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The Archetype of Intellectual Function: Problems of Description and Research

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Abstract: The article from the perspective of the theory of drives Szondi discusses the motivational and volitional foundations of the organization of the archetype of intellectual functions. It is postulated that archetypal structures are not only a priori existing mechanisms of cognition from the point of view of the formation of an individual's mental experience at an early age but also influence all subsequent processes of the development of cognitive functioning. The concept of "Icaric palindrome" is introduced as a specific system of organization of emotional-volitional processes in individuals who represent the anthropic form of the archetype of an intellectual function.

Keywords: Archetype, analytical psychology, Icarus complex, drive system, Szondi test

1. Introduction

Modern education faces many problems, the main essence of which is the search for ways of development and improvement (Akhmetova et al., 2020; Aksarina et al., 2019; Golubchikova et al., 2019; Golubchikova et al., 2017). A significant part of this research is associated with the search for ways to develop the individual's creative potential.

Shchepanovskaya and some other modern scholar archetypes describe the object of our research. This is the archetype of intellectual function, already considered by us in earlier works, where its main anthropic form, previously

known as the "Icarus complex" or "urethral fixation" (Badalov et al., 2020; Badalov et al., 2018; Badalov & Brovkina, 2017a; Badalov & Brovkina, 2017b), was determined. An archetype is a transcendental form of organization of the universe, which, acting as the cornerstone of symbolic thinking, can be interpreted and practically widely used (Gorelova & Arpentieva, 2018; Luria, 2017; Jung, 2011; Szondi, 1952). We are most interested in the possibility of finding an archetypal structure acting as an integrative form of knowledge, more precisely, its anthropic form, that is, the aggregate of that part of the human population that carries the capacity for unlimited cognitive functioning and the creation of a creative product (Badalov et al., 2020). The most interesting development capable of serving this purpose is the classification of the basic mythological archetypes of Shchepanovskaya, ranked by the author based on the genesis, historical perspective of education, performed social and cultural functions and typical for each semantic, mythological, ideological and philosophical derivative (Shchepanovskaya, 2008).

It should be considered the language representation of archetypes. Their representations function as culturally marked lexemes. Because archetypes are complex mental structures, their language representations get field structures consisting of core and periphery meanings. Thus, archetype mental structure determines language semantics' field structure in synchronic and diachronic terms. Diachronically, core meanings of lexical representation of archetypes transform into derivative meanings during language evolution. Accordingly, the knowledge structures co-develop with the language system (evolution of vocabulary and semantic system of language).

It should also be mentioned that metaphor is a powerful means of representing archetypes. In considering that, Makovsky writes that "language is a specific cemetery of metaphors. In practice activity, people deal not with the reality surrounding them but with the representations of reality, with cognitive models and cognitive world views. The representation of the world is consideration of it, interpretation. Humans represent the world (or different worlds) through the light of their culture, particularly their language. The metaphor itself is "world view" *sui generis*. That worldview differs both for people of the same culture in periods of historical development of this culture and for people of various cultures" (Makovsky, 2018). It concludes with the ideas of Makovsky that language is the main tool and basis for studying archetypes and their historical semantics. But not only language should be the subject of our examination as well as non-verbal and non-lingual systems of representation of knowledge (so-called "secondary sign systems of modelling"). That issue will also be discussed later.

In most works considering the intellect as a system of organization of mental experience, the archetypal structures of its formation are generally given a small role. They are believed to contribute exclusively to forming the earliest predictors of knowledge, whose role is exhausted in the subsequent presence of the individual unconscious as a fundamental "support" system. This role is a little subject to transformation (Kholodnaya, 2002). We believe that this kind of universal genetic predisposition should influence the development of the cognitive sphere of the individual throughout his life, undergoing the same processes of growth and development as the entire individual mental experience as a whole to study this form of organization of intellectual activity, it is necessary to turn to psychological methods. The study's goals are to examine the emotional-volitional spheres of people who are the anthropic form of the archetype of intellectual function in order to reveal the motivational processes that underpin their cognitive functioning and intellectual engagement.

