBHAUSEFFEKT

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Ohne den natürlichen atmosphärischen Treibhauseffekt wäre Leben auf unserem Planeten nicht möglich: Er bewirkt eine zusätzliche Erwärmung der Erdoberfläche um 33 Grad Celsius, wodurch die durchschnittliche globale Temperatur bei 15 Grad Celsius liegt. Ohne natürlichen Treibhauseffekt läge sie bei unwirtlichen minus 18 Grad Celsius. Der Einfluss des Menschen auf das Klima wird als anthropogener Treibhauseffekt bezeichnet. Ändern sich die Konzentrationen der Treibhausgase in der Atmosphäre, so wird die Bilanz von eingehender und ausgehender Strahlung verändert und das Gleichgewicht gestört. Insgesamt wird die Veränderung des Klimas durch ein Zusammenwirken von Strahlungsantrieb, klimatische Rückkopplungseffekte und die Rate der Speicherung der Energie durch das Klimasystem bestimmt.

Kohlendioxid gilt als wichtigstes Treibhausgas, da wir große Mengen davon ausstoßen und die ausgestoßenen Mengen für sehr lange Zeit einen Einfluss auf unser Klima haben werden. Über die Hälfte der anthropogen verursachten Störung des Strahlungshaushalts im Vergleich zur vorindustriellen Zeit geht auf das Konto von Kohlendioxid. Weitere wichtige Treibhausgase sind Methan ( $\text{CH}_4$ ), Distickstoffoxid ( $\text{N}_2\text{O}$ ) und Halogenkohlenwasserstoffe.

Kohlendioxid wird insbesondere durch die Verbrennung fossiler Energieträger wie Erdöl, Kohle oder Erdgas freigesetzt. Weitere Quellen für die  $\text{CO}_2$ -Emissionen sind Waldrodungen und Bodenerosion sowie Holzverbrennung.

Methan wird vor allem beim Reisanbau und in der Viehhaltung freigesetzt. Außerdem entweicht Methan bei der Gewinnung von Erdöl oder Erdgas. Zusätzlich wird das Gas bei der Verbrennung von Biomasse aus Mülldeponien freigesetzt und aus Abwässern. Distickstoffoxid entsteht bei der Verbrennung von Biomasse und fossilen Energieträgern und wird beim Einsatz von Düngemitteln freigesetzt. Industrielle Quelle ist die Herstellung von Adipinsäure (Kunststoffe, Weichmacher, Lösungsmittel).

Die Energieversorgung, also die Erzeugung von Strom und Wärme, macht mit ca. 26 Prozent den größten Anteil aus, gefolgt von der Industrie. Auch der Verkehr hat mit 13 Prozent einen signifikanten Anteil an den Treibhausgasemissionen.

## EASY PAINT TOOL SAI – GRAPHIC EDITOR FOR CREATING MASTERPIECES

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In the 21st century, many professional industries are moving into a digital format. People are increasingly used in everyday life computer capabilities. Documentation is not written by hand – it is made in text editors. Rarely where you meet a person who would store currency in paper – terminals for bank cards are now in every supermarket. Now you do not need to wear heavy textbooks and toms of your favorite books – we can read literature, now using only our phone. A similar digital revolution touched on art. Digital drawings – articles – now have become ordinary. Few artists in our years draw paints on the canvas – all this replaced the computer and many graphic editors. One of the most popular editors to create digital masterpieces is Easy Paint Tool Sai.

Developed by Japanese specialists in computer graphics, Paint Tool Sai is a leader among graphic editors to create stunning works. Several million installations worldwide speak for themselves. SAI or Paint Tool SAI – program designed for digital drawing in the Microsoft Windows environment developed by the Japanese company SYSTEMAX.

The development of the program began on August 2, 2004, the first alpha version came out on October 13, 2006. December 21, 2007 passed into the stage of beta testing. The first official release (1.0.0) took place on February 25, 2008, and the first update (1.0.1) – March 3, 2008.

The official translation of the program was released on March 31, 2008, but the program fans made an unofficial translation into English several earlier.

Today, the drawing market and designed to work with images are great. Artists, both lovers and beginners, choose utilities in accordance with their own needs, expensive software or an easy accessible product. This includes Easy Paint Tool Sai.

Particularly popular by SAI uses among the artists in the style of anime. In stock 8 Tools: Lasso isolation, isolating the "magic wand", rectangular selection, pipette, scaling, canvas rotation, canvas moving and moving the layer.

There are two-layer modes: raster and vector. In the raster are available tools, such as marker, airbrush, water, acrylic, handle, eraser and different variations in them. The vector is available handle, line, figure, curve, edit, line color, push line, highlighting and removing selection.

The program has the support of third-party textures of the brushes and textures of the canvas, which can be done personally. The feature of the graphic editor is its "ease", small size, a set of only the necessary feathers and not overloaded interface.

The palette of colors is huge, and the watercolor brush makes it possible to mix shades with smooth transitions. Another plus is the support of the most common file formats and standard hotkeys combinations.

The only minus is that the program does not reach graphic "monsters" as: Photoshop or Illustrator. Sai Paint Tool is a modern and very convenient program for those who are like to draw. Today, this graphic editor is very popular with artists, regardless of the direction of

their work and workshop. There are opportunities for both advanced users and newcomers, because it is very simple to understand the interface. The functionality of this program will allow the most difficult ideas of users. And the mass of lessons existing on the Internet will help you quickly master the program.

## SELF-HEALING CONCRETE

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Innovative technologies in production and construction are the integral regularity of scientific progress. The purpose of creating the new or modernizing the old technologies is the human need for a cheaper, more environmentally friendly and reliable material.

It is a well-known fact that concrete is still one of the most used materials in the construction industry. It is used in different types of construction work – from the foundations of various buildings to bridge structures and underground car parks. But cement has disadvantages too.

The disadvantage of concrete is that it cracks over time. When water penetrates through cracks, the reinforcement rusts and the structure loses its bearing capacity. In winter, water freezing in cracks expands them and accelerates the wear process. So, sooner or later, you have to carry out a long and expensive repair of concrete structures. For example, buildings that are under water or building that store harmful materials (radioactive or toxic industrial waste) inside are very difficult or even impossible to repair.

But a very unusual solution was found: self-healing concrete could solve the problem of the destruction of concrete structures long before the end of their service life.

The work of this self-healing concrete is that specially selected bacteria of the genus *Bacillus* together with calcium nutrients, known as calcium lactate, with nitrogen and phosphorus are added to the concrete ingredients when it is mixed. These self-healing agents can be inactive in concrete of up to 200 years. However, at the slightest destruction of the concrete structures, water begins to seep through the cracks that appear in the concrete and bacterial spores germinate upon contact with water and nutrients. When activated, bacteria begin to feed on calcium lactate. The result of this chemical reaction is that the soluble calcium lactate is converted to insoluble limestone and this limestone hardens on the cracked surface, thereby compacting it.

This figure shows the example of how bacteria work.



Summing up the characteristic of the self-healing cement it is possible to state that the advantage of this building material is the increased service life of structures. The disadvantage of self-healing cement is the higher cost of concrete and the decrease in its strength by 25%.

## **CONSTRUCTION ENGINEERING AND ENVIRONMENTAL SAFETY**

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Construction engineering covers all fields of the implementation of investment and construction projects: design, construction and operation of facilities. Environmentally friendly construction becomes very popular now and more and more preference is given to it in the civil engineering environment.

Environmental safety of construction means the protection of the natural environment from the unavoidable negative consequences. Protection is provided by the environmental protection measures which include the following:

- selection of environmentally friendly space-planning and design solutions;
- selection of environmentally friendly materials in design and construction;
- construction and operation of treatment and neutralization facilities and devices;
- the use of low-waste and non-waste technological processes and production of extraction and processing of construction materials.

Environmental safety deals with environmental engineering which is a section of construction engineering. This type of work is based on the widespread use of such scientific topics as chemistry, biology, ecology, geology, hydraulics, microbiology and mathematics. They are used for making decisions that will protect and also improve the health of living organisms and the quality of the environment.

Environmental engineers investigate the impact of technological progress on the environment, work on projects such as the development of clean building technologies, clean vehicles and clean methods for generating electricity. In order to assess the danger of hazardous technical waste they conduct research and give recommendations on how to neutralize them and to prevent harmful effects on the environment. Besides, environmental engineers are involved in the design of public water supply systems and industrial wastewater treatment systems. They also deal with local and global environmental problems, such as the effects of acid rain, global warming, ozone depletion, water and air pollution from car exhaust and industrial sources.

A set of measures for the construction of new facilities is required so as not to harm the environment. One of the most important among them is to prevent deterioration of the soil condition. The natural relief of the area is disturbed in the process of construction work and its restoration and reclamation are required after the completion of this work. Special structures that dampen the vibrations arising during the operation of the units are used for reducing the impact from mechanism and equipment on the ground. It will be necessary to

bring a drain to the existing sewage system in order to prevent the contamination of the soil by wastewater. If there is no connected sewage system it is necessary, first of all, to think about the organized sewage drain from the construction site and only then it is possible to begin the construction of facilities. This may require the laying of a temporary plumbing.

Gas emissions from engines of special equipment are kept under the control by sanitary services. They make sure that no air pollution occurs during the construction of new facilities. Waste from construction sites is taken to special landfills. At the same time the construction company concludes the agreement with the administration of the settlement on a fixed waste volume and waste type.

In conclusion we can confirm that it will be possible to reduce the negative impact on environment during the construction of new buildings only by taking all measures for environmental protection.

## **DIGITAL TRANSFORMATION OF THE UKRAINIAN THEATER**

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Today we receive most of information in media-space. On-line events have become a common, usual thing. Here belong not only scientific conferences, symposia, negotiations between companies, but so do on-line teaching and learning in educational establishments, and even theatrical performances. In such a way theatrical culture has been gaining active development in media-space, and so a new theater form emerges – on-line theater, which includes not only recordings of past years performances, but creations of new innovative artistic products. In our research we will analyze (deal with) one of such innovative artistic products – the project “Theater 360 degrees” – the only theater in Ukraine at present, which unites classical theatrical format and filming, connects traditions and innovations, that is the newest technologies. In theater’s first performance «Stone Master», written by Lesia Ukrainka (the director is Ivan Uryvskyi, video-version – by Valentyn Kondratiuk, the director of 3D-animation – Andrii Kompaniiets) photogrammetry was used, that is, the creation of digital copies of actors, props, sculptures. As the producers of the project mark, the technology of 3D-scanning has never been used in theater performances including the Ukrainian theater ones and that was really wow-effect – moving sculpture, a great number of the same, similar things at the stage, highly professional acting.

Though in the performance «Shynel» (The Overcoat) based on the story, written by Mykola Gogol (the director of theatrical performance is Valeria Fedotova, the director of screen adaptation is Valentyn Kondratiuk), the photogrammetry technologies were not used, the stress was made on modern sound – the unity of electronic and classical sounding. Having watched the play, one can say that everything was modern – interpretation of classical literary work; well-done stage decoration; multifunctional use of staircases as if these were the roads, which led nowhere; darkening, minimum scenery and only 4 actors who played several parts each on the stage during the whole performance. It is worth mentioning the director’s approach to the embodiment of the image of the red Shynel, which «came

alive» on the stage due to the actress Yuliia Brusentseva. The talented director V. Fedotova stressed the characters' features, human vices, showed the similarity of society problems-coincidence of wishes and opportunities, virtues, dishonesty, weakness of spirit, lack of mentality, which led to madness.

Digital transformation of the Ukrainian theater made modern theater performance available for being watched at home. In such a way, even in times of viral diseases, we do not lose the connection with theatrical culture. More than that, we continue to widen and deepen the cultural consciousness thanks to «Theater 360 degrees», which offered 10- days free of charge attending of premiere performances of «The Stone Master» and «Shynel». Let us emphasize, that art-project «Theater 360 degrees» closely cooperates with the Theater in Podol, most modern and technologically equipped theater in Ukraine. «Laconic interior, hard backstage, projection screen, one-to-one laid stages, snow-generators equipment, superb acoustics and unique sound equipment, which allow to do the recording in a studio directly from the stage - all these things help create performances of the world level» (<https://theatre360.com.ua>).

