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A "Dark Night." Extended Concepts in Homo Mysticus for Translational Sciences

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The paper aims to grasp a contemporary phenomenon known as depression from another, i.e. spiritual angle. The experience described by a Carmelite monk and mystic John of the Cross as "dark night" requires a new scientific panorama with reference to contemporary mental disorders. It constitutes a highly complex physical, mental and spiritual phenomenon. Therefore, it cannot be defined without in-depth, credible, responsible and well-justified interdisciplinary research. In this paper, we propose a new model of diagnosis, therapy and treatment of the "liminal spaces" states regarded as depression with the use of quantitative and qualitative mixed-methods and tools in social sciences and humanities, including digital humanities and applied linguistics. Further research may and should lead to a common model developed also with medical scientists. We also see a great and very promising potential of our model developed together with the achievements of medical informatics, narrative and translational medicine and translational sciences in general.

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The good person out of the good treasure of the heart produces good, and the evil person out of evil treasure produces evil; for it is out of the abundance of the heart that mouth speaks.

Luke 6:45

Introduction

The contemporary man has found himself in the times of rapid changes that make him lose his footing. Our civilization boasts of the development of super technologies, yet mental health and wellbeing is still constantly slipping from our hands. Sciences have been developing rapidly, yet paradoxically no satisfactory solutions have been found so far to ease the contemporary human minds.

With this paper we would like to start a serious scientific discussion around a few questions: What knowledge fosters the development of a healthy person? ("healthy" here is not limited only to the medical standards). How can educational, medical, social institutions of any kind open to more adequate integrated approach including the spiritual dimension of a human being? How can we look upon a man in an innovative way so that "a sliced" individual can be replaced by an integrated multi-dimensional person? Should we separate highly specialized, bureaucratic institutions, or rather promote integrated approaches by inviting to the mainstream grandeur academic perspectives also complimentary "fringe" actors in sciences? We have already reached the stage when in order to understand a human person and to seek new solutions in sciences, we have to construct a completely new paradigm in anthropology, including Christian anthropology, that considers the spiritual dimension of a human being.

We take under the loop the "dark night" concept and state of mind in John of the Cross, a medieval West Christian Catholic monk, mystic and prophet who received the most honorable title in the Catholic Church as Doctor of the Church, the title reserved only to crème de la creme saints whose writings and

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teachings revolutionized the way we perceive God and human beings. The "dark night" can also be traced on the pages of the most universal book ever, i.e. The Bible, that is not only a holy book, but also a cultural phenomenon and the best-selling literary text globally. However, for the scope of this paper, the text by the "Mystical Doctor" John of the Cross is the main source authentic text (document), the biblical texts and other spiritual texts are just highlighted for further widened research in international, intercultural and even inter-religious projects.

We dare say that the deep meaning of the state of "dark night" can only be accessed by the lens of the mystical language in the liminal spaces between human and Divine in the altered states and perception, consciousness and cognition of a given mystic. Therefore, the credible scientific methods and tools taken from linguistics are of high value. The state of "depression" can be investigated on the level of the altered states of the mind (psychology) and mere biological (physical) level, however, these are not discussed in this paper, just certain new paths are suggested for further psychological and medical research. We claim that a lot of contemporary crisis experienced by people nowadays may have their spiritual character, therefore need a completely new approach to understanding, diagnosis, treatment and therapy, not only in medical services but elsewhere. It is a very serious problem as the phenomena can be interwoven, therefore there is a great and urging need to invite frontier research scholars across disciplines, cultures, languages, religions, and so on.

Spiritual Background. Christian Spirituality and Personalism

The notion of spirituality has many faces. It can be developed on the background of religious systems, or not. Therefore, it is necessary to declare what is meant by Christian spirituality that is taken into consideration in this paper. Spirituality as a human ability to transcend is a universal anthropological fact, it means that each person, regardless his/her background, culture, education, religion has a need for spirituality. This is one of the very few features that

¹ https://en.wikipedia.org/wiki/Doctor_of_the_Church (accessed: 22.02.2023).

² Tomasz Jelonek, *Biblia jako fenomen kulturowy* (Kraków: Petrus, 2012), 5–8.

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distinguishes a man from other creation. The universal need for spirituality echoes our longing for the Creator and Lord.³

The very notion of "spirituality" belongs to the oldest notions. It has changed its meaning a few times over the centuries. Initially, until the 11th c. spirituality was understood as searching the unity with God. Later, spirituality was described as the non-materialistic aspect of the human soul. In general terms, spirituality means this feature of a rational and free being that is able to transgress himself, however, it needs to be clarified where the human heart is turning to. Therefore, the word "spirituality" should always be explained by the adequate adjective. Christian spirituality, i.e. life in Christ under the inspiration of the Holy Spirit and cooperation of a human person with the Divine grace is something completely different than the Far East spirituality. The latter is completely foreign in Christianity and culture founded on the Hellenic and Latin background, due to a different concept of God, man and the world in those two systems. Behind these notions completely different realities are hidden. Moreover, there is another notion of spirituality that can be described as "inner life" the notion with biblical foundations and used by the most renowned mystical writers, like St. Theresa of Avila in her work *Interior Castle*.⁴ Every human being has his/her inner life as one's own unique spiritual richness. However, spiritual life in its most precise meaning in the Christian perspective ca be defined as "life in Christ, life directed by the power of the Holy Spirit.⁵ The central figure in Christian spirituality is the person of Redemptory and Redeemer and life in Christ under the inspiration of the Holy Spirit. Therefore, Christian spirituality is distinguished from other kinds of spirituality by the person of Jesus Christ, both human and Divine.6

The name "personalism" comes from a Latin word "persona" and means every doctrine that claims to play an important role in reality. In this perspective, the so-called Christian personalism has its distinguished place that takes its inspirations from Christian revelation and observation of the world of persons. For the purpose of this paper, the author brings the perspective developed locally

³ Marek Chmielewski, *Wielka księga duchowości katolickiej* (Kraków: Wydawnictwo AA, 2015).

⁴ Ibidem.

⁵ Ibidem, 9–11.

⁶ Ibidem, 12.

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mainly by: Wincenty Granat, Karol Wojtyła (Pope John Paul II), Czesław Bartnik, Krzysztof Guzowski, Grzegorz Barth and others.7 The distinctive feature of Christian personalism, however, is the fact that in this particular perspective, it is not a person understood in general terms, yet the Person of Jesus Christ in whom two persons meet: human and Divine, man and God. The self-realization of a human being as a person in God means his/her deification, i.e. becoming to the image and likeness of God Himself. In the Christian personalism there are two paths to cognition: catalogic (descending from above down) and analogic (ascention from down up/above). The latter one means going from an experience and observation of the materialistic reality up to the spiritual transcendental reality and universal principles. The light from above and the light of reason permeate the same object of cognition, i.e. a person. It is very close to the idea of Christian humanism in which the key to the understanding of dignity of a human person is the fact that man was created to the image and likeness of God, and also Incarnation. So, the human nature is immersed in the life of Infinite God. In the perspective of Christian personalism, there are two key assumptions, that a human person is Theocentric and Christocentric. The theocentric human person means that all creation comes from God and directed to God, especially the rational beings gravitating to Him. This issue is broadly discussed by a local scholar, Grzegorz Barth.8 In this perspective the whole creation turns to God in order to participate in His nature and life, indicating a very positive connection existing between God and a man. This connection or tie causes that a man is immersed in a new kind of existence called grace, supranatural life or participation in the life of God. Therefore, a Christian human person in his/her personal existence connects the life of nature and grace.9 This direction towards God is also direction towards oneself as the road to God's infinity is also a road to the fullness of humanity. 10 God desires that a man participates in the inner life and

⁷ Michał Kosche, "The Human Person as a Social and Interpersonal Being According to the Most Significant Representatives of the Lublin Personalism," *Collectanea Theologica* 91, no. 1 (2021): 5–24.

⁸ Grzegorz Barth, *Ku pełni osoby w Chrystusie. Wincentego Granata personalizm inte-gralny* (Lublin: Wydawnictwo KUL, 2009).

⁹ Wincenty Granat, *Personalizm chrześcijański. Teologia osoby ludzkiej* (Sandomierz: Wydawnictwo Diecezjalne i Drukarnia w Sandomierzu, 2018), 626.

¹⁰ Ibidem.