2. Methodology

As the main method of research on the emotionally volitional basis for the organization of the mental experience of individuals with the archetype of intellectual function, we chose the projective method of portrait elections (Szondi, 1952). The method of conducting the Szondi test is based on the fact that the test subject is presented with six sets of eight cards, each of which shows a person with manifest mental pathology (catatonic and paranoid schizophrenia, homosexuality, sadism, epilepsy, hysteria, mania), symbolizing one of the eight factors of treatment in its native state. Of the eight cards presented to the respondent, he only chose the two most attractive and two least attractive portraits six times. Based on the selected portraits, a profile of inclinations is compiled. The transcription of the results is carried out according to the "one-zero" principle; that is, there are no choices and one choice in any direction (positive - "like", negative - "not like") is denoted by 0. Depending on the direction, two or three choices are denoted by + or -. The addition of an exclamation mark marks any subsequent selection. Having more than one choice in both directions is indicated by a \pm .

For 7 (Seven) years, we surveyed 3500 students of 1-5 courses of the Kyrgyz-Russian Slavic University, the Kyrgyz State Medical Academy, Tsiolkovskiy Kaluga State University, and Irkutsk State University. Of these, 310 people were selected from the age of 17 to 28 with the presence of an Icaric complex. All tested and transcribed Szondi according to the method described above. Then, a general table of results was compiled. In compiling the tables of values, the frequencies of occurrence of various combinations of vectors (Table 1) and the frequencies of each factor (Table 2) were taken into account for a complete analysis of the main drives themselves and their components. In this case, only the factor's direction was considered, without exclamation marks.

3. Results

Table 1 and Table 2 show that the vector Sch has the most stable indicators. Its most frequent combination is k-p +,

which is noticeable in the frequency of occurrence of this combination itself in almost half of the cases and, especially, in the frequency of negative selections of the factor k and positive - the factor p. The factor k is an indicator of "egostyles". It means restricting the sphere of the Ego.

In the case of positive choices, as an introjection, that is, reliance on external objects that a person wants to have. In the case of negative choices, in the form of rejection of any objects, values, and rules, it can reach a degree of negativity. Of all the factors, the negatively directed factor k is the most common indicator of individuals with the Icarus complex. Such a desire to limit the sphere of the Ego in the form of refusal to possess the material and propensity for its destruction is undoubtedly important as an indicator of one of the basic properties that we described as characteristic of the archetype of the intellectual function as a whole. The p factor indicates the ego systole — the dilation of the Ego, the striving of all to be, to create a projection on the world, to expand one's infinite self. In the understanding of Jung is a factor of inflation (Shchepanovskaya, 2008). The last term denotes unlimited expansion of the Ego to an archetypically ideal position, and, alas, in the practice of an unattainable self, a kind of "bubble" of a bloated Ego that can "burst" at any moment, that is, goes to the ego systole with the collapse of ambitions and hopes.

Table 1: The frequency of occurrence of various combinations of vectors in the Szondi test in individuals with Icarus complex