## HOW CONSUMERISM CHANGES CLIMATE

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Emissions are the primary driver of global climate change. CO<sub>2</sub> emissions are typically measured on the basis of “production”. The world’s largest per capita CO<sub>2</sub> emitters are the major oil producing countries; this is particularly true for those with relatively low population size. Most are in the Middle East: In 2017 Qatar had the highest emissions at 49 (t) per person, followed by Trinidad and Tobago (30t); Kuwait (25t); United Arab Emirates (25t); Brunei (24t); Bahrain (23t) and Saudi Arabia (19t). More populous countries with some of the highest per capita emissions – and therefore high total emissions – are the United States, Australia, and Canada.

One percent growth in GDP leads to a 0.5 to 0.8 percent increase in carbon emission. If we continue to grow at 3 percent per year, by 2043, the global economy will be two times larger than it is now. Which means energy consumption will be larger and the task of transitioning towards a zero-carbon world will be much harder.

A new study published in the Journal of Industrial Ecology shows that the stuff we consume is responsible for up to 60 percent of global greenhouse gas emissions and between 50 and 80 percent of total land, material, and water use. Transportation (cars, buses, trucks, and planes) leads in greenhouse gas emissions, while electricity (coal and natural-gas power plants) is a close second. Industrial goods and services are third; buildings, fourth; and agriculture, fifth.

More than half of global industrial emissions since 1988 can be traced to just 25 corporate and state-owned entities. Just 100 companies have been the source of more than 70% of the world’s greenhouse gas emissions since 1988, according to a new report. If fossil fuels continue to be extracted at the same rate over the next 28 years as they were between 1988

and 2017, says the report, global average temperatures would be on course to rise by 4C by the end of the century. This is likely to have catastrophic consequences including substantial species extinction and global food scarcity risks.

Christmas consumption represents a big problem. The average person will produce 26 kg CO<sub>2</sub> from the food they consume during the Christmas period. An organic Christmas (50 per cent of food consumed being organic) would result in a saving of 2 kg of CO<sub>2</sub>/person, while a low waste Christmas would result in a saving of 7 kg of CO<sub>2</sub>/person. Approximately £4 billion is spent on entirely unwanted gifts – equivalent to £92 per person. Nationally, this is equivalent to 4.8 million tons of CO<sub>2</sub> being produced from unwanted gifts. The total impact from Christmas could be as much as 650 kg per person.

The fashion industry is responsible for 10 % of annual global carbon emissions, more than all international flights and maritime shipping combined. At this pace, the fashion industry's greenhouse gas emissions will surge more than 50 % by 2030. Every year the fashion industry uses 93 billion cubic meters of water – enough to meet the consumption needs of five million people. Around 20 % of wastewater worldwide comes from fabric dyeing and treatment. Every year a half a million tons of plastic microfibers are dumped into the ocean, the equivalent of 50 billion plastic bottles. Microfibers cannot be extracted from the water and they can spread throughout the food chain. Less than 1 % of used clothing is recycled into new garments. The Ellen MacArthur Foundation estimates that every year some USD 500 billion in value is lost due to clothing that is barely worn, not donated or recycled.

## **THE IMPORTANCE OF OBSERVING NATIONAL FESTIVALS AND TRADITIONS**

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Our world is constantly in dynamics. Some rules are replaced by others. However, more and more often people are talking about the need to cultivate a sense of patriotism, preserve traditions and honor our ancestors. Others try to disregard their “roots” and create their own foundations, which are more consistent with the framework of modernity. But, is it really worth now in the modern world to honor traditions and national holidays or is it something that has passed into oblivion?

In fact, any tradition is a ritual that has evolved over the centuries; therefore it will be more correctly to look at such things not as something that has passed and is no longer relevant, but as something that worked well for a long time and gave meaning to the lives of many generations of people. Our traditions are our roots and a connection with the generations of our grandfathers, grandmothers and dozens of people of past generations who gave a new life and transmitted their experience and wisdom to their descendants which has come down to us. Traditions give us an understanding of how our ancestors lived, who, just like us, going through difficulties, were creating their lives. This is our upbringing, our worldview, something that is a part of us and our history that is why it is so important to keep it and remember our predecessors, whose example can now be a treasure trove of experience and knowledge. But also, as the experience of more than one and a half million peo-

ple displaced from the war zone has shown, it is very difficult for a person to live without knowing their roots and origins. They can live without the connectedness of generations, but they will always feel like a tree uprooted, since traditions give them the feeling of the inviolability of what is happening, the feeling of something more global than themselves, what was before us and will remain after us. This gives us a sense of intergenerational connectedness and security.

It is very important, being in such a big world, to be aware of yourself as a part of it and at the same time to identify yourself with the representatives of specific customs and traditions, in order to understand who you are in this world and to feel your individuality and originality. Only a person who feels a connection with their ancestors will be able to stand firmly on their feet and be self-confident. But if traditions give us support, then holidays give us unity.

Each nation has its own uniqueness that makes them who they are. These people have their own customs and traditions, and also celebrate those holidays and events that are associated with their history, because this is what unites them, constitutes their culture, their faith and represents a common goal for which they strive. If traditions are not preserved, the people may lose their national characteristics. If the country does not have its own culture, then people will actively adopt the foundations that have been formed in other states. In this case, it will be easy to lose the identity of the nation. But why should you reject your own traditions, and then initiate a search for them, if you can use those that have been formed over the years? It is clear that norms are transformed over time and acquire new features, but there must be some base. It is very important that children grow up and honor their family, as well as the ancestors, thanks to who they were born. If we abandon our traditions and feeling of unity, then people will plummet to the lowest level of moral development.

Therefore, it is best to find a way to adhere to traditions in such a way that they are expressed in modern forms - then they are renewed, which makes them even stronger, since traditions are not necessarily a repetition of an algorithm of actions, but the most important and valuable thing left from people who lived before us.

## **ABBAU-PROJEKTE IM WELTALL**

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Die wirtschaftliche Aktivität der Menschheit hing immer von den begrenzten Ressourcen unseres Planeten ab. Fast alles, was wir täglich verwenden, hängt auf die eine oder andere Weise von der Praxis des Bergbaus ab. Ohne neue Ressourcen wird es auch bei Verwendung von Sekundärrohstoffen unmöglich sein, Wirtschaftswachstum und technologischen Fortschritt sicherzustellen. Und mit seiner Erschöpfung auf der Erde wird die Menschheit unweigerlich anfangen müssen, sie außerhalb der Erde zu extrahieren.

Asteroiden sind das Ausgangsmaterial, das bei der Bildung des Sonnensystems übrig bleibt, und ein ausgezeichneter Ort, um Rohstoffe zu erhalten, da sie wertvolle und nützlich-

che Mineralien wie Eisen, Nickel, Rhodium, Wasser und Gold enthalten. Im Gegensatz zu Geistesplaneten wie der Erde, wo schwere Substanzen hauptsächlich im Erdkern konzentriert sind, befinden sich die Rohstoffe auf Asteroiden häufig an der Oberfläche, so dass es viel einfacher ist, sie zu extrahieren, und die Konzentrationen dieser Ressourcen können auch häufig verglichen mit den Konzentrationen in den reichsten Lagerstätten der Erde. Aber brauchen wir überhaupt Rohstoffe aus dem Weltraum? Und ist seine Produktion im Allgemeinen vernünftig und vor allem aus Sicht der kommenden Jahrzehnte rentabel?

Tatsächlich gibt es trotz aller Vorhersagen keinen geologischen Hinweis auf das bevorstehende Ende der Ressourcenvorkommen auf der Erde. Wenn dies jedoch wirklich geschieht, wird es höchstwahrscheinlich zu diesem Zeitpunkt möglich sein, einen Ersatz für seine industrielle Verwendung zu finden. Auch die Verarbeitungsprozesse können besser und vielfältiger werden. Die Technologien werden sich so entwickeln, dass die Produktion viel effizienter, energie- und ressourcenschonender wird.

Wenn wir davon ausgehen, dass die Gewinnung von Rohstoffen im Weltraum trotz ihrer Existenz auf der Erde durchaus sinnvoll ist, sollten die benötigten Rohstoffe nicht nur sehr wertvoll sein, damit der Abbau in großen Räumen im Allgemeinen wirtschaftlich ist, sondern auch es gibt große technische Hindernisse für die Verwendung von Rohstoffen im Weltraum. Diese Probleme sind auf die Tatsache zurückzuführen, dass sich die Umgebung im Weltraum stark von der der Erde unterscheidet, nämlich: Abwesenheit von Schwerkraft, Sauerstoff, starke Temperaturschwankungen auf dem Mond (von  $-160$  bis  $+130$  Grad Celsius). Unter diesen Bedingungen ist es schwierig, sich menschliche Arbeit vorzustellen, und die Fernwartung von Robotern kann bei technischen Problemen sehr schwierig sein. Das größte Problem ist jedoch der Transport und die Logistik.

Tatsächlich sind Missionen zur Schaffung eines autarken Ressourcenbestands im Weltraum sinnvoll. Genau wie die Erforschung von Helium-3-Lagerstätten auf dem Mond, deren Gewinnung bereits gute Aussichten auf Wirtschaftlichkeit bietet. Darüber hinaus kann es immer zu einem Technologieschub kommen: Die Menschen können nicht vorhersehen, was neue Erfindungen und Innovationen sein werden, sie können nur bestehendes extrapolieren. In jedem Fall wird unser Leben in der Zukunft viel interessanter sein.

## **THE PHILOSOPHY OF TRANSPORT AT THE BEGINNING OF THE XXI-ST CENTURY**

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The denial of the anthropocentric paradigm, which was popularized as a predominant one at the end of the XXth century, has a great impact on the temporal – spatial dimensions in the identification processes of individuals at the beginning of the XXIst century. This conceptual “drift” has included such global binary opposition as «West – East». On the one hand, there appears that the US strategy to enhance the open global economy is becoming more and more evident with their powerful international institutions (J. Mearsheimer); on the other, – “The Belt and Road Initiative” of China proposes its own global transportation model, which means creating a new logistics paradigm (A. Wheeler). In the conceptual

aspects, those strategies also represent a kind of duality: US ambitions are rather connected with the temporal “now” both in the political/economic and ideological/libertarian aspects. As for the implementation of the Chinese targets, it is, in fact, the realization of the paradigm, which is rooted in the cultural archetypes and notions of the Chinese culture and philosophy, and is oriented towards the temporal “future”.

With the global effects of the pandemic consequences in the current year, it is obvious that “post”-late capitalism and sociocultural pluralism have represented a definite tendency to implement paradigmatic dimensions and to comprehend the present in binary oppositions, – despite the concepts of the classical postmodernism. The latter is accounted for by some concrete facts, among which the appearance of the “human nature” on the proscenium of history parallel with conceptualization of temporality and duration (M. Heidegger, A. Bergson) are of paramount importance. Moreover, at present “human nature” with its psychological temporal and spatial factors determines not actual but virtual pluralism of the postmodern individual. In this very binary opposition “actual – virtual” the continuous qualitative transformations of “living the life” are apparently represented concerning both lives of individuals and changes of concepts of philosophy, – on the whole, including the philosophy of transport in its connection with temporal and spatial dimensions.

## MODERN TRENDS IN THE PROPAGATION OF INTERNET MEMES

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In the process of development of information society, in all spheres of activity, there is a fundamentally different worldview, which generates new concepts and phenomena that directly affect our life. Among such concepts and phenomena, a special place in the process of progress is occupied by the Internet, which has covered all spheres of life, acquired a decisive role in the system of communication and radically changed the system of public relations.

The Internet has caused a new surge of interest in understanding *memes* as a way of transmitting cultural information. Today, Internet memes are of interest as a means of influencing people’s consciousness, with the help of which it is possible to successfully propagate any phenomena, ideas or views.

Analyzing Internet memes in social networks, we can see that the main features of Internet memes can be considered the following: inconsistency, irony, deliberate distortion, and the absurd model of the linguistic world view, the language game when choosing linguistic means, ridicule of social and other problems.

Internet memes are the result of the creative interaction of social networks’ users. The meme, which is essentially simple and expressive, immediately attracts attention. First of all, this refers to the attention of young people, the largest group of users of social networks, because it is young people who are actively experiencing everything new and use all available means of communication. The more emotional the meme, the easier it is for us to perceive it.

Contemporary art refers to very narrow specific contexts or inverts and is generally full of absurd ideas. Therefore, it is easily interpreted in a memetic form.

We can use special online tools to create memes. We have selected some of the simplest and most convenient resources:

*Risovach* – a free and easy-to-use online meme generator;

*Meme Generator* – a free program for creating memes, which can be used through a computer browser or by downloading the application to a smartphone;

*Meme Arsenal* – a free online generator of memes and comics.