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plans of the Divine regarding the whole world and human beings. This basic relation to the transcendental world has a personal and cognitive character as its "object" is a concrete and living Person possessing the whole truth. 11 In Christian personalism, the human transcendence means a human person is directed to God, not to oneself, so to be a human being means to keep a relationship with God, to go to Him as one's destiny and happiness. A human personality acquires sense and meaning only when it turns to God, His life in order to participate in Him. Wincenty Granat accentuates an even more important formal element of personalism – its "Christcentrism" pointing at the dynamics of a person and interdependency between a human person and the Person of Jesus Christ and he uses the notion "Christian person." Christ constitutes the fullest and most transparent and clear image of a man, He reveals the truth about a man in one's full natural and supranatural dimensions.¹² Yet, at the same time He enlightens our mind from inside (heart), so a man can receive the Truth and create a certain viewpoint upon the world. A man walking towards God, does not stop walking towards himself.¹³ Furthermore, a man can understand himself only when the mystery of Christ, accepts and assimilates the whole reality of Incarnation and Redemption. Granat says that Christ reveals truth to a human person who can know this truth because He is a full/complete Person that is pointing at the real interpersonal ties between God and a man. A human "I" starts looking at the Divine "You." A Christian person being "a new Man," by grace, is "a new creature," therefore is self-fulfilled by the unity with Christ and becomes "a second Adam."14 The internal transformation takes place in the process of abandoning sin and acquiring sanctity and union with Christ. This transformation makes a man truly free in the quest for the transcendental goal, i.e. God. The power of this transformation is described as *deificatio*. Christian personalism is a very interdisciplinary science and constitutes a starting point in future, or even futuristic scientific explorations into a dialogue between reason and faith.

¹¹ Ibidem, 243–244.

¹² Ibidem, 399.

¹³ Wincenty Granat, *Ku człowiekowi i Bogu w Chrystusie. Zarys dogmatyki katolickiej*, vol. 2 (Lublin: Wydawnictwo KUL, 2016), 675.

¹⁴ Wincenty Granat, *O łasce Bożej udzielanej przez Chrystusa Odkupiciela* (Lublin: Towarzystwo Naukowe KUL, 1959), 209.

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The Mystical Experience in the Light of Christian Personalism

It needs to be stressed that mysticism comprises a lot of vague notions. For the purpose of the paper we clarify a mystical experience in the perspective of West Christian personalism. Many theologians distinguish three main features of infused contemplation that is identified with a mystical experience in the right meaning of the word: (i) a soul becomes aware in her experience, without any reasoning, nor imagining, but only spiritually that God is present in her. This is regarded as a Divine gift calling her to be in a friendly close relationship; (ii) this experiential and direct cognition of God does not give any new notions because it is general and unclear and means a concentrated intuition without many ideas, nor opinions that is just looking at the Supreme Good that is closer to the soul and is perceived as simple enormous love; (iii) the most distinctive feature of a mystical experience is the awareness that it appears unexpectedly and does not depend on the human will which is incapable of acquiring or keeping it. The spiritual powers in a man are somehow blocked or suspended, and the tight union with God happens in the deepest layers in the root of the soul (the heart). The mystics find it extremely difficult to find the adequate expressions in order to describe this state in which the Creator and the creation become one. The man feels lost and forgets himself having a feeling of his own nothingness, the mystic knows that he receives by grace only the good that only God possesses in His nature. Love experienced by the mystic towards God becomes love towards all people. The mystic is able to love all humanity with the love of God that he takes from the source of love, i.e. God Himself. When God unities with a soul, then, as John of the Cross says, human reason becomes Divine via this union with God, human will becomes the Will of God, the soul loves like God loves as human will becomes one with Divine Will and love. This way a human soul becomes heavenly, supranatural and more divine than human. The writings of John of the Cross are significant for all Christian mystics. He claims that a soul in a mystical experience realizes how she lived as a slave in her former life when used her own ideas and desires, now she sees how precious is her merely spiritual life. The mystics share one thing, i.e. they find it very difficult of expressing verbally what is happening in the soul united with God. Therefore, frequently their language contains words and structures that are more like images of a certain spiritual reality they experience than just clearly defined lexical items. So, in this case we

should rather be speaking of full "brain-heart" concepts than just dictionary meanings. There is no rule as to who receives such a mystical grace, it is always the decision of the Almighty. In other words, this grace is a free gift and cannot be asked for, yet received by the soul chosen by God Himself.

The HEART that Mouth Speaks

The core cognitive concept hidden behind various linguistic representations (images) in "dark night" is obviously "night" together with its semantic fields whose study can shed a completely new light upon human perception and cognition in liminal spaces in the altered states of mind. The results of such a study can change the way we have been thinking on how we perceive, understand and use our knowledge about the world and how we build the external world with application to mental health and wellbeing, education, governance, and everyday decision-making.

When talking about "mind" and "mindfulness" scientists usually refer to the intellectual potentialities, only. However, "heart" in the Bible and Christian literature has numerous meanings. To help the readers grasp the extension of the integral concept, we have consulted a credible world dictionary of the English language, the Britannica. Although "heart" in the biblical sense constitutes a physical organ of a human body (Ps 38:11; Ps 139; Isa 1:5), in this paper we are looking at "heart" in its spiritual sense. Here, it means the inner life of a person, one's own personality and intellectual capabilities (reason) and the whole internal nature. In the Old Testament "heart" is the seat of feelings, thinking and will (volition), also various emotions: joy, (Deut 28:47), sorrow (Jer 4:19), peace, or anger (Deut 19:6). However, the key point here is that in heart is also located reasoning and cognition (1 Kgs 3:12), visions (Jer 14:14), frenziness and evil thoughts (Prov 10:20), will and decisions (1 Kgs 3:12) but also the process of discernment and decision making (1 Kgs 8:17). So, in the biblical logic, there is a very close relationship between what is human (physical) and what is Divine

¹⁵ https://www.britannica.com/dictionary/heart (accessed: 28.12.2022).

¹⁶ Nowy słownik teologii biblijnej, ed. Henryk Witczyk (Lublin; Kielce: Towarzystwo Naukowe KUL; Jedność, 2017), 812–813.

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(spiritual). It is in the heart where a human being returns to God (Ps 51:12,19; Joel 2:12-13). Heart in the Bible is also closely connected to kidney and it is this particular organ that seats ... emotions and motives of human acts that are known only to God (Ps 7:10; Ps 26:2; Jer 11:20; 17:10; 20:12). In the New Testament, however, heart refers to the center of human life energy, or stamina, the location of the natural, physical life, but also the mental state (Luke 21:34; Acts 14:17; Jude 5:5). There is a discrepancy between the internal and external representation of a human person (2 Cor 5:12; 1 Thess 2:17). Heart in the New Testament constitutes the sphere of spiritual forces, reasoning (intellect) and will (volition). The crucial point is that the New Testament understanding of the word "kardia" is close to the Greek "nous" (mind, reason), heart and mind (thought and intention) can be understood as parallel notions (2 Cor 3:14-15) as synonyms (Phil 4:7). "Kardia" also expresses various aspects of human relationship with God, faith and obedience, or rejection and rebellion against God.¹⁷ A human person is unable to get to know one's heart fully, nor to transform it by one's own efforts. Only God can reveal what is hidden deeply at the bottom of a human heart (1 Cor 4:5; Rom 8:27), test it (1 Thess 2:4). Heart is also the seat of faith (Rom 2:5; 10:6-10). Only God can touch and transform a human heart (Acts 2:37) by sending His Holy Spirit (2 Cor 1:22; Gal 4:6–7) who pours His love into a human heart (Rom 5:5). The human heart that is entirely submitted to God is called "pure" (Matt 5:8; 1 Tim 1:5) as it was washed with the Blood of Christ (Heb 10:22; 1 John 1:7) and Christ is seated there by grace only (Eph 3:17). God sees and is the Only One who knows the human heart (Acts 1:24; 15:8), therefore it is only God who is the expert on a human heart.¹⁸

These biblical assumptions have a great impact upon our common thinking on such notions as "mind" and "heart." Consequently, mind cannot be understood only as an intellectual sphere of reason and thinking.

These findings and assumptions have a great impact upon our thinking on human ... thinking and thoughts, including the mental states in mental problems nowadays.

¹⁷ Ibidem, 814.

¹⁸ Ibidem.

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A "Dark Night" in John of the Cross

The phenomenon of "dark night" has also been known in the Judeo-Christian Western spirituality. Here, we are highlighting the spiritual causes of the omnipresent crises in the mentality of people globally: fear, anger, frustration, sadness, loneliness, aggression, violence, inability to undertake one's own responsible decisions, etc. The sources of contemporary "dark nights" on various levels (mental, emotional, interpersonal, etc.) may derive from the inner state of the human heart, not just the brain. However, heart is here understood as the human/Divine inner center of a human person. It can be accessed by a linguistic meaningful analysis of the spiritual writings of numerous West Christian mystics, both male and female. Obviously, the main protagonist is John of the Cross to whom we owe the very notion of "dark night" described as a painful path to the most desirable state of "unio mystica" with God and His love, described in the West Christian spirituality as sanctification. John of the Cross experienced very powerful spiritual states that he himself gave a name as "dark night." However, we need to be extremely cautious in approaching this phenomenon with a great care and respect as it is a very complex, dynamic and individual process that cannot be copied thoroughly and easily compared with that of other people's. Nevertheless, there are certain common threads worth mentioning.

The figure of John of the Cross and his concept of "dark night" is commonly known in spiritual literature worldwide. A recommended scientific book by F. Ruiza constitutes an excellent introduction into the life and doctrine of John of the Cross. ¹⁹ In fact, in order to understand "dark night" fully, one needs to refer to all other writings by John. However, for the purpose of the paper we are only focusing on "dark night" leaving the readers with our invitation to read them all. His writings are all based upon his own mystical experience, but also theoretical and practical knowledge received from his studies and spiritual guidance. Here, the doctrinal and existential elements are interwoven, therefore inseparable. Thus, we can be speaking of integral mysticism of John of the Cross.