Vector S (h;s)			Vector P (e;hy)			Vector Sch (k;p)			Vector C (d;m)		
Comb	N	%	Comb	N	%	Comb	N	%	Comb	N	%
S +	51	24.6	P +	38	18.4	Sch+	96	46.5	C+	61	29.6
S + 0	21	10.2	P 0	30	14.4	Sch0	32	15.4	C 0 +	51	24.6
S -	21	10.2	P -	20	9.70	Sch 0 +	22	10.6	C 0 ±	23	11.2
S 0 -	18	8.70	P ±	18	8.80	Sch-	10	4.80	C±	15	7.20
S ± ±	15	7.20	P0	15	7.20	Sch ± +	10	4.80	C ++	8	3.80
S ±	14	6.80	P ++	13	6.30	Sch ++	9	4.30	C ± ±	8	3.80
S ++	11	5.40	P 0 0	12	5.80	Sch±	8	3.80	C 0 -	6	2.90
S0	10	4.80	P 0 ±	11	5.40	Sch ± 0	6	2.90	C +	6	2.90
S ± +	9	4.30	P+	10	4.80	Sch 0 ±	6	2.90	C ± +	6	2.90
S 0 0	8	3.80	P + 0	9	4.30	Sch 0 0	3	1.50	C 0 0	6	2.90
S ± 0	7	3.40	P 0 +	9	4.30	Sch 0 -	2	1.00	C0	4	1.90
S 0 ±	6	2.90	P ± 0	7	3.40	Sch ± -	2	1.00	C-	4	1.90
S 0 +	5	2.40	P ± ±	7	3.40	Sch ± ±	1	0.50	C ± ±	4	1.90
S+	4	1.90	P ± +	6	2.90	Sch + 0	0	0	C + 0	3	1.50
S ± ±	4	1.90	P±	1	0.50	Sch + -	0	0	C ± 0	2	1.00
S±	3	1.50	P ± ±	1	0.50	Sch + ±	0	0	C ± -	0	0.00
Wh	207	100	Wh	207	100	Wh	207	100	Wh	207	100

Note: Comb is a combination, N is the total number of these combinations among the persons examined, and % is the percentage of the occurrence of this combination of the total number received. In parentheses near the vector notation is the position of the factors relative to each other, and W is the common sum of values.

The combination of k-p + as a whole is the strongest inflation, which, however, is always held back by the ego systole function, mostly as a waiver of the real world. Its combination with positive choices in factor h is also quite common, which means bisexuality in general and a high frequency of sexual deviations. By itself, the combination of k-p + is an indicator of fixation at the pre-oedipal (polymorphic-perverse) phase of the development of sexuality. That is why the frequency of occurrence of sexual disorders of the most diverse paraphilic orientation in the examined persons is much higher than the average, which negatively affects both themselves (due to stigma and queering) and others.

The overall goal of paroxysmal attraction P is to protect against external hazards. It consists of two factors: the epileptic form factor e, which causes both socially negative (through the discharge of gross effects) and socially positive behaviours; and the hysteron-form hy factor, which controls binary shame-vanity opposition. Thus, Szondi contrasts in vector P the tendencies of the formation of Evil's affective actions, prevailing in the person he calls Cain, and the ethical actions of Good inherent in Abel (Szondi, 1952).

As we can see from the data in Table 2, the indicators of the hy factor in individuals with the Icarus complex are much more stable than in e, and more than half of the cases have a negative or zero value. Even though such a reaction characterizes "good and meek" Abel, with his inherent strivings for order and justice, it also denotes the fear of special (sensitive) relationships. It means flight from reality into the world of fantasy and lies, and often the overpressure of "exhibitionism" "(A pronounced desire for demonstrativeness) and gross effects, accumulating in the unconscious. The possibility of inversion of manifestations and breaking them out is dangerous for the person and surrounding behaviour. Indicators of factor e, in turn, are the most unstable of all received, and, despite the prevailing positive value, indicating the dominance of conscientiousness and modesty, nevertheless, form the tendency of the frequent breakthrough of negative gross effects with subsequent emotional impoverishment and or guilt., and there is a threat from the latter,

consisting again in an increase in the frequency of suicidal attempts. Paroxysmal protection of persons with Icaric complex is unstable, actions take on the character of impulsive, poorly controlled.