Internet memes have become so popular among network users that online encyclopedias have been created to contain a variety of memes: *Encyclopædia Dramatica*, *Uncyclopedia*, *Encyclopedia of Dramatics*, *Fine Memory* and *Encyclopedia*.

Here are some online memes.

*Among Us* was the hottest video game of the year, and it inspired many memes on *TikTok*, Twitter and other social platforms. It became a hit offering kids and teens some fun entertainment;

There are many memes about *Bernie Sanders*, but the best one is *I'm asking again...* The meme is taken from a commercial in which Sanders says, *I'm asking for financial support again* for his campaign. Users turned this request into a viral meme replacing the text to reflect their dire needs;

At the start of the year, the threat of a potential WWII with Iran prompted the teens on *TikTok* to joke about how they would evade a hypothetical draft and how terrible they would fare in conflict;

*Smooth brains* which, according to a 2011 Urban Dictionary, is “a stupid person; [Smooth brain] refers to the lack of surface area on an individual’s brain. The general thought is that the more surface area (wrinkles, creases, etc.) a brain has, the smarter the person is;

Jokes about *Bing*, a search engine with a smaller market share than *Google*, have recently become popular. They are related to the fact that it does not interfere with natural output, and sometimes gives strange advice.

## COMMITMENT TO LOVE

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Divorce is too common in the modern world with almost half of all marriages ending in divorce or permanent separation. Commitment has been shown to be a clear factor in why some couples stay together. There are times when divorce is necessary, but those in other circumstances often later indicate they wish they would have tried harder before divorcing. There are many factors that place a couple at higher risk for divorce. It may be helpful to know some of the statistics and findings outlined below.

Over the years, researchers have determined certain factors that put people at higher risk for divorce: marrying young, limited education and income, living together before a

commitment to marriage, premarital pregnancy, no religious affiliation, coming from a divorced family, and feelings of insecurity.

*Young age.* Marriage at a very young age increases the likelihood of divorce, especially in the early years of marriage.

*Less income.* Having a modest income can help couples avoid stress that may lead to divorce.

*Premarital childbearing and pregnancy.* Childbearing and pregnancy prior to marriage significantly increase the likelihood of future divorce.

*Parents' divorce.* Unfortunately, experiencing the divorce of your parents doubles your risk for divorce. And if your spouse also experienced their parents' divorce than your risk for divorce triples. This does not mean you are predisposed to having your marriage end in divorce, only that you may need to be more aware of your marriage trends and work harder for a successful marriage.

Divorce affects children in many ways. A child may feel:

- a sense of loss – separation from a parent can mean you lose not only your home, but your whole way of life
- different, with an unfamiliar family
- fearful about being left alone – if one parent can go, perhaps the other will do the same
- angry at one or both parents for the relationship breakdown
- worried about having caused the parental separation: guilty
- rejected and insecure
- torn between both parents.

These feelings are often made worse by the fact that many children have to move home and sometimes school when parents separate, and most families in this situation come under some financial strain, even if they did not have money worries before.

Even if the parental relationship had been very tense or violent, children may still have mixed feelings about the separation. Many children hold onto a wish that their parents may get back together. Whatever has gone wrong in the relationship, both parents still have a very important part to play in their child's life.

The best way to get through divorce is to avoid it altogether. Sometimes, divorce is inevitable. But if you're still in love and in a committed relationship, then the divorce card is the last one you'll want to play. Saving a marriage is far and away a better play, especially when you have some idea of how to do it.

When things start to go bad, they can really steamroll unless you and your spouse consciously make changes to turn things around.

Here are some tips:

- Take responsibility
- Be quiet and listen
- Rediscover compromise again.

**PATRIOTIC MOTIVATIONS AND THEIR ARTISTIC INTERPRETATION  
IN THE COLLECTION OF IGOR PAVLYUK «MAGMA»**

I. Poliakov

Supervisors: S. Poliakova, O. Negodchenko  
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Contemporary Ukrainian poet and scientist, winner of many literary prizes Igor Pavlyuk realizes himself a patriot through the prism of his small homeland – Volyn. It was Lesia Ukrainka's land that gave him a sense of national dignity, an aesthetic interpretation of the universe, and the cosmism of Ukrainian perception.

The image of Ukraine appears in the author with an encyclopedic intellectual basis in many incarnations, spiritual layers: Ukraine is pagan and Christian, Ukraine is modern and ancient. The collection opens with a meditation-dedication to Hryhoriy Shumeikov «Global Planet». Igor Pavlyuk's lyrical hero is full of uncertainty about his future. His reflections on the spiritual diagnosis of society are quite pessimistic: «But who to call... Although after the downpour Relieves me, perhaps...».

The level of the greatest subjectivization of the facts of existence is carried out with high precision of rhyme. The flow of the author's poetic consciousness is embodied in materialized constructions that represent the poet in the context of different epochs and historical events. Sharpened, fair contemplation of oneself is associated with ironic comparisons. Analyzing the poetry of I. Pavlyuk on a national-patriotic theme, it is expedient to pay attention to such a form of expression of the author's consciousness in his works as the lyrical «I». In it, the artist embodies the worldview characteristics of his «middle» generation, which knew the principles of the Soviet system of values and felt the spiritual progress of the Independence era.

The author imagines his native land as a paradise («Let's get used to paradise again – To the homeland of happiness...»). The author announces this with great emotion. The earth is already breathing freely, and the Ukrainian does not have a sense of mastery on its territory. This artistic idea is professed by the author. It is the artist's main responsibility to communicate this to his descendants.

The concept of land, agricultural sanctuary as a fundamental factor of national spiritual culture appears reverently, sometimes unexpectedly from those poetic associations that provoke the text of I. Pavlyuk. Antithetical feelings such as life and death, love and betrayal, wealth and poverty, fame and oblivion are associated with the image of the mother earth. On the principles of poetic contrast is the dialectization of the author's feelings in the lyrical hero, who is as honest as possible with himself and his descendants. Homeland is a mental matrix of generations in the artistic modeling of the world, which cannot be betrayed, replaced by another country, continent, mentality. This is especially true of the artist, who for some time lived in the globalized society of the United States of America, in the Ukrainian diaspora. But the voice of the Motherland of ancestors turned out to be more powerful, timeless, eternal in its mental and aesthetic essence. The author professes a leitmotif idea based on the uniqueness of the national worldview. The realization of the conceptual metaphor helps to perceive the lyrical miniature «I had your bread and drank your wine» as an

author's confession with techniques of essayistic development of reality, picturesque means in the art of speech, expressed through auditory visual, taste artistic details.

The poet Igor Pavlyuk positions in his lyrical «I» the principles of absolute spiritual independence, freedom of choice, respect for alternative thought. It is quite effective for a well-known artist, full of dramatic beginnings. This involves «feedback» with the recipient of the artistic word, encourages the act of sacrifice in the name of human happiness.

## SONNE UND WIND – KOSTENLOSE ENERGIE FÜR MENSCHHEIT

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Seit der Antike nutzen die Menschen die Kräfte der Natur, um ihre eigenen körperlichen Schwächen zu kompensieren. So war es möglich Felder zu bewässern, Korn zu mahlen, Schiffe zu bauen die um die Welt segeln und große Bauten zu errichten.

Portugal, wie die meisten Staaten Europas, kann seinen großen Bedarf an Öl und Gas, nur über massive Importe garantieren. Um also die Handelsbilanz auszugleichen, braucht das Land eine eigene, importunabhängige Energieproduktion. Die großen Ströme und deren vielen Zuflüsse aus dem Bergen Asturiens und dem Iberischem Zentralmassiv werden seit langem von Staudämmen unterbrochen, wobei die Stauseen auch als Wasserspeicher dienen und Überschwemmungen verhindern sollen. Doch die Stromproduktion allein wäre kaum die hohen Kosten wert.

Auch die Windenergie hat einige Kritiker und diese nicht ganz zu Unrecht. Die riesigen Windparks vor den Küsten haben einen negativen Einfluss auf die Meeresfauna. Dabei geht es in erster Linie um die Lärmbelästigung, die durch die Drehung der riesigen Rotorblätter verursacht wird. Menschen, die in der Nähe einer Anlage leben klagen oft über Kopfschmerzen. Aber das ist besser, als in der Nähe eines AKW zu leben, oder wie in Städten wie Neu-Delhi, Peking und Athen, wo jeder zweite an Atemwegserkrankungen leidet.

Die sauberste Energiequelle ist immer noch die Sonne. Sie scheint so oder so. Solarmodule werden immer billiger ohne dabei an Qualität einzubüßen. Die vor 30 oder 35 Jahren in Betrieb genommenen Anlagen laufen noch heute ohne nennenswerte Beanstandungen und sie benötigen fast keine Wartung. Eine entsprechend dimensionierte Dachanlage in Portugal produziert selbst im Winter mehr Strom, als ein durchschnittlicher Vierpersonenhaushalt verbraucht. In Verbindung mit einer Anlage für Warmwasser ist der Energiebedarf damit schon fast abgedeckt. Was bleibt, das sind Heizkosten, die aber in einem mildem Klima und bei gut isoliertem Wohnraum, leicht mit Strom abgedeckt werden können. Im Sommer reicht es auch für eine Klimaanlage. Scheint perfekt zu sein, es gibt aber auch Nachteile.

Der am Tag produzierte Strom muss irgendwie für die Nacht gespeichert werden und in der Zeit, in der es regnet, braucht man alternative Energiequellen. Eine Möglichkeit sind Batterien, die aber sehr teuer sind. Eine andere Form sind die Pumpkraftwerke. Die überschüssige Energie wird genutzt, um Wasser in einen höher gelegenen See zu pumpen. Dabei fließt das Wasser auch Bergauf durch eine neue Art von Turbinen, die in beiden Richtungen

Strom erzeugen. In der Nacht und bei Bedarf, läuft das Wasser wieder durch die Turbinen nach unten. So dient der Stausee, von denen es schon genug gibt, als gigantische Batterie.

Aber da gibt es noch ein Problem. Der Verkehr, unsere Transportmittel, vom Auto über die Schifffahrt bis hin zur Luft- und Raumfahrt basiert zum größten Teil auf fossilen Brennstoffen, auf Erdöl.

Was die Menschen jetzt brauchen, ist eine internationale Energiepolitik, die auf einen ausgewogenen Mix aus Wasserkraft, Windkraft und Solarenergie setzt. Auch Wellen- und Gezeitenkraftwerke, Spiegelkraftwerke, Erdwärme, Biogas und andere exotische Formen der Energiegewinnung können zu einer Wende beitragen, die uns vom Öl und Gas unabhängig macht. Denn wenn man diese Bodenschätze nicht mehr braucht, dann werden auch keine Kriege mehr darum geführt. Kein Krieg in Nahost heißt auch, den Extremismus zu schwächen und so die Flüchtlingsströme zu stoppen.

## THE INTERNET IN OUR LIVES

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Today, man cannot imagine his life without the Internet. It has entered our lives too quickly and is too firmly entrenched there. The Internet for people is already a necessity that is needed like air.

The Internet, by definition, is a global system that is needed to transmit different kinds of information between devices of a computing system through sites. Thus, it is a huge network of computers connected together by wireless and wired networks. It provides access to the global web to transmit and receive information over it.

The Internet is a tremendous achievement of mankind. With its help, we can watch movies, listen to music, find new friends, communicate to family and friends who live far away, as well as find the information we need, learn about various events and news. The Internet helps us to develop.

One of the main achievements of the Internet has become. that people can communicate to other people through video communication, as well as find new friends or love.

Some people can learn a foreign language, participate in seminars, trainings to improve education, self-development or online courses. With the help of the Internet a person can get a job. The Internet itself is already considered a good source of income. To date, there are many professions associated with the Internet.

And the main problem of the Internet has become an Internet addiction. Internet addiction is when a person can't live without constant presence in social networks, checks e-mail, loses touch with the real world, escapes from the current problems, forgets, it's found in unsure people, with complexes, and often in the younger generation, who avoid personal communication, preferring the virtual. The role of the Internet in a person's life in this case exceeds the importance of the ordinary world, which loses its meaning, seems gray and uninteresting. In virtual reality a person can create his own image, image, become dif-

ferent, whatever he wants; this leads to internal imbalance. It is better to change the real life and engage in self-development than to create illusions.