¹⁹ Federico Ruiz Salvador, *Święty Jan od Krzyża. Pisarz-pisma-nauka*, trans. Jan E. Bielecki (Kraków: Wydawnictwo Karmelitów Bosych, 1998).

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The framework of the integral mysticism has been outlined by Bernard McGinn, one of the most outstanding explorers on Christian mysticism.²⁰

Predominantly, researchers refer to "night" as a symbol, however, we challenge this term, as behind the linguistic "night" a certain deep and wider concept is hidden. We even claim that is a multidimensional concept that needs extensive interdisciplinary investigations. The key concept of "night" is closely related to John's personal experience. The cosmic "night" represents a concrete reality of his state of spiritual darkness.²¹ In the light of Christian anthropology, Christian personalism and Christian spirituality "dark night" is understood as "night of faith," a process leading to complete union with God. To do so, a human person needs to be first stripped bare. This state is accompanied by the feeling of total solitude, being lost in the life led so far by the established schematic patterns and regulations. This inevitably leads to suffering that is a natural state in the essential life breakthroughs. However, this suffering has no value as such, yet is a result of the process of internal/inner transformation of the human soul.²² John of the Cross distinguishes three stages of "dark night." The first stage is suffering that a soul experiences as a result of a radical change that has to be taken with reference to the materialistic goods. It needs to be accentuated that it does not mean a person needs to get rid of them, yet he/she needs to accept ordered dependencies in which a human person stands with reference to the materialistic world. The materialistic goods cannot be placed above our life, they cannot lead our pursuits, nor our activities. Human persons are all called to return to God as the only Creator who desires to be in unity and communion with humans on earth and then in eternity. Thus, in the first stage the soul enters "darkness," a world unknown so far that exists beyond our awareness, perception and control. In this stage our physical senses that so far have been a door to the external world are now in blackout, so we lose the feeling of control of this world. It does not mean that the senses vanish all of a sudden, just on the contrary, they become sharpened, however with a different focus, which is our spiritual growth. Here, our human natural sensual inclinations are now inhibited, i.e. our impulses and

²⁰ https://en.wikipedia.org/wiki/Bernard_McGinn_(theologian) (accessed: 20.01.2023).

²¹ Święty Jan od Krzyża, *Noc ciemna*, trans. Bernard Smyrak (Kraków: Wydawnictwo Karmelitów Bosych, 2013).

²² Jerzy W. Gogola, *Mistyka karmelu* (Kraków: Karmelitański Instytut Duchowości; Wydawnictwo Karmelitów Bosych, 2017), 51.

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sensual pleasures, so from now on they do not vanish but are directed towards God, in a way a person develops spiritual senses next to physical senses. At this stage a person is highly supported by the grace of God in order to be set free from the net of worldly dependencies and enters the phase of internal purification. John of the Cross describes this particular effort as an active night of senses."23 One can experience a palette of extreme feelings now, fear, pain, anxiety, suffering, but also joy. At this stage a soul is gradually set free from "gods" of the world that distract us from God. In this stage, God himself comes to help the person, the sensual and spiritual purification happens now without any human activity. John calls this stage a passive purification and we deal with a passive night of the senses and passive night of the spirit. However, it needs to be emphasized that God respects human freedom, so His intervention is only possible when a person achieves a certain level of spiritual growth and is able to detach from the earthly matters. However, there is another trap here, too. A person who reaches this higher spiritual level may easily be delighted with himself and expects only the bright future ahead, therefore God decides to suddenly "put out the light." This action causes enormous fear, even panic as the person cannot be directed by the senses, imagination, nor rational cognition any longer. All the spiritual skills acquired so far cannot be used, either as everything is immersed in darkness and the feeling of dryness.²⁴ A very important issue here is this suffering is not caused by the absence of God, just on the contrary, His presence is so close that causes such enormous suffering.²⁵ The soul is being prepared to autonomous independent life.

The second stage of "the night" is referred to the rational powers of a human being, i.e. one's reason. It means that in order to be united with God fully, we have to abandon rationalization of the external reality, including rationalization of God himself who is a spiritual being beyond the materialistic order of the world, also perfect and cannot be enclosed in our human limited definitions, notions, nor images. Again, as in the previous stage, suffering is inevitable as a result of more and more suppressed rationality. In this stage, a person also has an

²³ Święty Jan od Krzyża, *Droga na górę Karmel*, trans. Bernard Smyrak (Wydawnictwo Karmelitów Bosych: Kraków 2013), 116–117.

²⁴ Ibidem.

²⁵ Wilfrid Stinissen, *Noc jest mi światłem*, trans. Justyna Iwaszkiewicz (Kraków: Wydawnictwo Karmelitów Bosych, 1993), 18.

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overwhelming feeling of solitude and abandonment. The person entering the midnight is already on a higher, internal and spiritual level. Now, the freedom is happening on the level of soul powers: memory, reason and will/volition. This is a much deeper purification of the most intimate space of faith in a human being where only he/she has an access. Now, all our spiritual bondages are to be ordered. All the beliefs, including the way of spiritual practices, are now being questioned. The external man is being transformed into an internal man who is becoming "to the image and likeness of God Himself." 26 The soul realizes that God cannot be loved by any other feeling of love but with His own Divine love. This way, all forms of human love cannot be compared with God who is the Ultimate Love. The powers of our souls - memory, reason and will are also attached to specific, now spiritual, goods. The relation with the living God requires that those dependency nets are also loosened if not abolished. Our own images of God and supranatural reality belong to those spiritual bondages, too. John warns against any kind of blasphemy, including our own images of God. Another crucial point is that in the hierarchy of creation, it is a human being that is the crown of creation, above any other creation, therefore we need to be careful not to reverse this order. Our attention needs to be focused on God as our Creator, not so much on the creation itself. Here again a biblical reference can be made to those people who sold everything in order to buy the precious pearl. God is everything to them and losing God means losing everything.²⁷

The final stage takes place sometimes after many years until God himself initiates "the passive night of senses." Now, a human person is already strengthened and transformed on his path to complete union with God, experiences internal peace and joy. Nevertheless, states of dryness and darkness may still be present. The third stage of "dark night" is the inability to get to know God in our earthly life, we are convinced that His nature is hidden, or under the veil, so to speak. This stage makes a person very humble as he/she realizes how very little we know God and how far from him we actually are. Suffering again is a necessary companion as now we realize our own blindness, especially in those who considered themselves as believers in close relationship with the Creator. All the lanterns that so far have been shedding light on our life paths, beliefs, opinions,

²⁶ Ibidem, 16.

²⁷ Ibidem.

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attitudes, etc. have been taken away, leading to insecurity and instability. In a way, a human person is forced to leave all the comfort and safety zones as they have proved to be just his/her own imagination and safety valves or security strategies. A human being now needs to transform and enter a mature and independent/autonomous life. At this stage, some unpleasant physical symptoms may be present resulting from the fact that the sensual part of the soul is too weak to receive deeper spiritual sensations. General weakness and stomach pain may also appear now. John describes this phase in a very artistic style saying that now God is acting like a great painter giving the final touches to His masterpiece, human soul is now being purified from any unconsciousness and imperfections. John says this Divine impact on the soul means "infused contemplation," or "mystical theology." This way the soul is being perfected and ready to receive perfect love. The light of God paradoxically constitutes "dark night of the soul" as its perfection exceeds the soul that is blinded by this light.²⁹ Suffering now results from the enormous brightness of the light in which a soul is able to see her nothingness and impurity. This stage is accompanied by great suffering caused by the loss of spiritual pleasures, or even the feeling of the loss of God. However, John says that the pain felt is always the first symptom of a Divine intervention.

Both John of the Cross and other Carmelite mystics have a desire to live in the recluse, far from the external world, away from the camera flashes on the life stage of the life powers and global actors. They realize their own "nothingness" with comparison of the presence and glory of God. Once a human person realizes one's own "nothingness," weaknesses, emptiness, powerlessness and conviction that whatever he/she has, it all comes from God. The mystic becomes independent of other and him/herself, but totally dependent on God. This way, the attitude of a rebellion is naturally conquered and the person is ready to ask for, receive and accept a Divine intervention.

The Divine intervention along those three stages goes via the senses, then memory, reason and will in order to purify the soul from any bondages and ties. Such a soul is now prepared for complete unification with God in love. In the light of Christian theology and mysticism, God desires to share Himself with His

²⁸ Święty Jan od Krzyża, *Noc ciemna*, 543–544.

²⁹ Mieczysław Gogacz, *Ciemna noc miłości* (Warszawa: Akademia Teologii Katolickiej Wydawnictwo Sióstr Loretanek, 1985), 122.

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people as He loves every human being, therefore we are all called to be mystics able to discover a Divine spiritual element in our heart and return to the Creator and be unified with Him in love. The three stages of the night are aimed to finally unify our human will with the Will of God, to be able to listen and hear what we are called for. The unification of the human will with the Divine Will constitutes the highest and fullest dimension of intimacy between the Creator and the creation, it is described as "unio mystica" or "the spiritual marriage."