Table 2: The frequency of occurrence of the values of individual factors in the Szondi test in individuals with the Icarus complex

h factor			s factor			e factor			hy factor		
Sig.	N	%	Sig.	N	%	Sig.	N	%	Sig.	N	%
+	98	47.3	-	104	50.2	+	67	32.3	-	106	51.3
-	38	18.3	0	46	22.2	0	62	30.0	0	43	20.7
0	37	18.0	+	29	14.0	-	46	22.2	+	38	18.3
±	34	16.4	±	28	13.6	±	32	15.5	±	20	9.70
Wh	207	100	Wh	207	100	Wh	207	100	Wh	207	100
k factor			p factor			d factor			m factor		
Sig.	N	%	Sig.	N	%	Sig.	N	%	Sig.	N	%
-	146	70.5	+	137	66.2	0	86	41.5	+	126	60.1
0	33	15.9	0	41	19.8	-	84	40.5	±	50	25.0
±	19	9.30	±	15	7.20	+	25	12.1	-	16	7.7
+	9	4.30	-	14	6.80	±	12	5.90	0	15	7.20
Wh	207	100	Wh	207	100	Wh	207	100	Wh	207	100

Note: Sig is the value taken by the factor, N is the number of similar values found among the surveyed individuals, % is the percentage of the given value from the total number obtained, and Wh is the total.

The vectors P and Sch characterize the protective factors of the ego and its potential to resist external and internal influences that contribute to its maladjustment and destruction. In contrast, the vectors C and S denote inclinations, the actual maladjustment carrying carriers, inclinations to contact with the outside world (including at the sexual level) and together denote Love. They are also divided in terms of the stability of the occurrence of the studied parameters. The vector S is more stable in this respect, consisting of the factors h and s, the first of which is the factor of Eros - any connection between people in sex and love, "the connection between soul and body," and the second factor of Thanatos - the needs of destruction and self-destruction, sadism and masochism, activity and passivity. Factor h, which Szondi designates as a hermaphroditic factor (Szondi, 1952), can differentiate into both the form of heterosexual love for a separate person with its positive tendencies and the form of asexual, ideal, collective love for all of humanity. However, the most clearly described trends are observed when they are the same in the s factor. Given the presence of splitting (more often in the form of h + s), they vary somewhat in character.

The main feature of the vector S, according to the data obtained, is the difference between the frequency of factors and their combinations. In half of the cases, the factors h and s acquire a positive and negative value, respectively. However, this combination is more than twice as rare, and variations in the combinations of different values of the factors under consideration are extremely diverse. Love for a particular person (h +) is often combined with a lack of activity (s-), which, given the predominant picture of incestuous contacts in factor C (see below), means a pronounced infantile relationship with the mother, as well as feminine masochistic passivity (as for the latter option, it occurs in men with Icaric complex no less than in women). A high frequency of the existence of other cleavage reactions forms a frequent inversion of sexual activity. The various combinations of the factors h and s also indicate a high frequency of perversions and the general instability of the vector S, formed because of the previously noted fixation of the Ego-attraction of the surveyed respondents at the pre-oedipal stage of polymorphic sexuality.

An interesting feature of vector C (attraction to contacts) is the high frequency of occurrence of the zero trend in factor d, exceeding both its positive and negative values. However, the positive trend is statistically comparable with it. Considering that factor d expresses the binary opposition "the desire to go looking for - the desire for constancy" (with positive and negative tendencies, respectively), zero reaction means the reluctance of both, often replacing, including in the opposite direction, pronounced incestuous attachment to parents. The latter is formed when negative tendency prevails in factor d, and such states can alternate quite often if we consider the instability of ego-states and the tendency of the studied contingent to paroxysmal mood changes. Unlike the previous one, in the m factor, denoting the opposition "the desire to be tied to the mother, and through it to life - the desire to become completely free", negative and zero values in individuals with the Icaric complex rarely occur, and the prevailing positive reactions can often change ambivalent, not binary-opposite. The combination of a negative or zero d c pronouncedly positive m creates a general tendency to behavioural "freezing". It is regularly combined with signs of withdrawing from reality into fantasy.