Also, some of the most common problems were poor eyesight and deterioration of the musculoskeletal system in people due to a long stay at the computer.

The disadvantages of the Internet can also include the fact that there are many scammers. They, in turn, can take your personal information and use it for personal gain.

The virtual world in a person's life is becoming indispensable, it can provide great assistance in finding information on any subject, the main thing is to learn how to use it properly, aimless social networking forms addictions and adversely affects the psyche, as well as a passion for computer games.

The disadvantages of the Internet in people's lives are mainly related to psychological addictions and hypodynamic, people communicate less in real life, the ability to communicate declines. It is important to find a balance between the virtual world and the real world.

The role of the Internet in human life has been growing lately, and often communication is reduced to correspondence and chats, it is worth making a variety in life - theaters, movies, exhibitions, walks also allow to spend time in a pleasant company with benefit.

## **MADWOMAN IN THE ATTIC: A PREQUEL TO CHARLOTTE BRONTE'S *JANE EYRE***

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Jean Rhys has read Charlotte Bronte's *Jane Eyre* as a teenager. She was shocked by the way Bronte portrayed Mr. Rochester's Creole wife in the attic. She has taken the story very much to heart as a native of the Caribbean herself. This experience has forced Rhys to create a full-length novel *Wide Sargasso Sea* nearly fifty years later that established Rhys as one of the greatest novelists in the twentieth century.

*Wide Sargasso Sea* was written in 1966, and it is without peradventure a prequel to Charlotte Bronte's *Jane Eyre*. Lasser proves that the novel is a kind of defence to the Creole culture against colonial literary canons as it is in fact "Rhys's critical response to Charlotte Bronte's demonizing representation of the traumatized colonial woman, Bertha Mason" (*Colonial Strangers: Women Writing the End of British Empire* P. Lasser, 2004, p. 106). Speaking about motives in writing this novel Jean Rhys says: "The Creole is of course the important one. I'm fighting mad to tell her story" (*The Letters of Jean Rhys*, 1985, p. 157). The writer sees Bertha Mason as a poor ghost and decides to write her a life.

The insane wife of Mr. Rochester in Charlotte Bronte's *Jane Eyre* is shown as an ugly and frightening creature. Jean Rhys in *Wide Sargasso Sea* describes her as a beautiful woman, tall and regal. She is the first beauty of the exotic Spanish Town in Jamaica. A lot of factors contributed to her loneliness and final madness. She is always different for people in Caribbean land, and in England, and in Coulibri. She is lonely as her mother rejects her and is torn between the ideologies of the colonizer and colonized, oppressor and oppressed, and the menacing anxiety of being neither white nor black. It is important to be mentioned that

she is oppressed not merely because she is a woman but because she is a certain kind of woman – a white Caribbean woman.

There are three parts in the novel and three characters – Antoinette Cosway (the incarnation of Bertha Mason), Mr. Rochester, and Grace Poole – narrate their stories. Rhys does not name Bertha Mason's husband and lets him "speak" the entire Part Two. There are two main themes in the novel: the romantic and the realistic one. On the one hand, it is the story of two people who love each other. On the other hand, Bertha Mason is shown as a victim of circumstance. She is an unhappy child from a family with a hereditary illness who becomes a woman doomed to a terrible fate. This story is not a classical happy end story as true-to-life stories do not always include the happy end.

Bertha inherits from her mother clinical pyromania. The fire is a kind of power that both attracts and tortures her. It promises warmth and pleasure yet threatens with pain, it hints both at creation and destruction.

In her prequel-novel to Bronte's work, Jean Rhys develops and deepens the formerly marginal character of Bertha. The writer gives her character a voice. Now readers can read the story of the insane, miserable Bertha through the lips of Antoinette Cosway. The story about love, unhappy marriage, and madness strike the readers' imagination and cause them to feel regret for her, and sorry for whatever happened in the woman's life.

## **ATOMENERGIE – ZUKUNFT DER MENSCHHEIT?**

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Viele Menschen kennen oder haben zumindest von Atomenergie gehört. Viele Menschen sind sich auch der Gefahren dieser Branche bewusst. Aber dennoch sind die Länder der Welt nicht in Eile, um vollständig auf die Kernenergie zu verzichten. Kein Wunder. Viele Menschen ziehen es vor, nur die Nachteile zu beachten. Natürlich, der Reaktorunfall auf der Three Mile Island Kernkraftwerk am 28. März 1979, die Tragödie im Kernkraftwerk Tschernobyl am 26. April 1986 oder im Kernkraftwerk Fukushima am 11. März 2011 – sind alle tragischen Ereignisse. Es gibt jedoch Gründe, warum unser guter Freund "Atomenergie" immer noch bei uns ist. Deshalb stellt sich die Frage: Ist die Atomenergie wirklich unsere Zukunft?

Ein bisschen Hintergrund. Es fing alles damit an, als ein gewisser Herr Bequerel anno 1896 die Radioaktivität entdeckte. Und es ging in die Phase der Nutzung, als 1938 Otto Hahn und Fritz Straßmann der Nachweis der Spaltung des Uranatoms gelang. Dann ging alles sehr schnell, über die Erprobung der ersten Atombombe bis zu deren erster Anwendung, die kommerzielle Nutzung für Kraftwerke begann schon mit dem ersten Versuchsreaktor 1951.

Schon damals waren sich die Forscher der möglichen Gefahren bewusst, nämlich radioaktive Strahlung. Strahlung kann eine Fläche von zehn Quadratkilometern ungeeignet für das Leben machen. Was natürlich das "friedliche Atom" zu einer Massenvernichtungswaffe machte. Man muss nicht weit gehen, um ein Beispiel zu nennen - erinnern Sie sich an die Atombombenanschläge von Hiroshima und Nagasaki am Ende des Zweiten Weltkriegs.

Wenn die Kosten eines Fehlers so hoch sind, warum brauchen wir allgemein Atomenergie? Warum ist die Atomenergie trotz aller Schrecken immer noch ein Teil unseres Lebens?

Die einfachste Erklärung ist die kontinuierliche Energieerzeugung. Eine Kritik an erneuerbaren Energien ist, dass sie nur dann Energie produzieren, wenn der Wind weht oder die Sonne scheint. Die Atomenergie hat diese Nachteile jedoch nicht. Kernkraftwerke können ein Jahr oder länger ohne Unterbrechung oder Wartung betrieben werden.

Kernenergie selbst ist billig. Kernkraftwerke sind billiger zu betreiben als ihre Kohle- und Gaskonkurrenten. Es wurde berechnet, dass selbst unter Berücksichtigung von Kosten wie der Regulierung des Betriebs von Reaktoren und der Entsorgung radioaktiver Abfälle die Kosten für die Wartung eines Kernkraftwerks 33-50% der Kosten für die Wartung eines Kohlekraftwerks und 20-25% der Kosten für die Wartung eines Gaskraftwerks betragen. Die erzeugte Energiemenge ist auch den meisten anderen Formen der Energieerzeugung überlegen.

Die Nutzung der Kernenergie ist vorteilhaft. Für jedes Plus gibt es jedoch ein Minus. Die meisten verstehen das, können es sich aber nicht leisten, die Nuklearenergie vollständig aufzugeben. Wir leben in einer Zeit hohen Energieverbrauchs, dessen Volumen nur noch zunehmen wird. Erneuerbare Energien sind großartig, aber sie verlieren eindeutig an Leistung gegenüber ihrer großen Schwester Atomenergie. Und hier ist die Antwort – bis die Menschheit eine Energiequelle findet, die viel umweltfreundlicher und leistungsfähiger ist, wird die Kernenergie ein Teil unseres Lebens sein.

Aber ist das unsere Zukunft? Ich denke nicht. Obwohl wir an einer so gefährlichen Energiequelle festhalten, kann man mit Sicherheit sagen, dass eine solche "radioaktive Beziehung" nicht ewig dauern wird. Heutzutage wird eine solche Energiequelle weitgehend aufgegeben. Die nukleare Abrüstung und das Verbot von Atomtests sind alles Zeichen dafür, dass wir uns auf dem Weg zu einer sichereren Zukunft befinden.

Das Problem der Bedrohung und vollständigen Ablehnung der Kernenergie wird noch lange ungelöst bleiben. Dies wird jedoch nicht ewig dauern. Und wenn wir eine Lösung für das Problem finden, können wir mit Sicherheit sagen, dass wir in einer besseren Zukunft leben.

## CYBERSECURITY

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**Cybersecurity** (sometimes called computer security) is a collection of methods and practices for protecting computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. Cybersecurity is applied in a wide variety of areas, from business to mobile technology.

Several main categories can be distinguished in this direction:

1. **Network security** – actions to protect computer networks from various threats, such as targeted attacks or malware;

2. **Application Security** – Protecting devices from threats that criminals can hide in programs;
3. **Information security** – ensuring the integrity and privacy of data both during storage and during transmission;
4. **Operational security** – handling and protecting information assets;
5. **Disaster Recovery and Business Continuity** – responding to a security incident and any other event that could disrupt systems or lead to data loss;
6. **Raising awareness** – educating users.

**Cyber threat** is illegal entry or the threat of malicious entry into the virtual space in order to achieve political, social or other goals. Cyber threats come from hackers, people who can break into servers and obtain information from them in an illegal way. A **hacker** is a highly qualified specialist who understands the intricacies of computer programs.

#### **Types of cyber threats**

1. **Cybercrime** – actions organized by one or more attackers with the aim of attacking a system in order to disrupt its operation or obtain financial gain;
2. **Cyberattack** – actions aimed at collecting information, mainly of a political nature;
3. **Cyber terrorism** is actions aimed at destabilizing electronic systems with the aim of causing fear or panic.

Attacker tools and techniques: phishing, virus software, malicious programs, social engineering, SQL-injection, Man-in-the-Middle attacks, DoS attacks, DNS poisoning attacks.

#### **Latest cyber threats**

The **Dridex** banking Trojan has been known to cybersecurity specialists since 2014 and is still one of the most complex software programs in its category. Malware development continues to this day: new versions of the Trojan appear, and major updates are periodically released.

**Emotet** is one of the most active Trojans at the time, which spreads with email spam through malicious Word documents. Such letters can be disguised as invoices, waybills, account security warnings, invitations, and even information about the spread of the coronavirus.

It is necessary to protect not only the PC, but also all technical devices in contact with information. All data can become a weapon in the hands of intruders, so the confidentiality of modern IT systems must be at the highest level.

### **SMART HOUSES: THE FUTURE IS ALREADY HERE**

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The purpose of the article is to give an overview of modern technologies and their impact on people's lives. Nowadays, a lot is written and said about smart houses. The term “smart house” means a system of home devices capable of performing actions and solving

certain everyday tasks with the help of artificial intelligence without human intervention. To find out the cause of smart houses' popularity, a closer look should be taken at the key features.

According to the official statistics from the Prosecutor General's Office of Ukraine, the most common crime in Ukraine is theft with almost 350,000 cases. Thus, a lot of people are frightened to leave their homes for a long period of time. And that's where home monitoring comes into play. Smart security systems can autonomously monitor the house, and report any incidents to the homeowner and, if necessary, emergency services.

The other equally important feature is the remote controller. The power of being able to control home's functions from a distance should not be underestimated. On an exceptionally hot day, a house could be cooled right before one gets home. It is also possible to check whether the lights are left on, who is at the front door, or make sure that all media are turned off while away.

Smart lighting is also honored to be on the list due to the ability to create a personalized and intelligent environment. For example, the system can simulate a human's presence when there is no one in the house, automatically dim the light when the TV is turned on, perform alarm functions or signal about incoming calls and messages. Moreover, the lamps can be turned on automatically and controlled by voice commands.

And last but not least, the feature of the smart locks. In contrast to smart lighting, smart locks can be programmed according to special needs. Visitors can be granted or denied access based on specific identifiers. Instead of turning the key, enter the code, put the finger on the scanner, or press a button in the app.

Having taken into consideration useful features provided by smart houses, a conclusion can be made that the future of smart houses looks very promising and its popularity will increase from year to year, which means the way of life is about to change drastically. Planning the most basic elements of a "smart home" during the construction phase will subsequently make it possible to unite these "smart homes" into a network. In the near future, this phenomenon will occur more often, this means that in the long term, the construction of "smart houses" can turn into the creation of "smart streets" and even "smart cities".