In the poem by John of the Cross, "night" is not so much a period in his spiritual life, nor a tragic drama on the road to the union with God, but a reality of an encounter with God that has a personal character and is, in fact, an encounter between two persons: one human and the other one Divine. "The Beloved (Christ) meets the beloved (a soul) during night and due to night." The poem constitutes a narrative of the author (soul) that is already in the state of "unio mystica," therefore in the state of perfection, so after the road has been finished. "Dark night" is faith, or in better words, road of faith of a human person in love with God. At the beginning, faith is a guide and means to the union with God. At the end, faith appears to become the Person of the Beloved, the subject of all desires and searching.³¹

A "Dark Night" – a Contemporary Phenomenon?

The state of "dark night" as described in the experiences of John of the Cross, a Spanish mystic of the 16th c. may be commonly present in the lives of contemporary people. It may appear among believers and non-believers. "Psyche" means "soul," "therapy" means healing, or treatment. The shortest description of Jesus' public activity is: healing of the human soul. However, in the contemporary language, psychotherapy has lost its religious, or spiritual dimension and has become the synonym for just a set of practices by a professional psychologist or therapist for his client. Nevertheless, psychology closed to transcendence does not really exist anymore, or at least, it proposes limited and not integral image of mental states of a human person. Psychology and the Gospel

³⁰ Święty Jan od Krzyża, *Noc ciemna*, 11.

³¹ Federico Ruiz Salvador, *Święty Jan od Krzyża*, 425.

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do not show divergent paths. Since mind cannot be separated from the soul (heart), the academic psychology has to accept the spiritual dimension of a patient. Psychology describes how we function as humans, the Gospel explains what for and who for. Therefore, they are complementary. Both our human mind and its complicated mechanisms and our immortal soul constitute an integral entity.³² Our brain does not determine our thoughts, nor actions. Imagination and faith go beyond the materialistic world and biochemistry laws. Nowadays, the Christian theology of mysticism has shifted the accents more towards mysticism in everyday ordinary life, not only monastic life. Every single man nor woman has experienced in their life various forms of suffering, injustice and unhappiness. Everywhere there are lost, rejected wounded people deprived of their own voice and dignity. Our contemporary battle fields may be different than those on the biblical pages, yet the human hearts have not changed much since then.³³ Therefore, psalms and other spiritual texts constitute a spiritual remedy like a balm poured onto a wounded human heart. The highly secularized world nowadays tends to perceive a human being only in his/her materialistic dimension only, as a combination of biology, physics and chemistry. Yet, by the definition of the World Health Organization, a human being is also spiritual. However, among the six paths to spirituality, the Christian path has not been recognized, at all. Therefore, this study can shed light upon the gap that calls to be filled in with new knowledge on who we are as human beings. The merely scientific vision of a human being in unsatisfactory as very limiting. Clearly, it does not bring the satisfactory solutions as billions of people globally are diagnosed, treated with depression and the numbers of the patients, instead of diminishing are actually constantly rising to worrying levels. The spiritual dimension of humans calls for being taken into consideration in the contemporary medicine and medical solutions. Andre Malraux states bravely that the 21st c. is going to be mystical, or it will vanish.34

³² Marek Pietrachowicz, *Psychoterapia Ewangelią. Boża strefa zrozumienia* (Warszawa: Fronda, 2021), 5–8.

³³ Merrill Morse, *Psalmy na trudne chwile*, trans. Mirosława Majdan (Warszawa: Wydawnictwo Księży Marianów, 1997), 10.

³⁴ Jan A. Kłoczowski, *Drogi człowieka mistycznego* (Kraków: Wydawnictwo Literackie, 2001), 5.

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The main goal at this early stage of our textual research only is to show the need to redefine "depression" by widening the concept and bring new therapeutic solutions. The common and global mental disorders, crises and other distortions may have their spiritual background. Contemporary depression can be a spiritual crisis that can only be tackled with the use of spiritual instrumentalia, not pharmaceuticals, nor academic therapies. In a lot of cases "dark night" and depression seem very much alike. It is a very complex and delicate issue, therefore needs very responsible research with the use of credible instrumentalia. H. Bergson is astonished that a mystical experience can be compared with sickness, or mental disorders. Obviously, it is difficult to judge the state of spiritual or physical health because a human being lives in unstable balance, however there is intellectual health that can be easily founded and it is easily recognized.³⁵ Christian mystics do experience visions and ecstasies that can be compared to pathological states, however, the mystics treat them as something minor and are very careful about being misled. Their encounter with the Supreme power makes it very hard to find expression in their mind and therefore they are searching desperately words, gestures and images to express the inexpressible.³⁶ The nervous states in mystics should be accepted as they are also met in the other people who are geniuses, e.g. in music.³⁷ The observations made by many psychologists and philosophical analysis based on numerous facts of mystical life indicate that opinions on mysticism as a pathology do not have solid grounds and should be rejected. At present, mysticism constitutes the object of explorations not in psychopathology but in the psychology of normal/ordinary, or perhaps superordinary phenomena in religious life. John of the Cross himself draws a clear boundary between natural pursuits of a human soul and infused grace by God.³⁸ H. Bergson claims upon his study of mystical writings that in mystics the activity of the power of God is revealed, but this power is felt as somebody very close and there is no division between the Loved and the one who loves.³⁹

³⁵ Henri Bergson, *Les deux sources de la morale et de la religion* (Paris: Presses Universitaires de France, 1932), 241.

³⁶ Ibidem, 241–242.

³⁷ Ibidem, 243.

³⁸ Święty Jan od Krzyża, *Żywy płomień miłości*, trans. Bernard Smyrak (Kraków: Wydawnictwo Karmelitów Bosych, 2013), 328.

³⁹ Bergson, *Les deux sources de la morale et de la religion*, 244.

The psychologists and philosophers of religion, who in their attempts try to explain mystical experiences, also notice intellectual elements. W. James claims that mystics perceive the truth unknown to them so far and the secrets of life become clear and get a certain new outlook on all matters. Moreover, the greatest Christian mystics have always had a sense of a mission received in their encounter with God.

The phenomenon is also already discussed among medical doctors, especially psychiatrists. Gerald G. May, MD claims that the dark sides of human spiritual life are a vital element in genuine HEALTHY spirituality (sic!). Unfortunately, nowadays we notice naive spirituality never leading to healing, nor enriching the soul. The Christian spirituality, on the contrary, can result in the spiritual wholeness, or integrity. Perceived with great care and respect, such a process is seen as a deep transition, a completely new orientation in fullness of spiritual life.⁴¹

Materials and Methodology

We are aware that we are just initiating further more in-depth, wider and international, inter-cultural and interlingual, next to intralingual frontier research studies across many disciplines. In our initial project idea mixed quantitative and qualitative methods and tools from social sciences and humanities in general, translation sciences are proposed. The textual data come from two versions: the English online version of *The Dark Night of the Soul* by John of the Cross and the Polish paper print for comparative high quality case study of the semantic field of "dark night" in a chosen context. First, we brainstormed the topic and wanted to see the existing gaps in the methodologies and tools. Having spotted them, we came back to the texts to see if we can bring any improvement and gap filling. We saw that scientists from various disciplines need to bring even still more quality to the qualitative and quantitative perspectives in general as "the devil is in the details." We are aware that we are just bringing ideas, certain

⁴⁰ Wiliam James, *Odmiany doświadczenia religijnego. Studium ludzkiej natury*, trans. Jan Hempel (Warszawa: Aletheia, 2011), 227.

⁴¹ Gerald G. May, *The Dark Night of the Soul. A psychiatrist explores Connection between Darkness and Spiritual Growth* (San Francisco: Harper, 2013).

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proposals, not ready solutions, yet. The further linguistic analysis that we would like to apply later on in our next studies is a combination of a high qualitative linguistic case-study combined with a creative transposition method in intralingual parallels immersed in the theory of Christian personalism, anthropology and the so-called Polish cognitivism. The Anglo-American cognitive perspective accentuates the role of the brain, i.e. the neurophysiological mechanisms in the conceptualization of a human experience and the world image based on this experience and accentuates the role of embodiment in creating notions (e.g. Langacker). A Polish scholar Krzeszowski goes even further and says that embodiment even constructs the whole systems of values.⁴² However, the Polish cognitivism draws from the tradition of ethnographic and ethnolinguistic school⁴³ and claims that a language and the world image enclosed in it is also tied with the history and culture of particular national communities. Anna Wierzbicka, the author of NSM (Natural Semantic Metalanguage) accepts both biology and culture and claims that universalism and relativism are inseparable. Her approach is described as anthropological and cultural linguistics that has its roots in the European tradition (Leibniz, Bogusławski, Apresjan) and has a very clear Slavonic, i.e. Polish mark. Her NSM theory distinguishes the elementary meanings common to all the languages. A very interesting thesis is that all linguistic forms have a semantic meaning, i.e. the same contents can be revealed via lexical, grammatical, morphological and syntactic elements. She stands in dialogue with Anglo-American cognitive linguistics and her major scientific impact is that she recognized semantics as the foundation and key research area in linguistics. She has become famous for establishing the existence of both semantic atoms called "primes" and a system of elementary grammatical rules that are known in all world languages. For this reason, she even proposed lexicographic definitions that are based on elementary (simple) semantic units. She also appreciated everyday natural language and the user's intuition. She consequently demonstrates the subjective nature of meaning. Wierzbicka was successful in solving the problem of the antimony between universalism and absolute relativism (objectivism) by creating the methodological frameworks for intercultural semantics.