Another important aspect of using Szondi's test for analyzing the impulses of the self is the complementary method, which consists of analyzing not only the "conductor" (as indicated by the foreground attraction of the resulting profile), but also the "follow-up" - which are in the background latent tendencies that less, they are permanently "ready" to go to the current profile (Szondi, 1952). Taking into account the frequency of occurrence of various indicators according to the obtained tables, we can describe the main version of the "conductor" in individuals with the Icarus

complex as having the following formula:

$$S + P + Sch + C + \quad (1)$$

A complimentary to him "follower":

$$S + P + Sch + C + \quad (2)$$

A similar structure formed due to the tendency of individuals with the Icarus complex to form a splitting of inclinations; we denote the "Icaric palindrome." Interestingly, if we describe the "conductor" and "follow-up" obtained using the main signs and symbols used by L. Szondi, then in the foreground, we will "get" passive, meek and conscientious Abel, who has a pronounced infantile affection for the mother and seeks to preserve unchanged living conditions, including by going into the fantasy world. In addition, in the background of the theoretical complementary profile, we have an actively aggressive Cain, who seeks to manipulate the environment, is autistic, with a tendency to negativity, a lack of attachment and a constant desire to search. Given the high frequency of splitting drives and the tendency to inversion with such splitting, we end up with a picture of a dual personality. The signs of this personality are fully consistent with the theoretically constructed by us based on the works of Schepanovskaya and Young's anthropic form of the archetype of intellectual functions (Badalov & Brovkina, 2017a; Badalov & Brovkina, 2017b; Badalov et al., 2018; Badalov et al., 2020).

4. Discussion

Many modern scientists, such as Reischer (2019), Vaughn Becker & Neuberg (2019a; 2019b), Beebe (2016), McAdams and Roesler (2012), and Knox (2002), believe that cognitive processes and results, including internal representational systems, are largely (trans)formed due to the impact of evolutionary processes and forms that interact with current processes. Although the studies of Jung and his schools (archetypes of the collective unconscious, etc.) are largely ignored by the modern psychological science of cognition, researchers are faced with what can be described only at the intersection of neurocognitive and archetypal models. These points of view need a functional analysis; this assumes that various tasks of the intuitive level, such as self-defence and mating, as well as more complex intrinsic social ones, involve common representational systems, processes and schemes for solving. To model, predict and correct adaptive and productive responses to repetitive problems of being, one must also consider the peculiarities of a person's personal experience: the specifics of specific input data at critical stages of his development. Archetypes describe one of the mechanisms for thinking about problems associated with specific subject areas with general modelling trends, etc. These procedural "patterns" of comprehension (perception, thinking, memory and actions) resonate with ancient motivational and emotional-volitional systems. The symbolism in this interaction arises from the sub-symbolic. Thus, archetypes are a natural result of the implementation of fundamental goals in three contexts: 1) the actual representation of reality using mental modelling systems; 2) a history of personal experience that creates a specific type of such systems; 3) evolutionary processes that have formed the basic cognitive and affective abilities of the relationship of abilities (that all normally developing people have) and mistakes of these abilities and brain's defaults a disease (Buckner et al., 2008). Vaughn Becker and Neuberg (2019b) suggest that all humans have these functionally modular systems archetypal symbolic systems that are a) applied in human cognition and life, b) shaped and transformed by learning and culture, c) biologically prepared by human heredity in the past.

Moreover, even the most abstract problems studied in cognitive science can, at least in part, be comprehended by a person relying on the most ancient, archetypally conditioned, socially assigned abilities and strategies (motivational, emotional, volitional patterns) (Vaughn Becker & Neuberg, 2019b; Haddad & Moulin, 2007). As a result, turning to a modern understanding of archetypes allows us to combine disparate models of conceptual points of view, stimulates methodological reorientation, generates new hypotheses and probably opens completely new directions of integrative research (Arpentieva et al., 2020; Badalov et al., 2020; Vaughn Becker & Neuberg, 2019a; Arpentieva, 2018; Arpentieva, 2015; Frankenhuys et al., 2013). Knox (2002) considered the nature of archetypes in the light of cognitive science research: he discusses a minimalist model in which archetypes can be likened to image schemas, that is, primitive conceptual structures that exist in a form which can never be experienced directly or indirectly.