## ENGLISH-BASED CORONEOLOGISMS AS A VIRAL INTERNET PHENOMENON

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Coroneologism are considered the new words that have occurred to name some specific phenomena related to the COVID-19 pandemic. This topic is relevant since the world has been suffering from the pandemic and a lot of new coroneologisms have appeared. Such neologisms in most cases do not directly refer to the coronavirus disease but rather to the changes in our lives and related social phenomena. Below are just a few of them:

- ✓ ***Doomscrolling*** is a long-term reading of negative news. This neologism is already actively used in social networks.

- ✓ With the need to work from home, the Zoom app has grown in popularity, enabling video conferencing. This service is also used by schoolchildren who attend online lessons. This demand for Zoom has attracted a large number of attackers who deliberately connect to other people's conferences, which, as a rule, are not protected by passwords, and show inappropriate content on the air. This type of prank came to be called **zoombombling**.
- ✓ Along with self-isolation and video communication, online parties have also entered the daily life of people around the world, when each participant cooks some food and then connects to a chat with his/her friends who do the same. A strong alcoholic beverage that is made when people are quarantined, or otherwise locked up or trapped in a location for an extended period of time, is called **quarantini** (martini + quarantine).
- ✓ Another name for the coronavirus, COVID-19, has given rise to a number of neologisms of the same root. One of them is a **covidiot**. This term refers to those people who ignore the warnings regarding public health or safety, the danger of coronavirus, self-isolation, and social distancing.
- ✓ The term **coronials** (by analogy to millennials) has appeared to label the children who were conceived or born during the COVID-19 pandemic.
- ✓ Staying at home with their family made many people happy, as they finally have time to spend with the children or parents. But it is known that the quarantine for several months has caused divorces for some families. The couples whose marriages are fraying under the pressures of self-isolation could be heading for a **covidivorce**, symbolizing the rupture of relations due to the inability to be together in a confined space for a long time.
- ✓ **Coronapocalypse** (coronavirus + apocalypse) is “the end of the world” caused by the Covid-19 epidemic.
- ✓ **Coronaphobia** (coronavirus + phobia) is a new disorder emerging from the COVID-19 pandemic.
- ✓ A **covidol** (Covid-19 + idol) is an exemplary social distancing citizen who buys reasonable amounts of toilet paper, antiseptics, and storable food.
- ✓ A **coronator** (like a terminator) is a person who defeated the Covid-19 disease.
- ✓ **To be coronated** means to be infected with the Covid-19.

The world learned about the COVID-19 in December 2019. It all started with China. Countries around the world are implementing measures to slow the spread of the coronavirus, from national quarantines to school closures. Due to the fact that many people were sitting at home, the Internet became a major means of communication. More and more new coroneologisms are being appeared. People use them. So they spread on the Internet like a virus.

## BIM-TECHNOLOGIES IN CONSTRUCTION

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The development of the construction industry in the period of the modern information society - a society of knowledge and digital transformation, takes place on the basis of the introduction of innovations and the improvement of existing technologies.

The purpose of this article is to provide an overview of the development of technologies in the field of construction and design, as this increases labor productivity and reduces the timing of design and construction processes, which is one of the most important criteria in this area.

Observing each time a faster rate of implementation in practice of a number of innovative and intelligent technologies that largely automate our daily life, we should also expect a similar trend in the field of systems that help in the design and implementation of construction investments.

Having studied the experience of foreign countries such as the USA, Great Britain, in the field of innovations in the construction industry, it became clear that information technology (BIM technology) will become an integral part of construction processes.

BIM (Building Information Modeling) - building information modeling or building information model. Building information modeling is an approach to the construction, equipment, maintenance and repair of a building, which provides for the collection and integrated processing in the design process of all architectural, engineering, technological, economic and other information about a building with all its interconnections and dependencies, when the building and everything related to it are considered as a single object.

Information modeling creates a digital model that includes complete information not only about the object, but also about the process of its construction, allows you to take into account the time of all technological processes, solve one of the biggest problems of the construction industry, non-compliance with construction deadlines, get rid of misunderstandings and disputes between the customer, the designer and the builder.

It was found out that an important component of this technology is a single information space, a database containing all information about the technical, legal, property, operational, energy, environmental, commercial and other characteristics of the construction facility.

The introduction of a BIM system in the design and construction process has undeniable advantages, as it allows you to instantly access any information about the object, control the quality of work at all stages, avoid collisions in the project, and also significantly reduce the cost of construction.

Thus, computer programs and databases are essential for the development of innovations in construction, which are widely used from the design stage to the construction of a building and to track the status of construction in the modern digital world.

## ZU NEUEN KENNTNISSEN ÜBER DIE CHEOPS-PYRAMIDE

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Rund 4500 Jahre nach Erbauung der gigantischen letzten Ruhestätte des Pharaos sind dem Winterberger Archäologen und Publizisten Siegfried Wachsmann - Ende der 80-er Jahre des 20. Jahrhunderts - zwei sensationelle wissenschaftliche Entdeckungen geglückt: Erstmals konnte der Sauerländer einen fotodokumentarischen Beweis für den bislang unentdeckt gebliebenen Nordausgang des Luftschachtes aus der Königskammer erbringen, nachdem er zuvor herausgefunden hatte, daß die bisher festgeschriebenen Maße der Pyramide falsch und irreleitend waren.

Das gewaltigste Bauwerk der Antike wird in den gängigen archäologischen Lehrbüchern mit einer Höhe von 137 Metern bei 227 Metern Kantenlänge angegeben. Nach über 20 Jahren Forschung fand Wachsmann aber nun heraus, daß die zugrunde liegende Maßeinheit, die sogenannte Königselle, exakt zwei Zehntel mehr beträgt als bislang angenommen. Der winzig erscheinende Unterschied zog bahnbrechende neue Erkenntnisse nach sich. "Die Cheops-Pyramide ist in Wirklichkeit 146 Meter hoch und hat eine Kantenlänge von 230 Metern", stellte Wachsmann fest. "Daraus ergaben sich für die Berechnung der verborgenen Ausgänge und Kammern völlig neue Neigungswinkel, die mir endlich den Schlüssel zum Geheimnis dieses beispiellosen Monuments an die Hand gaben."

900 Fotos, unter akribisch fixierten Bedingungen auf dem Plateau von Gizeh aufgenommen, wertete Wachsmann aus, studierte archäologische Spezialkarten aus Kairo und belebte mittels überlieferter Aufzeichnungen ein alt-ägyptisches geometrisches System, das ihm "mit zwingender Logik" die verborgenen Strukturen der pyramidalen Architektur offenbarte. So fand er schließlich auch den nur wenige Zentimeter kleinen nördlichen Luftschachtausgang an der sogenannten Todeswand, die nie bestiegen werden konnte.

"Es müssen noch mindestens zwei unentdeckte Kammern in der Cheops-Pyramide sein", meinte der Querdenker. In der einen befinde sich die Mumie Cheops'; die andere sei die sagenumwobene Kammer des Wissens, in der der mächtigste Pharaos der vierten Dynastie Dokumente über die gesamten wissenschaftlichen Erkenntnisse seiner Zeit hinterlegt haben soll.

Neben Aufzeichnungen über Mathematik, Geographie, Physik und Astronomie sowie Abhandlungen über Edelsteine und Maschinen, Sternkataloge, Erd- und Himmelsgloben, soll die Kammer des Wissens der Überlieferung zufolge Glas enthalten, das sich falten läßt, ohne zu brechen, und Metall, das nicht rostet. Bewiesen - wenn auch ungeklärt - ist jedenfalls, daß Fleisch in den düsteren Gängen des Steinkolosses nicht fault, sondern mumifiziert.

(Kulturchronik, 2/1991)

## JULES VERNE: INSPIRATION TO LIVE BY

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Literature is an infinite source of wisdom and knowledge. It shows us good and bad things about the past, makes us think about different subjects that one is not even aware of. In this article I'd like to dwell upon one of the famous writers of the past – Jules Verne. He said, “Anything one can imagine, other men can make real”. In his books we read about his prodigy thoughts concerning science, love, human beings, existence, future, relationships, the mystical human power of making impossible things possible.

“The sea is only the embodiment of a supernatural and wonderful existence. It is nothing but love and emotion; it is the “Living infinite...” Here are some interesting facts about his life: he was born on February 8, 1828 in France. His father wanted him to become a lawyer. The author worked as a broker at the Paris Stock Market. Jules Verne dreamt of a new kind of literary genres – science fiction adventures. He had problems with money in the beginning of 20<sup>th</sup> century and he had to sell his yacht to survive. His nephew who was mentally disturbed shot him in a leg. Many of his works appeared after his death – his son Michel edited them. Comparing Jules Verne's original manuscripts with the versions published after his death, modern researchers discovered that Michel did much more than mere editing. In most cases he entirely rewrote them – among other changes, he recast plots, added characters, and made their style more melodramatic. Scholarly reaction to these discoveries has been mixed. Some critics condemn these posthumous works as contaminated; others view them as a legitimate part of the Verne père et fils collaboration.

Jules Verne's works are translated into more than 140 languages that makes him one of the world's most translated and read authors. Some of his famous books are “20,000 Leagues Under the Sea”, “Journey to the Center of the Earth”, not to mention “Around the World in 80 Days”. These wonderful and mind-blowing stories have been inspiring lots of technicians, scientists, adventurers, and inventors for more than 150 years. Is there a Jules Verne in modern times? Why aren't there any literary innovators like him?

The one work of his I want to talk about is “A Captain at Fifteen”. There were some problems raised that are still being discussed nowadays. This story is about a young boy Dick Sand who is serving on the schooner Pilgrim as a ship's boy. The shipwreck occurred and an enormously intense task lays on the shoulders of the boy. He becomes captain of the ship. But there is a person who betrays them and misleads the ship's magnetic compass. Of course, villain has accomplices. The ship arrives to Africa where Negro (the cook) and his associates want to sell the Afro-American sailors from the ship into slavery and share the money. The young captain has to deal with difficulties during the “nobody-wants-to-experience-that” (“Wouldn't-wish-to-my-worst-enemy”) adventure. This story is extremely emotional especially in its description of African slavery and while reading at the age of about 10 or 11, I experienced mixed feelings about it. We still have something that horrible and humiliating in our modern life. However, there is a message in the book I consider invaluable – author wants us to believe that everything is possible despite age or origin. It depends on your personal courage, unity, respect, strong beliefs, your attitude and your willing heart. I would like to finish with one of my favourite quotes from Jules Verne's work, “While

there is life there is hope. I beg to assert... that as long as a man's heart beats, as long as a man's flesh quivers, I do not allow that a being gifted with thought and will can allow himself to despair."

## GOOD PARENTING

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The question of the right upbringing of children is always relevant. Children are absolute gifts and a blessing to parents; hence their safety should be a priority. Most parents would admit that parenting is not the easiest job in the world but worth every bit of the experience that comes along with it, especially when you see your kids happy and healthy

Responsible parenthood is a set of parent qualities, feelings, knowledge and skills related to the education, child development in order to ensure the process of forming a healthy and mature personality. Responsible parenthood as a set of activities, as well as all types of activities, is something that must be learnt.

There is no single right or wrong way to parent, but maintaining basic standards of safety and behavior can make the difference between responsible and careless parenting. Many individuals parent in ways that reflect their own upbringing. Even if a parent acts in ways that are careless, however, it is never too late to change approaches and adopt more responsible parenting strategies.

However, *a fundamental truth all parents would admit to, is the importance of being responsible for their kids.*

According to experts, the responsible parent, first of all, is a mature person who is able to be held responsible for their actions and life. Being a mature personality, a person is able to provide himself or herself with work, housing and create favorable conditions for the development of the child.

So, responsible parenthood is, first of all, a balance of different aspects of the upbringing:

The communicative side is regular communication with the child. The parent should always be aware of what happens in the child's life – their interests and preferences, if possible, to share them and have an impact on their child's choices.

The emotional side – the parent should be ready not to just listen to the child and talk with him on important topics, trying to avoid assessments, judgments and condemnation, but to act as an assistant and adviser, to bring out the child's response, give them the opportunity to discuss problems and share their experiences.

The economic side – the parent must be able to pay for the child's learning, to provide them with necessary clothes, and, if it is possible, pocket money.

The protection side is the preservation and strengthening of the child's health that in the conditions of the modern society becomes very relevant and completely falls on the shoulders of parents.

The regulatory side – the parent needs to act as an expert who has experience in communicating with social institutions. This means that the child should be taught to follow the rules established by the community in which they live.