⁴² Tomasz Krzeszowski, "Parametr aksjologiczny w przedpojęciowych schematach wyobrażeniowych," *Etnolingwistyka. Problemy języka i kultury* 1994, no. 6: 29–51.

⁴³ Elżbieta Tabakowska, *Kognitywizm po polsku – wczoraj i dziś* (Kraków: Universitas, 2004), 24–25.

Her thought seems very inspiring for our study as we are also pursuing the universal meaning (semantics) yet in a subjective, individual experience of a mystic.

Another Polish scholar in linguistics, Alicja Sakaguchi, in her renowned book on mysticism and prophecy, consciousness, perception and cognition entitled Language-Mysticism-Prophecy. From experience to Expression⁴⁴ claims that mystical experience results in the unpredictable and internal transformation of an individual that has been known in various religions under different names: in the Jewish tradition it is called "a prophetic calling," in Christianity "a revelation" or "the grace of God", and in Buddhism - "an illumination." This has a great impact not only on the individual's life, but also upon the entire generations. From the linguistic perspective the author discusses the linguistic methods and tools by which this experience is illustrated, or represented. The Polish scholar accentuates that the research in this particular area goes beyond the conventional/traditional mainstream sciences and in order to treat the subject matter with the highest respect we need to find out highly specific methods of analysis. In her opinion, the mystical experience, consciousness, specific perception and cognition can be depicted by means of the original written accounts, such as: descriptions, confessions, explanations, observations, predictions, instructions, warnings, threats and even...curses), biblical texts, prayers, works of worship.

Sakaguchi radically claims that

in order to isolate the "language" of pure reality, it is necessary to remove the socio-cultural influences found in the study of the language of religion, to eliminate simplifications, erroneous notions and unnecessary remnants of human thinking. [...] Such a cleansing and sorting is necessary to free the religious language from a superficial and excessively naive view, from appropriations, abstractions and unnecessary complications.⁴⁵

The seemingly (?) opposing "dark night" and "light" concepts in John of the Cross can constitute linguistic representations of such a widened mystical and

⁴⁴ Alicja Sakaguchi, *Język – mistyka – proroctwo. Od doświadczenia do wysłowienia* (Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza, 2011).

⁴⁵ Ibidem, 441-442.

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prophetic state of mind. We are aiming to start building a new model of approaching the mystical and prophetic consciousness, perception and cognition with the use of linguistics by introducing intralingual and interlingual parallel texts called "apocrypha" in the most general meaning of the word, or "parabiblical texts" to see if and how universals are neighboring with the elements specific to a given religion, culture, time, etc.

To do so, we have decided to take a small sample from *Dark Night* by John of the Cross and see what can be done to extract most out of the language. We have allowed ourselves to consider using in the future development of the project the latest trends in linguistics, and freely mix the grandeur mainstream approaches with "the fringe" newly emerging trends nowadays to compliment what is still missing. MMDA (Multimodal Discourse Analysis) and its younger sister FPDA (Feminist Poststructuralist Discourse Analysis), genetic studies seem to be very promising as new methods and tools, not as competition but rather a bit positively provoking attitudes from new, less obvious angles.

For our present sample study we have decided to extract a small text from the whole book just to highlight the linguistic potential for further research. Then, we shall propose a few possible options to study the sample, or a mixture of joint paths that each can bring more meaning and understanding of the contents, both explicit and implicit. Then, we considered what kind of techniques we would like to apply to get most quality of the sample under the study. Within the ethnographic approach there are still possible various techniques used generally in discourse analysis in corpus studies, both on a small and a big scale. Here, generally speaking, social sciences meet with humanities and scientists apply their tools and techniques to empirical study of texts of any kind, e.g.: frequency lists, keywords, collocations, and concordances. For the purpose of this paper, we decided to use concordance for the reason that concordance, in the opinion of linguists working in translation studies, can be regarded as closest to the classic qualitative analysis. Concordance means a list of all occurrences of the particular search word in a given corpus. However, the crucial issue here is that the word is presented together with the wider context. The length of the contexts is decided by the researcher and measured with the number of words and characters. Concordance enables observations of the selected words in their contexts, therefore reconstruction of any discourse related to these words is possible. In case of concordance, the researcher is led by his/her intuition and selects the words for the study whose context is analyzed later on. By the use of concordance it is possible to investigate the context of the key words with reference to the research question, not only in a small sample but also in very large corpora.

Usually, when we want to prepare a textual analysis, we use some textual analysis tools that are available on the market. On the other hand, it is possible to prepare our own tool that is more flexible. If we want to create this kind of a tool, we need to decide which programming language and environment we use. Recently languages like Python, R or Julia are really popular as data processing tools. If performance is not important, we can use any modern programming language that enables to program algorithms. For one of our previous research, we prepared an application with Java 11 programming language and IntelliJ IDEA Educational programming environment. The application contains an algorithm to:

- 1. Read all lines from the source text file and store it in a LinkedList collection.
- 2. Prepare the source data for processing by deleting all empty lines.
- 3. Concatenate all source lines into one line and separate lines with space. Here, this step was taken in order to avoid the situation when one sentence is divided into two or more lines in the source file.
- 4. Split the source line (from step 3) into sentences. Here, a dot was used as a separator.
- 5. Create an empty collection (list) for storing sentences.
- 6. Process all the sentences from the source text. If the sentence contains all expected words add this sentence to the list.
- 7. After checking all the sentences, the result list is saved to the result txt as an ordered list.

The biggest problem of this algorithm is that it focuses on word's occurrence. It is really important to underline that this type of algorithm and analysis loses the context that is crucial for a deep meaning. We can say the biggest challenge is preparing and coding an algorithm that focuses on a wider context and gives an ability to speed up the qualitative analysis process. Another challenge is preparing a tool that connects the quantitative and qualitative approaches.

On the market we can find some tools dedicated to data analysis. Usually

researchers decide to use one of them, for example MAXQDA. At the beginning the researchers need to spend time on preparing codes that they assign to parts of the source data. We think that software dedicated to automatic preparing and assigning codes to just a part of the source could be really useful and helpful. According to another research approach, researches focus on corpora and semantic field. For some researchers (like Regine Robin) linguistic samples could be divided into 6 groups:

- 1. Equivalents,
- 2. Oppositions,
- 3. Descriptions,
- 4. Associations,
- 5. Actions of the subject,
- 6. Actions.⁴⁷

Barbara Fatyga suggested adding "emotion's temperature" (positive, negative, neutral, ambivalent) to each group. This process could be really laborious. Preparing an algorithm that helps to assign emotion's temperature to each group seems to be the biggest challenge. Yet, another problem is connected with Slavonic languages (like for example Polish) that belong to a different family of languages and the solutions very well prepared and established for the English language are not satisfactory for the Slavonic languages. In our study we would like to highlight the problem and invite other scholars to a serious discussion on how to improve digital humanities in general by combining the quantitative studies that are faster, cheaper and less time and energy consuming with the qualitative

⁴⁶ Maciej Folta, "Badanie pola semantycznego słowa 'Niemcy' w 'Pionierze. Dzienniku Dolno-Śląskim' w 1945 r." *Studia socjologiczne* 2019, no. 232: 3.

⁴⁷ Izabela Sekścińska and Agnieszka Piórkowska, "Does Brexit mean Brexit? An analysis of the semantic field of the lexeme Brexit," *Crossroads. A Journal of English Studies* 2020, no. 31: 66–87.

⁴⁸ Barbara Fatyga et al., *Raport końcowy z badania dyskursu publicznego o prawie autorskim w Polsce w latach 2012-2013*, https://prawokultury.pl/media/entry/attach/Fundacja_Nowoczesna_Polska-Raport_końcowy-Badanie_dyskursu_prawa_autorskiego.pdf (accessed: 30.03.2023).

studies that are necessary for the prime quality of text meaning in translational sciences in general.

The corpora in the quantitative approaches need to be applied together with a qualitative study in order not to lose the nuance meanings of the key words depending on the context. Because the biblical and spiritual texts are always multi-layer and multi-dimensional, with hidden precious meanings, concordance seems a very good tool for the analysis of such texts. There is a great need for very good quality concordances for spiritual texts in various languages, especially in the neglected languages, e.g. Slavonic, as most concordances are done for English (the Bible).

Textual Samples for Qualitative Study

We have decided to take two samples, one in English as the global language, and the other one – Polish as a Slavonic version just to see any intuitive differences. The first sample comes from the English online version of *Dark Night* by John of the Cross, specifically *Stanzas of the Soul* in the *Prologue*.