The spiritual side is the ability to instill basic vital values, such as a family, culture. Parents must teach the child to appreciate their life and health. Responsible parents are parents who have special parent competence, that is, the understanding what their child needs at their age and in their particular situation.

**WISDOM PASSED ON BY THE COMPASSIONATE CYNIC (ON THE LINGUISTIC MATERIAL OF THE NOVEL "THEATRE" BY W. S. MAUGHAM)**

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To my mind the brightest moments in the whole book are literally a few sentences that carry a huge semantic meaning. You can think about them for a very long time returning to them every now and then. They are the quintessence of this masterpiece.

The first excerpt from the work I would like to dwell upon is: "They (Julia's mother and aunt) had achieved the aloofness from the common ties of men that Julia felt in herself when she stood at the footlights bowing to the applause of an enthusiastic audience. Sometimes she had thought that aloofness her most precious possession. In her it was born of pride; in them of humility. In both cases it brought one precious thing, liberty of spirit; but with them it was more secure."

Two human traits – pride and humility – are opposed in this excerpt. Using the powerful stylistic effects of antithesis and paradox S. Maugham offers his readers quite a challenging situation – these opposite traits give the different characters possessing them the same feeling – liberty of spirit. However, the reliability of this liberty depends on the conceptual substance that was used to make its foundation. In the first case (Julia's liberty of spirit), it is very unstable, and under any unfavourable circumstances, this illusory freedom will collapse and, being blown to smithereens, injure those who are nearby. In the second case (liberty of spirit enjoyed by her mother and aunt), it is strong and durable, built on the basis of kindness, generosity, understanding, caring and humility. Even if someone or something makes an attempt to destroy such a fortress, there will be a core inside, due to which no external factors can affect the inner world of the people who have achieved such liberty of spirit.

In other words, if the source of Julia's pride – her fame – dries up, she will lose her serenity, her soul will be emptied. The source of her mother and aunt's aloofness is within themselves – it is humility. It is amazing and so incongruous with all that "theatre" that the author emphasizes this by using this word *humility* only once. It is so strong that one doesn't need to mention more than once. Whatever storm is outside, there will be "calm sea" in the soul of these people.

How paradoxical it is that humility here symbolizes freedom! How could it be?... Then if you think more deeply you can catch the kernel of understanding. Humility is the exact opposite of pride. This virtue is considered one of the main ones in Christianity. Human humility is relying on the grace of the Lord in everything and clearly understanding that without Him people cannot achieve anything. Humble people never put themselves above others, accept what the Lord gives them with joy and gratitude, don't demand more

than they have been given. Humility gives a person joy and happiness instilling confidence in divine support. This is how you can describe the state of Julia's mother and aunt.

Julia understands that their freedom is different and more secure, but she doesn't want change hers. Julia looks at herself through the retrospective of her achievements, which awakens pride. It is the pride that deprives man of all divine graces. So, exactly that happens to this great actress. On her way to fame and fortune, Julia lost a lot of gifts, real gifts – humility, mercy, kindness. She didn't need family values, she did not realise how wonderful her husband was (she didn't have an inkling about his inner world, she only saw his outer shell), she "lost" her son having never possessed him. And her son lost his mother's love, her care – the precious gifts every child is entitled to.

Julia thought that the world revolved around her, that it was all about the theatre, and that she had the main role in that never-ending play. She was rejected by Thomas, Charles, her son, but all that did not lead her to the correct conclusions. In the end, she still came to exactly the same set of ideas she had as a young girl starting her adult life.

The second sentence worth our attention and admiration is Michael's reply to Julia "I could not love thee, dear, so much, loved I not honour more". Using the stylistic devices of antithesis and paradox S. Maugham makes readers scrutinise his striking approach to the relationship between honour and love. Michael's phrase is a quote from a verse *Song to Lucasta, Going to the Wars* written by Richard Lovelace. Why did Michael decide to answer Julia with a quote? The answer is very interesting. Initially, it seemed to me that this is because for Julia the whole world is the theatre, and Michael found an approach to her as an actress. But in reality, it's not so, and it's not about Julia, but about Michael. A quote is a stylistic device that helps you say a lot more with fewer words. And if a person is appropriately educated to understand the subtext, they will understand the speaker. Smart quotes have an amazing effect on us. Michael is very educated, he is a gentleman and a deep thinker. It was these words quoted by him that conveyed to Julia how much he loved, respected and appreciated her. At the same time, Michael could not offend her feelings. He loved a woman and had to be honest with her. His honour did not allow him to let her be dishonoured. Honour is not just a rational, logical and unemotional concept. In fact, it is the opposite. Love based on honour is most reliable! Such love involves patience and sacrifice and these notions are crucial for true love.

## **MODERN THEATRICAL JOURNALISM OF UKRAINE: PHOTO PRESENTATION OF BEING CONTEMPORARY THEATRICAL PUBLICISTICS IN UKRAINE**

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Contemporary theatrical art of Ukraine is productively and adequately presented in a genre-like manner in the media reality. Its multidimensional essence is successfully interpreted on the pages of specialized print publications "Kino-theater", "Ukrainian theater", "proscenium", in numerous internet resources, in radio and television broadcasts. The most common genre characteristics of the modern theater process are theater reviews, interviews, reviews, which are professionally carried out by leading theater critics and journalists (A. Sakva, A. Vergelis, M. Garbuzyuk, A. Podluzhnaya, A. Lipkovskaya, etc.)», Lviv (magazines

"proscenium", "theater conversation") and Kharkiv schools of theater studies (magazine "Arterium").

The actual "face" of such magazines is formed by photographic content, which today is multi-genre and artistically high-quality. The most presentable, rather complex from the point of view of creative psychology, is a photo portrait of a famous theatrical personality, which is often presented on the cover of the famous magazines "Kino-theater", "Ukrainian theater". According to the brilliant artist Vincent Van Gogh, a photo portrait together with picturesque finds can revolutionize art. Such artistically high-quality are the "business cards" of the cinema theater magazine: photo portraits of people's artists of Ukraine B. Stupka, A. Khostikoev, N. Sumskaia, P. Lazova, R. Derzhipilsky, honored artists of Ukraine I. Vitovskaya, V. Zhdanov, T. Tsymbalyuk and others. Moreover, the photographer often "snatches" artists in a psychological state of the role, in costumes of historical characters (P. Lazova, T. Tsymbalyuk). The actor's face presented in close-up shows the extraordinary human and acting charm of the artists (V. Zhdanov, L. Samaeva, A. Saminin), the exact angle of the artist's psychological characteristics, the depth and variety of acting talent.

Photo portraits of famous figures of theatrical culture of Ukraine organically accompany the genre of biographical interviews, in which photos that are important for the life of a creative person are chronologically cleverly arranged: excerpts from stage and film works. They masterfully illustrate the verbal text of the interview, adding high-quality artistic visual content.

The genre of theatrical review, positioned on the pages of specialized print publications of Ukraine, is accompanied by reportage photos. They certify the emotional tempo of the analysed stage action, capturing the effective essence of theatrical art as proposed circumstances (according to K. Stanislavsky). Photo artists often use the "general plan" of the action, resorting to different angles from which the stage action would be "read" convincingly. So, the positioning of the photographer's shots in the play "Gestalt therapy" with the main performer O. Zhurakhovskaya is interesting. Interestingly, the black-and-white format of photo illustrations gives the publication compositional harmony and etiquette of presentation. In this aspect, reportage photos of performances of Kiev theaters (the magazine "theatrical and concert Kiev"), presented in color and black-and-white solutions, are interesting compositionally.

A similar black-and-white photo discourse of theatrical modernity and the past is presented in the All-Ukrainian magazine "proscenium", which is published by the Faculty of culture and arts of the I. Franko Lviv National University. Most of the photographic materials are photographs from theater archives (photos of the founders of the Lviv conversation theater, the National Theater of luminaries). A fairly skilful artistic technique is to embed photos in the text of reviews or theater studies and historical studies. This technique was characterized by the well-known theorist, author of the work "the history of a photo portrait" L. Volkov, who pointed out the universality of this genre and the prospect of its application in theatrical communication. Thus, the photo content of modern theatrical journalism in Ukraine is a self-sufficient artistic and communication phenomenon that requires creative and technical innovations.

## THE PHILOSOPHY OF TRANSPORT IN THE POSTPARADIGMATIC “CONDITION”

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The developments of late capitalism in its “post”-evolutionary drift from a paradigmatic social order is definitely linked with the “cultural logic” of postmodern society (F. Jameson), consequently, “post”- later capitalism, appearing in pluralized forms, obtains definite postparadigmatic dimensions. In the socio - cultural aspects, among the most critical features of postmodernity there is normalization of change, individuation, and pluralism (W. Simon), represented in various and diversified contexts of the life experience.

The denial of the paradigmatic order, which realizes a high degree of consensual meanings, and skepticism concerning “master paradigms”, made postmodern people reject universally shared ultimate sources of “truth” in philosophy, theology, “high” and “low” culture. The results of the latter are represented in the reduction of “being”, consequently, the postmodern individual is absorbed with the temporal “now”: the past and history have vanished in the stream of interpretation, and the “high dome” of hopes and aims for the future looks much less attractive due to the uncertainty of the general perspective (M. Heidegger, J. Vattino et al.).

## ARE WE GRATEFUL TO CAPTIONISTS?

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The profession of the people who make subtitles is called Captionist. We need subtitles as:

1. Subtitles help us understand the meaning of a video without sound, which means more users will watch it. Moreover, there are about 70 million deaf people in the world today. Videos with subtitles will help them understand the meaning of your video.
2. Not to mention other languages, but having English subtitles is one of the main requirements of international film festivals.
3. But most importantly for us, the students of the Department of Philology and Translation, you can LEARN the language. If the original English text is installed, you can listen to the pronunciation of the actors. By installing the Ukrainian translation, you can enrich your vocabulary or just enjoy the film.

**Professional subtitles.** These subtitles are laid out in accordance with the international ESIST standard, which incorporates industry best practices for making text information readable to viewers during a movie. It is important to know what size and color the font should be, where and how many subtitles should be on the screen so as not to distract the audience from the content of the film. The subtitle texts are taken from the original discs – directly from the company that produced the film. Text distortion is simply implausible. Subtitles take up virtually no space, so you can save several translations of the film at

once. For example, Ukrainian, German and Brazilian subtitles can be stored in addition to the original English text.

There are also subtitles called SDH – subtitles for the deaf and hard-of-hearing. Such subtitles are created to convey not only the speech of the characters, but also important sounds (and sometimes even their absence) with a verbal description.

If you think it's easy to write subtitles, you are not quite right. The Captionist must be able to do many things. It's one thing to master a program that allows you to create subtitles in an evening, but it's another thing to make such subtitles that you can read and understand what the character said in the available amount of time which is very limited. The start time of the subtitle should coincide with the beginning of the phrase. In this case, it is necessary to take into account the fact that too long a showing of the subtitle leads to its re-reading by the viewer. The ending time of the subtitle should not exceed the episode or scene of the audio-visual sequence.

It takes a tremendous amount of effort to make the subtitles you normally see on the screen. So, wait until the end of the captions to see the name of the person who worked on the subtitles for you to enjoy the film or the video.

## LE DÉVELOPPEMENT DE LA MUSIQUE EN FRANCE

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Chaque pays apprécie le développement culturel pour sa perception naturelle et émotionnelle. L'histoire de la musique française remonte au lointain Moyen-Âge, lorsque les traditions des musiques du monde ont été transférées par des chants migrants. En France, au XI<sup>e</sup> siècle, les traditions de la musique populaire médiévale se sont développées dans deux régions principales : de la Bretagne au nord de la France, sont nés les Troubadours et les Trouvers de Provence au sud de la France. Les deux étaient lyriques, les différences étaient principalement linguistiques. Les paroliers ont préféré un amour sensuel des paroles. En plus des chansons d'amour, des œuvres et des vérités, diverses ballades à base de récits ont également été présentées. La musique de Troubadour et Trouvar était basée sur le poème du poète, qui est à la base de la chanson, et est donc restée la clé du rythme de la chanson pendant des siècles. La plus ancienne chanson connue en français est Le Carillon de Vendôme, qui date du début du XV<sup>e</sup> siècle.

**Musique médiévale.** Le groupe de musiciens de l'abbaye Saint-Martial de Limoges, ainsi que les compositeurs parisiens du XII<sup>e</sup> siècle, sont particulièrement importants. La musique profane dans la France médiévale était dominée par les troubadours, les jongleurs et les trouvères, qui étaient des poètes et des musiciens connus pour créer des formes telles que la ballade (forme fixe) et l'aboïement. Le plus célèbre était Adam de la Halle.

**Musique de la Renaissance.** Le déplacement du centre de l'activité musicale de Paris vers la Bourgogne marque le début de la Renaissance musicale en France. L'instabilité politique sous des rois faibles, la fragmentation continue et l'acquisition de territoires par les Britanniques pendant la guerre de Cent Ans ont contribué au mouvement des musiciens

vers l'est. La domination musicale française en Europe a pris fin pendant la Renaissance, et les musiciens flamands et italiens ont pris de l'importance. Parmi les compositeurs français de la Renaissance qui ont suivi, citons Nicolas Hombert, Pierre de La Rue, Pierre de Manchicure, Claude Goodimel, Pierre Certon, Jean Mouton, Claudine de Sermis et Clément Janekin. La chanson française devient populaire à cette époque et s'exporte en Italie sous forme de canzone.

**Musique baroque.** Avec l'avènement du calvinisme, la musique était relativement simple, du moins dans les régions de France soumises à l'influence calviniste. Dans les régions strictement calvinistes, la seule expression musicale possible était de chanter des traductions françaises de psaumes, comme ceux écrits par Houdimel. À partir du XVII<sup>e</sup> siècle, l'opéra italien et allemand a été la forme de musique la plus influente, bien que des compositeurs d'opéra français tels que Balthasar de Beaujoyeux, Jean Philippe Rameau et Jean Baptiste Lully aient créé un style national distinctif caractérisé par des rythmes de danse, des dialogues conversationnels et l'absence d'airs récitatifs italiens. L'époque baroque a vu fleurir la musique de clavecin. Parmi les compositeurs influents, citons Jacques Champion de Chambonnières, Louis Couperin et François Couperin. Jean Philippe Rameau, compositeur d'opéra renommé, a écrit un traité influent sur la théorie musicale, en particulier sur le thème de l'harmonie ; il a également introduit la clarinette dans ses orchestres.

**Air de cour.** Pendant la fin de la Renaissance et le début du Baroque, d'environ 1570 à 1650, et atteignant son apogée en 1610 et 1635, la musique vocale séculaire populaire appelée "air de Cour" s'est répandue dans toute la France. Bien que les airs de cour n'utilisaient à l'origine qu'une seule voix avec accompagnement au luth, ils sont passés à quatre ou cinq voix à la fin du XVI<sup>e</sup> siècle. Au milieu du XVII<sup>e</sup> siècle, ils sont revenus à une seule voix.

**VIII<sup>e</sup> siècle.** Au XVIII<sup>e</sup> siècle, avec l'influence croissante de la bourgeoisie, de nouvelles formes de vie musicale et sociale se forment. Peu à peu, les concerts ont dépassé les salles du palais et les salons aristocratiques. En 1725, A. Filidor (Danikan) organise régulièrement des "Concerts spirituels" publics à Paris, en 1770, François Gossec fonde la société "Concerts d'amateurs". Les soirées de la société académique des "Amis d'Apollon" (fondée en 1741), cycles annuels de concerts organisés par "Académie royale de musique", étaient plus fermées. Dans les années 1720-1730, la suite de clavecin a atteint son apogée. Parmi les clavecinistes français, le rôle principal revient à F. Couperin, l'auteur de cycles libres basés sur les principes de similitude et de contraste des pièces. Avec Couperin, J. F. Dandre et surtout J. F. Rameau ont également apporté une grande contribution au développement de la suite pour clavecin.

**La Grande Révolution** française a apporté d'énormes changements dans tous les domaines de l'art musical. La musique est devenue une partie intégrante de tous les événements de l'époque révolutionnaire, acquérant des fonctions sociales, qui ont contribué à l'établissement de genres de masse - chants, hymnes, marches et autres. Le théâtre a également été influencé par la Révolution française - des genres tels que l'apothéose et l'agitation utilisant de grandes masses chorales ont émergé. Durant les années de la révolution, l'"opéra du salut" s'est particulièrement développé, soulevant les thèmes de la lutte contre la tyrannie, de la mise à nu du clergé, de la glorification de la loyauté, de la

dévotion. La musique militaire et spirituelle devenant très importante, l'orchestre de la Garde nationale est fondé.

**XXe siècle.** À la fin des années 1880 - 1890, une nouvelle tendance émerge en France, qui se généralise au début du XXe siècle : l'impressionnisme. L'impressionnisme musical a fait revivre certaines traditions nationales - le désir de spécificité, de programme, de raffinement du style, de transparence de la texture. L'impressionnisme trouve sa plus grande expression dans la musique de C. Debussy, touche les œuvres de M. Ravel, P. Dukas et d'autres. L'impressionnisme a également apporté des innovations dans le domaine des genres musicaux.

**Aujourd'hui.** La scène musicale française est connue pour presque toutes les directions de la musique populaire, en même temps qu'elle a donné naissance à un certain nombre de genres nationaux spécifiques, tout d'abord la chanson française.

## THE INFLUENCE OF SOCIAL MEDIA ON COMMUNICATION

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Communicating on the web has become an integral part of the social activities of modern man. This is due to the growing popularity of various social networks and entertainment resources. Of these, the most popular networks today are Facebook, Twitter, Instagram, Clubhouse, YouTube and LiveJournal.

Social networking has given rise to a number of innovative linguistic phenomena, many of which have positive as well as negative effects on the English language. Social media reminds us that change is a natural and ongoing process, so with the advent of the social network Twitter, the following words have been coined:

1. *Hashtag*. Many websites and blogs use tags to make it easier to find the content you want. When Twitter first appeared, it was impossible to add tags there. So, Twitter users decided to invent their own way to add special tags to their posts. And that's how hashtags came about. Hashtags consist of the symbol # in front of the keywords, written without spaces between them. Hashtags are now used all over the Internet, not just on Twitter. An example of a popular hashtag is #TBT, which stands for Throwback Thursday.
2. *RT (Retweet)*. Retweeting among Twitter users is when someone shares your tweet with their readers and followers. Retweeting is used to express agreement with what the person said, and if you would like to add something to what was said.
3. *Facepalm*. Facepalm is a gesture where you cover your face with your palm if, for example, you hear something obvious or not very clever.
4. *Noob* is a newcomer, both in the good and bad sense. Noob can be called a person who doesn't know something or doesn't have some skill. Also, this word can show that you are just a novice user.
5. *DM (Direct Message)*. Direct Message (DM) is a Twitter term for private messages sent by users to each other directly. All users of this social network have access to the Messages sec-

tion where they can read and write private messages to other users. This term is also used in the social network Instagram.

Today we communicate a lot through the Internet, and therefore we should not be surprised by the emergence of a specific Internet dialect. This dialect is quite simple and it uses many abbreviations of words and phrases. Online English is close to the style of everyday, personal communication with its frequent use of slang.

According to the sphere of use, we can divide Internet slang into several thematic groups:

- 1) denoting people (*guys, gf, mom*);
- 2) denoting human qualities (especially negative ones) (*mummy's boy*);
- 3) designation of objects, places or other objects (*Ebooks, ICQ, FAQ*);
- 4) performing some action (*CUL8, to troll, I wanna ask u a qstn*);
- 5) evaluation of a situation (*ASAP, I dunno, cool*);
- 6) expression of various emotions (*wow, woo, LOL, OMG*).

When Twitter increased their character limit from 140 to 280 in 2017, many speculated that it would dramatically change the way we used Twitter. However, Twitter found that the increase hardly altered the average length of users' tweets. Twitter reported that the most common length of a tweet back when Twitter only allowed 140 characters was 34 characters, but now that the limit is 280 characters, the most common length of a tweet is 33 characters. Despite the average length staying pretty much the same, Twitter found that the new 280-character limit has meant that abbreviations are being used much less than before. Instead of writing in "text speak" like "u r," "u8," "b4" and others, people are now using proper words. For example, the use of abbreviations like "gr8" is down by 36%, use of "b4" is down by 13%," and "sry" has dropped 5%."

Other words have increased as result, including *great* (+32%), *before* (+70%) and *sorry* (+31%). Twitter also claimed that the use of *please* and *thank you* have increased over the year since the character count change, by 54% and 22%, respectively. With more room for nuance, rather than being forced to communicate with a directness that was often interpreted as cold or rude, it could be that Twitter users are miraculously becoming politer and more articulate. Not a bad outcome, it seems!

English is constantly changing, albeit slowly. On the Internet, the process is many times faster – the language there changes every day with new expressions and images becoming popular.

## HISTOIRE DE LA LANGUE FRANÇAISE

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Le français appartient au groupe des langues romanes, au même titre que l'espagnol, l'italien, le portugais, ainsi que le roumain, le moldave et d'autres langues. Ces langues sont appelées romanes.

La langue qui est aujourd'hui parlée en France a été créée il y a plus de deux mille ans. L'histoire de la langue française est divisée en quatre périodes : le latin populaire, le vieux français (V - IX), le moyen français (XIV-XV) et le nouveau français (XVI-XVIII).

Le latin populaire:

également connu sous le nom de "latin vulgaire". C'est le latin populaire (plutôt que le latin classique) qui est l'ancêtre direct des langues romanes. D'autre part, toutes les régions de sa distribution ne possèdent pas aujourd'hui de langues romanes. Le latin national a atteint la plus grande répartition géographique au III<sup>e</sup> siècle après JC, pendant la période d'expansion maximale des frontières de l'Empire romain. Au IX<sup>e</sup> siècle, une nouvelle langue commune (pour la population indigène gallo-romaine et les Francs qui sont venus ici) a été formée à partir du latin populaire dans le nord de la France - le français (ou plutôt, le vieux français), et dans le sud - le provençal.

Le vieux français (V - IX):

Pendant la période du latin populaire, qui a commencé avec le déclin de l'Empire romain au III<sup>e</sup> siècle et jusqu'à la formation du vieux français au IX<sup>e</sup> siècle, les voyelles latines en syllabes ouvertes sous l'accent de "diphthongisation", mel ⇒ miel, fer ⇒ fier, (h)ora ⇒ (h)uore, flore ⇒ fluore. En quelques mots, il y a une transition, un ⇒ e : jument ⇒ mer, clare ⇒ cler (maintenant écrit "claire"). Le schéma de déclinaison à deux branches disparaît également, mais la conjugaison du verbe avait déjà beaucoup en commun avec sa variante moderne à l'époque, bien que toute la forme personnelle ait alors été lue (porter - (je) port+- (nous) port+ons-(tu) port+es-(vous) port+ez-(il) port+et-(ils) port+ent).

Le moyen français (XIV-XV):

Cette période s'est accompagnée de nouveaux changements dans le domaine de la phonétique (perte de la voyelles non accentuées de type *seur-sur-sûr* ; fixation définitive dans la langue des consonnes nasales, etc.) La grammaire a renforcé l'utilisation de l'articulé : *le+de=del* (maintenant "du"). L'article indéfini à l'époque (*un/une*), à son tour, a pris la forme de *des(+ rotation avec la préposition "de")/uns* (pluriel), dont l'*un* (*uns*) est alors devenu obsolète. Un modèle d'article partiel (*du+de la*), utilisé avec des noms qui ne pouvaient pas être comptés, est apparu.

Le moyen français (XIV-XV):

Depuis le XVI<sup>e</sup> siècle, le français est le principal moyen de communication de l'État. Le roi a signé un décret sur l'utilisation du français dans le travail de bureau et dans la sphère officielle. Cette décision a non seulement consolidé l'abandon du latin, mais a également contribué à la poursuite de la consolidation de la version linguistique de la capitale royale - Paris et l'Ile de France - causant ainsi un sérieux coup aux dialectes régionaux. Le changement phonétique le plus important du XVI<sup>e</sup> siècle peut être appelé la transition vers le stress de la phrase (les mots sont fusionnés en une seule phrase en termes de sens, et l'accent n'est mis que sur le mot principal). Dans le cadre de cette phrase fusionnée, un phénomène apparaît que nous appelons maintenant un "liaison", par exemple "vous êtes" (où le liaison entre les mots donne un son [z]). En grammaire, le système des articles français a acquis sa forme et sa structure modernes ; il y avait une séparation des noms masculins (avec une flexion nulle) et des noms féminins (+ flexion "-e") du genre ; et le système des pronoms personnels qui sont capables de "Moi ? Rien", ou à une utilisation non

autonome "je+hais". Les linguistes considèrent également l'acquisition d'unités de vocabulaire fixes dans la phrase comme une caractéristique évidente du modèle français de cette époque.