The English sample (bold print by the authors):

Stanzas of the Soul

- 1. On a **dark night**, Kindled in love with yearnings oh, happy Chance!- I went forth without being observed, My house being now at rest.
- 2. In **darkness** and secure, By the secret lader, disguised oh, happy chance! In darkness and in concealment, My house now being at rest.
- 3. In the happy **night**, In secret, when none saw me,
 Nor I beheld aught, Without light or guide, save that which burned in my heart
- 4. This light guided me More surely than the light of noonday

 To the place where he (well I knew who!) was awaiting me A place where none appeared.
- 5. Oh, night that guided me, Oh, night more lovely than the dawn, Oh, night that joined Beloved with lover, Lover transformed in the Beloved!
- 6. Upon my flowery breast, Kept wholly for himself alone, There he stayed sleeping, and I caressed him, And the fanning of the cedars made a breeze.

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- 7. The breeze blew from the turret As I parted his locks; With his gentle hand he wounded my neck And caused all my senses to be suspended.
- 8. I remained, lost in oblivion; My face I reclined on the beloved.
 All ceased and I abandoned myself, Leaving my cares forgotten among the lilies.

The Polish sample (bold print by the authors)

Śpiew duszy

1. W **noc** jedną pełną **ciemności**,

Udręczeniem miłości rozpalona,

O wzniosła szczęśliwości!

Wyszłam niepostrzeżona,

Gdy chata moja była uciszona.

2. Bezpieczna pośród ciemności,

Przez tajemnicze schody osłoniona,

O wzniosła szczęśliwości!

W mroku ciemności, w ukrycie wtulona.

Gdy chata moja była uciszona.

3. W noc pełną szczęścia błogiego,

Pośród ciemności, gdzie mnie nikt nie dojrzał,

Jam nie widziała niczego,

Nie miałam wodza ani światła innego

Ponad ten ogień, co w sercu mym gorzał.

4. On mnie prowadził jasnością

Bezpieczniej niż światło południowe,

Tam, gdzie mnie czekał z miłością,

O którym miałam przeczucie duchowe,

Gdzie nikt nie stanął istnością.

5. O **nocy**, coś prowadziła,

Nocy, tyś milsza nad jutrznię różaną!

O nocy, coś zjednoczyła

Miłego z ukochaną,

Ukochaną w Miłego przemienioną!

6. Na mojej piersi kwitnącej,

Którą dla Niego ustrzegłam w całości,

Zasypia w ciszy kojącej,

Wśród moich pieszczot szczodrości,

A wiatr od cedrów niesie pieśń miłości.

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Rankiem, wśród wiatru,
 Gdym Jego włosy w pęki rozplatała,
 Prawica Jego pełna ukojenia
 Szyję mą słodko opasała,
 Że zatonęłam pośród zapomnienia.

Zostałam tak w zapomnieniu,
 Twarz moją oparłam o Ukochanego.
 Ustało wszystko w ukojeniu,
 Troski żywota mojego
 Skryły się wszystkie w lilii wonnym tchnieniu.

Having selected the samples we just decided to read them carefully and separately (Renata and Kamil) to see how we understand as ordinary readers both versions, English and Polish, especially with reference to the two concepts "night" and "light." On the very first glimpse we spotted nuance meanings in the two linguistic versions that resulted from numerous linguistic and paralinguistic elements (hyphens, exclamation marks, etc.). We focused our attention to unblock, or unchain what was hidden under the veil of those two key concepts with the use of both linguistic and paralinguistic elements. The first analytical step was to extract the key nouns in the English version (night and light) and see their counterparts in the Polish translation with the basic aim to determine how those key words are linguistically represented by the whole range of all spotted linguistic elements: nouns, verbs, adjectives, associations, etc., including minor, yet meaningful major elements, like pronouns, small and capital letters, also paralinguistic elements exclamations marks, whose function and role is of a great value from the linguistic perspective. The word "night" we treat as the stimulus key word. It can be a noun, verb, adjective, adverb, numeral, pronoun, capital or small letter, association, exclamation mark, etc. anything that constitutes elements of a written language from the linguistic perspective. The stimulus key word and its various linguistic representations that come into consciousness without any control, both of the author and the reader can reveal all aspects of the unconscious. Therefore, this method seems adequate in o rder to explore not only the mystical language and mind of the Author, but also aid us enter the minds and conscience of the readers.

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The first general reading of both versions, English and Polish, shows like we deal with completely two different texts, both linguistically and semantically.

The extraction was aimed to find 1) the depictions of "night", "light", "love" linguistic representations both explicit and implicit; 2) human and Divine names, both explicit and implicit; 3) the separate lexical items and expressions indicating the mutual relationship between the two.

The English Translation

"NIGHT" (explicit and implicit)

A dark night/ without being observed/ at rest/ in darkness/ secret ladder/ disguised/ in concealment/ in secret/ when none saw me/ happy night/ without light/ sleeping/ a place where none appeared/ night that guided me/ night more lovely than the dawn/ night that joined Beloved with lover/ he stayed sleeping/ all my senses suspended/ lost in oblivion/ my face I reclined/ all ceased/ I abandoned myself

"LIGHT" (explicit and implicit)

this light / the light of noonday/ without light or guide/ this light guided me more surely than the light of noonday

"LOVE" (explicit and implicit)

Kindled in love with yearnings/ happy chance/ secure/ in the happy night/ burned my heart/ I knew who! was awaiting me/ night that joined Beloved with lover/ Lover/ the Beloved/ kept wholly for himself alone/ he stayed sleeping, and I caressed him/ I parted his locks/ with his gentle hand he wounded my neck/ caused all my senses to be suspended/ lost in oblivion/ my face I reclined on the Beloved/ all ceased and I abandoned myself

"HE" Personal (anthropological) pronouns in inflections He/ himself/ him/ his / he

NIGHT/LIGHT/LOVE/PERSONAL INTRA- and INTER-relationship On a dark night, Kindled in love/ In darkness/ In the happy night, In secret/ Without light/ in my heart/ This light guided me/ I knew who/ was awaiting me/ night that guided me/ night that joined Beloved with lover/ Lover transformed in the Beloved!/ Kept wholly for himself alone I caressed him/ I parted his locks/ With his gentle hand he wounded my neck/ lost in oblivion/ My face I reclined on the Beloved/

The Polish Translation

"NOC" (night)

W noc jedną/ pełną ciemności/ pośród ciemności/ w mroku ciemności/ w noc pełną szczęścia błogiego/ O Nocy, tyś milsza nad jutrznię różaną!/ O nocy, coś zjednoczyła/ nocy, coś prowadziła

"ŚWIATŁO" (light)

Nie miałam wodza ani światła innego/ Ponad ten ogień/ On mnie prowadził jasnością/ światło południowe/ milsza nad jutrznię różaną/

"MIŁOŚĆ" (love)

Przez tajemnicze schody osłoniona, w mroku ciemności, w ukrycie wtulona/ ponad ten ogień, co w sercu mym gorzał/ on mnie prowadził jasnością/ Tam, gdzie mnie czekał z miłością/ O nocy, coś prowadziła/ O nocy, coś zjednoczyła Miłego z ukochaną, Ukochaną w Miłego przemienioną/ Na mojej piersi kwitnącej, Którą dla Niego ustrzegłam w całości, zasypia w ciszy kojącej/ wśród moich pieszczot szczodrości/ Gdym Jego włosy w pęki rozplatała/ Prawica Jego pełna ukojenia Szyję mą słodko opasała/ Twarz moją oparłam o Ukochanego

ON (Personal pronouns in inflections) On/Jego/ niego

NIGHT/LIGHT/LOVE/PERSONAL INTRA- and INTER-relationship w noc/ pośród ciemności/ Przez tajemnicze schody osłoniona/ w ukrycie wtulona/ w noc pełną szczęścia błogiego/ On mnie prowadził jasnością/ gdzie mnie czekał z miłością/ O nocy, coś prowadziła/ Nocy, coś zjednoczyła Miłego z ukochaną/ Ukochaną w miłego przemienioną!/ Którą dla Niego ustrzegłam w

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całości/ Wśród moich pieszczot szczodrości/ Gdym Jego włosy w pęki rozplatała/ Prawica Jego pełna ukojenia Szyję mą słodko opasała/ Twarz moją oparłam o Ukochanego

Results

The comparison of the English and Polish version of the same text shows that linguistically they are quite far away. The question that arise is whether they are far away to the same extent conceptually. The detailed study is limited due to the scope of the paper, however we wish to highlight the main discrepancy that strikes here. In the English language there is no gender, while in the Polish language we have masculine and feminine forms of nouns, adjectives, pronouns, also grammatical structures that are feminine or masculine or neutral, even if there is no personal subject pronoun (he, she, it). In this sample study we were focused upon the mutual relationship between a human person and the Divine Person. Interestingly, in both versions despite divergent linguistic representations of this relationship, one can observe intra- and inter-relationship between NIGHT, LIGHT, LOVE - expressed both explicitly and implicitly. This is an indication that, despite the languages belonging to separate families and cultures, we deal with interrelationships between concepts, rather than words. Moreover, these concepts have no clear boundaries, just on the contrary, they intermingle, or permeate each other to some extent. This may be a very clear indication that the conceptual level is more universal. Human concepts may underline the human languages beyond. However, a very intriguing observation is that in *Stanza* 4 a personal pronoun "he" appears just to be followed by "who!" (the exclamation mark) is essential, somehow bringing a new dimension of night, light that indicates that both night and light are now recognized as a "He" (the small and capital letters are important, indicating "profane" and "Divine"). Another fascination textual discovery is that while in the English version the narrator is "gender-free or neutral," while in the Polish version the narrator seems to be a "she" which is indicated by the feminine forms of verbs, e.g. (wyszłam, wtulona, widziała, miałam etc.). The relationship is multi-dimensional, both of physical and Divine, the intra- and inter-character, the encounter is of personal nature, despite the protagonists that seem to come from two seemingly separate spaces (physical and spiritual, profane and sacred). All the lines become blurred, like in

a very dynamic interplay of shadows in the liminal spaces in-between night and day, darkness and lightness, dusk and dawn may speak even more than midday, or midnight when clear boundaries and divisions are vanishing to give space to ... the mysterious UKNOWN that is closer than we may dare to think!

Conclusion

Our initial, early-stage textual case studies performed so far showed that in order to explore the extended concept of "night" we see a great potential in application of various quantitative and qualitative methods. The extraction of key words is just the very first step. Then, we get extra more in-depth nuance meanings typical and so important in the case of religious and spiritual literature by analyzing also synonyms, antonyms, similes, associations – in order to determine the lexical-semantic field of the concepts in the next phase of the study. Such a procedure will definitely allow us to see extended concepts in place of just key words, or dictionary definitions.

Discussion

The soul (heart) of a human being cannot be accessed by anyone but the person. However, it seems that we have an excellent tool to reach, investigate, explore, discover and describe the inner center of a person. The language of the person constitutes the lens via which the soul can be explored. Having accepted that we have at our disposal not only the physical senses but also spiritual senses we consequently are entitled to use the language of sensual perception to describe the human-Divine encounter. The non-materialistic God can be accessed only with the non-materialistic tools. The Christian authors from the times immemorial have used the language of sensual sensations to describe the human-Divine encounters. The language of biblical prophets and mystics may indicate a special form of perception of the Divine reality. Following the linguistic approach developed by the Polish scholars at the local Maria Curie-Skłodowska University of Lublin, Poland with their colleagues from other countries under the term "The Linguistic Image of the World" may be further extended into "the

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linguistic representation of the inner world/soul/heart." The linguistic credible research tools of this local ethnographic school can be applied in order to determine if mystics and prophets have a spiritual perception, cognition and awareness. So far, there is a huge gap in the scientific tools to study mystical and prophetic cognition. We deal here with a fascinating phenomenon of the so-called extended/widened cognition that is sometimes called the integral/complete cognition. It seems that language and linguistic research tools are a promising offer together with other social sciences instrumentalia. And then, maybe we can justify that their language is more than just a symbol or mere metaphor, but that they are using this kind of language to describe the spiritual reality that is actually inexpressible (the language of incommunicability). Also, talking of a language, we need to go much beyond our traditional approach towards understanding what constitutes a language. The mystical and prophetic literature is rich in less obvious expressing the inexpressible in the so-called liminal spaces between human and Divine.

However, we are aware that we are just starting a new approach that needs to be verified by other scientists in the field from various disciplines with the use of other theoretical frameworks and very credible tools and methods as we are touching a very sensitive issue, that is mental health of a human being. Therefore, we want to make sure we approach the topic without any bias, nor too early assumptions. Only when our so far planned pilot study at an early stage gets its full form in our ongoing brainstorming with the scientific environment across disciplines pursuing the truth on depression and is well-described and tested with a small pilot focus group of Polish patients, we can start extending the project for patients from other languages and native languages.

We claim here, however, that the linguistic cognitive instrumentarium constitutes an excellent new diagnostic and therapeutic tool kit if combined with other social sciences, medical humanities and medical informatics methodologies. Yet, there is a need to enlarge the team so in future we are planning to collaborate with psychiatrists, psychologists, therapy mentors and health counselors, social care workers, but also families of patients who are not living on a desert island but belong to a certain social environment. Their personal narratives will be a precious source text contribution to understanding their minds and hearts.

We owe our approach to a few other books that inspired our investigation, namely: The SPIRITUAL BRAIN. A Neuroscientist's Case for the Existence of the Soul by Mario Beauregard and Denyse O'Leary⁴⁹ and THE SPIRITUAL SENSES. Perceiving God in Western Christianity.⁵⁰ In linguistics, we highly appraise the book *Research Methods in Linguistics* by Lia Litosseliti,⁵¹ and *Research Methods in Applied Linguistics* by Zoltán Dörnyei.⁵² Having explored our own contributions to the research path to a new understanding of depression, the authors of this paper have decided to combine their own authorian approaches and solutions in linguistics (Renata) with information technologies (Kamil) in order to bring new solutions in narrative and translational medicine and create NEW diagnostic tools, methods of treatment and therapies and innovative futuristic services for combating depression.

Further Re-definitions and Widening/Extending Concepts. MINDfulness or HEARTfulness?

In our quest for truth on "depression" in order to get insight into the mystical mind and heart, we are taking the mystical language of John of the Cross under the loop. For a very start we select the lexical items that can help us determine the so-called semantic field of "night" separately for each of the three stages. By mere extracting all the associations, synonyms, antonyms, etc. we try to describe the semantic fields of the two core key words: night and light.

This study proves the need to redefine and question other scientific approaches, including the linguistic concepts of ineffability in liminal spaces. It is worth while investigating what linguistic tools mystics and prophets use to express the Unsayable, or translate the Untranslated. This is another issue to be

⁴⁹ Denyse O'Leary and Mario Beauregard, *Duchowy mózg. Neuronaukowa argumentacja za istnieniem duszy*, trans. Zbigniew Kasprzyk (Kraków: Wydawnictwo WAM, 2011).

⁵⁰ Paul L. Gavrilyuk and Sarah Coakley, *Duchowe zmysły. Percepcja Boga w zachodnim chrześcijaństwie*, trans. Aleksander Gomola (Kraków: Wydawnictwo WAM, 2014).

⁵¹ Lia Litosseliti, *Research methods in Linguistics* (London: Bloomsbury Academic, 2018).

⁵² Zoltán Dörnyei, *Research Methods in Applied Linguistics* (Oxford: Oxford University Press, 2007).

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challenged. The study of West Christian mystical literature shows that the states of the mystical mind very often are expressed with tears, silence, enchantment, sometimes stillness, generally speaking what linguists call a "paralanguage." It is understood as a part of meta-communication that modifies and delivers nuanced meaning, it can also convey emotion by such techniques as: prosody, pitch, volume, intonation. It can be used both consciously and unconsciously.⁵³ In our opinion, the extended study in future with the improved research instrumentalia and mixed methods taken from various interdisciplinary fields (theology, philosophy, anthropology, social sciences) in a close collaboration with the latest developments in linguistics can shed a new light upon a lot of medical problems and solutions. The so-called translational medicine seem to be opening new doors to new diagnostic tools, treatments, therapies and recovery.

Final Remarks

The present paper was aimed at shedding some more light on the contemporary phenomenon diagnosed as depression from a different spiritual angel. The experience described as "the dark night of the soul" by John of the Cross, a Spanish Carmelite mystic is still worth looking upon with reference to the contemporary mental diseases. The mystical "dark night" constitutes a very complex phenomenon which is also a spiritual and physical process combined. It cannot be easily defined and need very careful, credible and responsible research. In future, there is a great potential to develop our model to study the language that patients diagnosed with depression are using over a longer period of time. It is interesting to see if their language is changing, e.g. with meditation of the selected biblical texts from the Old Testament (e.g. Psalms) or New Testament texts. Especially those when sick people were healed by Jesus. We would like to see how the patients speak of their identity, on WHO AM I? In the biblical psalms the heart of the Bible is pulsing. Contemplating psalms allows the readers to contemplate and recognize numerous faces of one and the same God.

⁵³ https://en.wikipedia.org/wiki/Paralanguage (accessed: 28.12.2022).

Further Research Potential

For further development we propose to combine this image-depicting of the inner world via the language with neuroimaging techniques, namely fMRI and QEEG in order to design a patient's personal cognitive mapping to see if we obtain satisfactory and long-term healing effects.

Close-up

The biggest challenge from our study for the contemporary sciences may be that we do not actually think with our brains only, but with our whole bodies, and the conductor of the orchestra (human thoughts and actions) is not the brain but the HEART?! Maybe, BrainHeart combined makes us "bravehearts" in all life circumstances?