Le français moderne évolue sur la voie de la logique, en choisissant la précision et la clarté linguistiques. L'acquisition par la langue française de sa structure phonétique, orthographique, grammaticale moderne s'est faite progressivement au cours d'un long parcours de formation et de développement linguistique, qui se poursuit encore aujourd'hui.

## LES DIFFÉRENCES ENTRE LE FRANÇAIS CANADIEN ET LE FRANÇAIS EUROPÉEN

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Vous pensez que la langue française est la même partout ? Eh bien, vous avez tort. Avec des locuteurs natifs en France, Belgique, Suisse, Luxembourg et au Canada, sans mentionner les millions de personnes qui parlent français en Afrique et à Haïti, il est tout à fait normal que la langue française soit différente, selon ses locuteurs. Les différences entre le français canadien et le français européen sont beaucoup plus marquées que celles entre l'anglais britannique et l'anglais américain, mais la langue reste compréhensible pour tous ses locuteurs et ne pose pas de gros problèmes de communication.

Un peu d'histoire. Les colonisateurs français, avec le légendaire explorateur Jacques Cartier, n'arrivent au Canada qu'en 1536, et les d'autres Français s'y installent au cours du 18<sup>ème</sup> siècle. Puisqu'ils venaient de toutes les régions de France, leurs dialectes commencent à se mélanger, marquant le tout premier éloignement du français européen. Ensuite, influencés par les Britanniques — leurs rivaux dans la colonisation — les Français Canadiens commencent à utiliser des anglicismes, surtout dans les affaires et dans le commerce. Avançons rapidement jusqu'au 1977, quand la Charte de la Langue Française établit le français comme langue officielle au Québec. La charte interdit tous les mots empruntés à l'anglais dans les situations formelles (même si le *français* est encore très commun dans les situations informelles), les titres des films sont traduits en français, et le panneau de signalisation STOP devient ARRÊT.

Vocabulaire. Passons donc aux aspects plus amusants. Lorsque nous parlons de différences entre le français canadien et le français européen, il faut faire attention aux mots. L'exemple préféré et plus commun (parce qu'il est hilarant) est le mot *gosses*. En français européen, ce mot est utilisé pour définir *les enfants*, tandis qu'en français canadien, c'est un mot argot — voici donc une erreur à ne pas faire deux fois à Montréal. D'autres exemples plus innocents incluent les mots *voiture* (français européen) et *char* (français canadien), ou *pastèque* (français européen) et *melon d'eau* (français canadien).

Mots empruntés : non seulement à l'anglais. Comme nous l'avons déjà mentionné, les locuteurs français canadiens ont emprunté des mots à l'anglais (*chum*, par exemple, indique un ami ou petit copain), mais aussi aux tribus autochtones canadiennes. Ceux-ci incluent :sandales — babiches ; renne — caribou ; canneberge — atoca.

Grammaire. Bien que la plupart des malentendus entre locuteurs européens et canadiens soient dus au vocabulaire et à l'argot plutôt qu'à la grammaire, il y a quand même des différences grammaticales assez importantes. Dans les prépositions, les Canadiens aiment abrégé : **sur la** devient **s'a**, **dans les** devient **dins** et **sur les** devient **s'es**. Quand les Français utilisent le pronom **nous**, les Québécois utilisent plutôt **on**. Et enfin, les Français sont un peu plus formels (du moins en ce qui concerne la langue) et utilisent la forme **vous** beaucoup plus souvent, alors que les Canadiens passent rapidement au **tu**.

Accent. Tout se rapporte au nez. Si vous pensez que le français est une langue nasale, attendez de parler avec un Canadien. Les voyelles sont plus nasales en français canadien, et le son **un** est toujours très utilisé au Canada (moins en Europe). Les Canadiens prononcent les consonnes **d** et **t** comme **dz** et **tz** lorsqu'elles sont placées avant les voyelles **i** et **u**. Si vous rencontrez un Canadien qui ne le prononce pas comme cela, les locaux penseraient probablement qu'il est un peu snob.

Alors, où voulez-vous apprendre le français — Montréal ou Paris ? Pourquoi pas dans les deux destinations ? La variété met du piquant dans la vie !

### DIE ENERGIE AUS STERN

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Ökologie ist in unserer Welt ein aktuelles Thema wie nie zuvor. Die Temperaturen steigen, die Gletscher schmelzen, die fossilen Ressourcen des Planeten werden immer weniger und die menschlichen Bedürfnisse immer größer. Wenn doch Ressourcen wiederhergestellt werden könnten!

Die älteste Energiequelle der Erde ist die Sonne. Ihre Energie wird von allen lebenden Organismen für das Wachstum und die Ernährung genutzt, sie wird für die Photosynthese und die Produktion von Vitamin D benötigt. Der Stern strahlt Energie in verschiedenen Formen aus. Nicht alles kann vom menschlichen Auge erfasst werden. Der Infrarotbereich wird als Wärme zum Erhitzen von Wasser in Solarkollektoren verwendet. Aber es gibt eine Möglichkeit, Licht in Strom umzuwandeln. Dieses Phänomen wurde 1839 von Alexander Edmund Becquerel entdeckt und wird als Photovoltaik Effekt bezeichnet.

Im Vergleich zu anderen Energiequellen verwendet man hier keine Rohstoffe, man benötigt keinen Verbrennungsprozess zur Energieerzeugung, Kohlendioxid wird nicht erzeugt, es gibt keine Lärmbelastung, keine verschmutzte Luft und Infektionen von Kindern und Mutationen. Nur 18 Sonnentage auf der Erde enthalten die gleiche Energiemenge wie alle Reserven an Kohle, Öl und Erdgas.

Die Kosten für diese Energie sinken im Laufe der Jahre. 1970 betragen die Kosten 60 USD pro kWh, jetzt sind es 20 bis 30 Cent bei gleichem Volumen. Die Nachfrage nach Solarmodulen wächst um 25% pro Jahr. Mit einem Wirkungsgrad von fast 30%. Die Entwicklung ist im Gange, in die viele Geschäftsleute ihr Geld investieren. Die Investitionen in die Zukunft der Solarenergie werden sich in den nächsten 20 Jahren auf 5 Billionen US-Dollar belaufen, und die Produktionskosten werden um mehr als die Hälfte gesenkt.

Ein japanisches Energieunternehmen hat Pläne zum Bau eines großen Solarkraftwerks auf dem Mond angekündigt. Es wird aussehen wie die Ringe des Saturns. Von einer solchen Solarstation werden 13.000 Terawatt Energie pro Jahr erwartet, obwohl die Zahlen beeindruckend sind. Nur die Zeit wird zeigen, ob dieser Plan in Erfüllung geht. Und die Universität für progressive Architektur in Katalonien hat ein Solarpanel entwickelt, das Pflanzen, Moos und Boden bearbeitet. Der Vorteil ist, dass hier nur "grüne" Materialien verwendet werden. Im Inneren werden spezielle Bakterien in den Brennstoffzellen verwendet, wo die Pflanzen den Lebenszyklus der Bakterien bestimmen und das Wasser als Brennstoff dient. Ein solches System eignet sich für Gebiete, wo die Sonne nicht sehr häufig ist.

Das einzige Problem, das die Entwicklung von Kraftwerken behindert, ist die Häufigkeit der Stromerzeugung. Offensichtlich funktionieren Solarkraftwerke nicht nachts oder bei schlechtem Wetter. Trotzdem bezieht Europa 34% seiner Energie aus erneuerbaren Quellen, und bis 2050 planen Dänemark und Japan, auf 100% Versorgung umzusteigen. Es lohnt sich, ihrem Beispiel und zu folgen, um die Fehler der Vergangenheit nicht zu wiederholen und sich zu bemühen, ungefährliche Quellen ohne negative Folgen zu verwenden.

## **METAPHYSICAL REFLECTIONS ON SPIRITUALITY IN POETRY**

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Dnipro National University of Railway Transport named after Academician V. Lazarian

Metaphysical poetry focuses on the issues that lie outside the physical world. This is evidenced by the attention of John Donne (1572–1631) and the Metaphysicals to the relations between the physical and spiritual aspects of human existence, in particular, the search for analogies between the external and internal in the nature of Man. Metaphysical poetry is also characterized by a contrasting tone in the coverage of spiritual phenomena, the ability to interpret similar images in the opposite way.

The metaphysical school emerged precisely on the fertile soil of English literature, and this is explained by the specifics of the national, political, and religious situation that developed during Donne's time. The type of free metaphysical knowledge of the world made it possible, to some extent, to overcome the religious confusion characteristic of this period, in English culture. The metaphysical was understood as an ideal opportunity to hide one's religious and confessional affiliation, and the artistic word made it possible to indirectly profess Christianity itself, and not Catholicism or Protestantism in its various manifestations.

Almost all the metaphysical poets have long been in a spiritual crisis due to the historical situation in England at the time: John Donne was brought up in the spirit of Catholicism from childhood, but later turned to the Protestant faith; Richard Crashaw's father was a Puritan preacher; Andrew Marvell's family also held affection for with the Puritans. The confessional fighting and state policy of England in the 17<sup>th</sup> century influenced the manifestation of the metaphysical in poetry: poets tried to find support in the metaphysical as in a certain transitional link to religious faith.

The metaphysical arises where the forms of thinking are liberated and separated into something independent, which has become the subject of special consideration. Comparing

spirit with consciousness, the metaphysical deals with objectification of spirit, which are understood as objective forms of mental activity fixed in language: categories, ideas, theories, and values. It was within the framework of the scheme proposed by the metaphysical that a person's spiritual life was differentiated and developed. The spirit was represented in it by the noumenal world of absolute values, participation in which determined the degree of spirituality of a person or society.

It was the methods of the English metaphysical school that determined the features of the poetry that is still called metaphysical, and which is not limited to the Baroque. This is, first of all, that part of philosophical poetry which goes beyond the physical knowledge of the world and is connected with speculative searches for the true, the discovery of intangible sources of existence, secondly, poetry that partially professes the spiritual principles of a religion and, thirdly, based on the fact that an important feature of the language of the first Metaphysicals was synthesis, i.e. the desire to reconstruct the relationship between the earthly and heavenly, material and ideal, the described phenomenon is poetry, which allows for the combination and mutual enrichment of the audible and visible, poetic and scientific, every day and poetic word.

## **BASIC DIFFERENCE BETWEEN A LAPTOP AND A COMPUTER**

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When choosing a new device, the user must determine the purpose of their purchase and what they will use it for.

A laptop is ideal for people who work on the go. It is a compact, sufficiently light-weight device that can be taken to a business meeting, study, work, walk, etc. Due to the built-in battery, the laptop can work for some time without connecting to the mains. You also do not need to buy other components such as a monitor, webcam, keyboard, speakers, mouse and microphone - they are included in the package (the bear perfectly replaces the touchpad). These are the main advantages of the laptop.

The disadvantages of the laptop are:

- fragility;
- the high cost of repairs;
- the performance is worse than that of a computer;
- there are difficulties in upgrading some components.

On the other hand, the computer is bulky because of its configuration, as it consists of separate independent component parts, such as a monitor, system unit, keyboard, optical mouse and other additional components, which require a special workplace. Also, the computer has several advantages, such as more power, high - quality audio system, allows you to connect more peripherals and performance is better than a laptop.

The disadvantages of the computer are:

- lack of mobility;
- work exclusively from the mains;

- protection against voltage fluctuations, it is necessary to buy a stabilizer separately;
- it occupies large area;
- it is necessary to hide somewhere a countless number of wires to connect the elements of the device;
- the processor is noisier than a laptop.

Moreover, the computer is much easier to upgrade or repair. That's why it remains popular among users.

These days, the line between a laptop and a computer is gradually blurring. There are mini-computers, which are not inferior in size and compactness laptop. A modern laptop has the same power and performance as a computer.

In our opinion, the laptop these days is very convenient to use because of its size, sufficient power and portability. It is perfect for students or school kids to search for information and write research papers, labs or quizzes. You can take it with you to the classroom, to the library or to show presentations you have prepared. Laptops are great for relaxing, watching movies, playing games or listening to music.

On the other hand, a computer is very good to use for office work, powerful programs such as design, powerful games and design, or for people who spend most of their time at home.

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