Bibliography

- Barth, Grzegorz. *Ku pełni osoby w Chrystusie. Wincentego Granata personalizm integralny.* Lublin: Wydawnictwo KUL, 2009.
- Bergson, Henri. *Les deux sources de la morale et de la religion*. Paris: Presses Universitaires de France, 1932.
- Chmielewski, Marek. *Wielka księga duchowości katolickiej*. Kraków: Wydawnictwo AA, 2015.
- Dörnyei, Zoltán. *Research Methods in Applied Linguistics*. Oxford: Oxford University Press, 2007.
- Fatyga, Barbara, Bogna Kietlińska, Katarzyna Michalczak, Piotr Michalski, Mariusz Piotrowski, and Paweł Tomanek. *Raport końcowy z badania dyskursu publicznego o prawie autorskim w Polsce w latach 2012-2013*, https://prawokultury.pl/media/entry/attach/Fundacja_Nowoczesna_Polska-Raport_końcowy-Badanie_dyskursu_prawa_autorskiego.pdf (accessed: 30.03.2023).
- Folta, Maciej. "Badanie pola semantycznego słowa 'Niemcy' w 'Pionierze. Dzienniku Dolno-Śląskim' w 1945 r." *Studia socjologiczne* 2019, no. 232: 1–22.
- Gavrilyuk, Paul L., and Sarah Coakley. *Duchowe zmysły. Percepcja Boga w zachodnim chrze-ścijaństwie.* Translated by Aleksander Gomola. Kraków: Wydawnictwo WAM, 2014.
- Gogacz, Mieczysław. Ciemna noc miłości. Warszawa: Wydawnictwo Sióstr Loretanek, 1985.

- Gogola, Jerzy W. *Mistyka karmelu*. Kraków: Karmelitański Instytut Duchowości; Wydawnictwo Karmelitów Bosych, 2017.
- Granat, Wincenty. *O łasce Bożej udzielanej przez Chrystusa Odkupiciela*. Lublin: Towarzystwo Naukowe KUL, 1959.
- Granat, Wincenty. *Ku człowiekowi i Bogu w Chrystusie. Zarys dogmatyki katolickiej*, vol. 2. Lublin: Wydawnictwo KUL, 2016.
- Granat, Wincenty. *Personalizm chrześcijański. Teologia osoby ludzkiej.* Sandomierz: Wydawnictwo Diecezjalne i Drukarnia w Sandomierzu, 2018.
- James, William. *Odmiany doświadczenia religijnego. Studium ludzkiej natury.* Translated by Jan Hempel. Warszawa: Aletheia, 2011.
- Jelonek, Tomasz. Biblia jako fenomen kulturowy. Kraków: Petrus, 2012.
- Kłoczowski, Jan A. Drogi człowieka mistycznego. Kraków: Wydawnictwo Literackie, 2001.
- Krzeszowski, Tomasz. "Parametr aksjologiczny w przedpojęciowych schematach wyobrażeniowych." *Etnolingwistyka. Problemy języka i kultury* 1994, no. 6: 29–51.
- Kwiatek, Piotr. Psalmoterapia. Uzdrowienie serca. Kraków: Święty Paweł, 2022.
- Litosseliti, Lia. Research methods in Linguistics. London: Bloomsbury Academic, 2018.
- May, Gerald G. *The Dark Night of the Soul. A psychiatrist explores Connection between Darkness and Spiritual Growth.* San Francisco: Harper, 2013.
- Morse, Merrill. *Psalmy na trudne chwile*. Translated by Mirosława Majdan. Warszawa: Wydawnictwo Księży Marianów, 1997.
- *Nowy słownik teologii biblijnej*, edited by Henryk Witczyk. Lublin; Kielce: Towarzystwo Naukowe KUL; Jedność, 2017).
- O'Leary, Denyse, and Mario Beauregard. *Duchowy mózg. Neuronaukowa argumentacja za istnieniem duszy*. Translated by Zbigniew Kasprzyk. Kraków: Wydawnictwo WAM, 2011.
- Pietrachowicz, Marek. *Psychoterapia Ewangelią. Boża strefa zrozumienia*. Warszawa: Fronda, 2021.
- Salvador, Federico Ruiz. Święty Jan od Krzyża. Pisarz–pisma–nauka. Translated by Jan E. Bielecki. Kraków: Wydawnictwo Karmelitów Bosych, 1998.
- Sakaguchi, Alicja. *Język mistyka proroctwo. Od doświadczenia do wysłowienia*. Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza, 2011.
- Sekścińska, Izabela, and Agnieszka Piórkowska. "Does Brexit mean Brexit? An analysis of the semantic field of the lexeme Brexit." *Crossroads. A Journal of English Studies* 2020, no. 31: 66–87.
- Stinissen, *Wilfrid. Noc jest mi światłem*. Translated by Justyna Iwaszkiewicz. Kraków: Wydawnictwo Karmelitów Bosych, 1993.
- Święty Jan od Krzyża. *Droga na górę Karmel.* Translated by Bernard Smyrak. Kraków: Wydawnictwo Karmelitów Bosych, 2013.
- Święty Jan od Krzyża. *Noc ciemna.* Translated by Bernard Smyrak. Kraków: Wydawnictwo Karmelitów Bosych, 2013.

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Święty Jan od Krzyża. *Żywy płomień miłości*. Translated by Bernard Smyrak. Kraków: Wydawnictwo Karmelitów Bosych, 2013.

Tabakowska, Elżbieta. Kognitywizm po polsku – wczoraj i dziś. Kraków: Universitas, 2004.

Zawada, Marian. *Doświadczenie mistyczne. Studium struktury fenomenu*. Kraków: Wydawnictwo Karmelitów Bosych, 2015.

https://en.wikipedia.org/wiki/John_of_the_Cross (accessed: 28.12.2022).

https://www.britannica.com/dictionary/heart (accessed: 28.12.2022).

https://en.wikipedia.org/wiki/Paralanguage (accessed: 28.12.2022).

https://en.wikipedia.org/wiki/Doctor_of_the_Church (accessed: 22.02.2023).

https://en.wikipedia.org/wiki/Bernard_McGinn_(theologian) (accessed: 20.01.2023).

https://www.amazon.com/Dark-Night-Soul-Psychiatrist-Connection/dp/0060750553 (accessed: 28.12.2022).

Streszczenie

"Noc ciemna". Koncepty poszerzone u Homo Mysticus w naukach translacyjnych

Artykuł ma na celu spojrzenie na współczesne zjawisko określane mianem depresji z nieco innej, duchowej perspektywy. Doświadczenie określane przez karmelitańskiego mistyka św. Jana od Krzyża mianem "nocy ciemnej" wymaga nowego oglądu w odniesieniu do zaburzeń psychicznych. Jest to zjawisko niezwykle złożone, psycho-fizyczno-duchowe. Nie można go jasno zdefiniować bez dogłębnych, odpowiedzialnych i interdyscyplinarnych badań naukowych. W niniejszym artykule przedstawiamy naszą wstępną propozycję nowego modelu diagnozowania, terapii i leczenia stanów określanych jako depresja - przy zastosowaniu badań jakościowych i ilościowych, z zastosowaniem nauk metod i narzędzi nauk społecznych i humanistycznych oraz ze szczególnym uwzględnieniem językoznawstwa stosowanego. Dalsze badania mogą i powinny doprowadzić do wspólnego modelu opracowanego też z naukowcami z obszaru medycyny oraz szeroko pojętych nauk kognitywnych. Dostrzegamy też ogromny potencjał naszego modelu wraz ze zdobyczami informatyki medycznej w obszarze medycyny translacyjnej.

Słowa kluczowe: noc ciemna, mistycyzm zachodniochrześcijański, nauki translacyjne, humanistyka cyfrowa, stany graniczne, nauki kognitywne, językoznawstwo stosowane, informatyka medyczna

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Zusammenfassung

"Die dunkle Nacht". Erweiterte Konzepte bei Homo Mysticus in den Translationswissenschaften

In diesem Artikel soll das zeitgenössische Phänomen der Depression aus einer etwas anderen, spirituellen Perspektive betrachtet werden. Die Erfahrung, die der Karmelitermystiker Johannes vom Kreuz als "dunkle Nacht" beschreibt, erfordert eine neue Sichtweise auf psychische Störungen. Es handelt sich um ein äußerst komplexes, psycho-physisch-spirituelles Phänomen. Es lässt sich ohne eingehende, verantwortungsvolle und interdisziplinäre wissenschaftliche Forschung nicht klar definieren. In diesem Artikel stellen wir unseren Vorentwurf für ein neues Modell zur Diagnose, Behandlung und Heilung der als Depression bezeichneten Zustände vor, das auf qualitativer und quantitativer Forschung unter Anwendung methodologischer Wissenschaften und Instrumente aus den Sozial- und Geisteswissenschaften mit besonderem Schwerpunkt auf der angewandten Linguistik beruht. Weitere Forschungen können und sollten zu einem gemeinsamen Modell führen, das auch mit Wissenschaftlern aus dem Bereich der Medizin und den breit aufgefassten kognitiven Wissenschaften entwickelt wird. Wir sehen auch ein großes Potenzial für unser Modell zusammen mit den Errungenschaften der Medizininformatik im Bereich der Translationalen Medizin.

Schlüsselwörter: Dunkle Nacht, christlich-abendländische Mystik, Translationswissenschaften, digitale Geisteswissenschaften, Grenzzustände, kognitive Wissenschaften, angewandte Linguistik, Medizininformatik

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