To consider these issues, there are two main lines: a line of research related to the comparative study of cognitive functions in animals and humans (Muthukrishna et al., 2018; Fox et al., 2017; Aoki & Feldman, 2014; Dunbar, 2009; Dehaene & Cohen, 2007), and a line of research related to the study of the pathology of cognitive functions (mental and other disorders, crisis and extreme situations, including in isolation and during overloads) (Cona et al., 2019; Kendal et al., 2018; Panksepp, 2015; Tomasello, 2014). To consider these issues, there are two main lines: a line of research related to the comparative study of cognitive functions in animals and humans and a line of research related to the study of the pathology of cognitive functions (mental and other disorders, crisis and extreme situations, including in isolation and during overloads). Our study belongs to the second line, which, however, gratefully refers to the results obtained in the study of animals. An important point of the research is also ideas about how shared experience forms the culture of cognition (their archetypes) and social forms of cognition (such as storytelling narratives) (Green et al., 2019; LeCun et

al., 2015; Gottschall, 2012; Feinstein & Krippner, 2007) form a person or an animal. Cultural-genetic co-evolution is reflected in the processes of human and animal cognition of themselves and the world (Oatley, 2019; Muthukrishna & Henrich, 2016; Hoppitt & Laland, 2013; Nakahashi et al., 2012; Chudek & Henrich 2011; Enquist et al., 2010) and the corresponding evolutionary bio-cultural theory of meaning (theory of emergence of meaning and its subsequent development in human and animal worlds) is under discussion in Zlatev (2006).

So, within our research framework, we became interested in the interrelationships of the procedural-temporal characteristics of the orientations of cognition and life in general in humans and animals and their emotional and behavioural traits. In the search for information on this issue (which, unfortunately, is not so much since, as noted by Vaughn Becker and Neuberg (2019a), many researchers ignore or underestimate aspects related to a comparative historical analysis of the development of cognitive functions in humans and animals (Uchiyama & Muthukrishna, 2019), we came across, for example, a study by Cona et al. (2019). Cona et al. (2019) observed that "people's tendency to choose more immediate or more delayed rewards is a crucial trait that can explain individual differences not only in cognitive abilities, but also personality traits, substance use and dysfunctional behaviour" (Cona et al., 2019). There is "a stable preference for immediate smaller rewards seems to predict a constellation of behavioural and real-life problems" (Cona et al., 2019), for example, these are hostile, antisocial, rule-breaking and withdrawal behaviours" (Fossati et al., 2004), anxiety (Rounds et al., 2007), intrusive thoughts (Sohn et al., 2014), high levels of stress (Chan, 2017), somatic symptoms and pain interference (Tompkins et al., 2016), perception of rejection, low levels of life satisfaction and self-efficacy, and substance addiction (Bickel et al., 2011). This means "that steeper discounting rates are associated with a range of impulse-control disorders and unhealthy behaviours" (Bickel & Mueller, 2009; Reynolds, 2006): time preference appears to be a promising candidate endophenotype for multiple dysfunctional behaviours and represents a good psychotherapeutic target for correction these states (Cona et al., 2019). When biological organisms and other complex systems perform multiple tasks, they often face critical trade-offs. These critical trade-off biases human phenotypes via natural and cultural selection lead to the evolution of phenotypes, the transformation of cognitive, personality, and socio-economic statuses, and differences in brain structure (Kassymova et al., 2019a; 2019b; Stepanova et al., 2018; Rogers, 1951). In this study, we see that researchers fix the connection between cognitive, emotional and personal characteristics of humans and animals, similar to that described in the concepts of archetypes by Jung (2011) and Sven (2006).

Research "from the side" of analytical psychology is also developing (Beebe, 2016; Hunziker, 2016; Bradshaw & Storm, 2013; Nardi, 2011). So, Beebe (2016), based on the works of Jung, von Franz and Briggs-Myers, presents an innovative model of psychological types with a hierarchical differentiation of the features of cognitive, emotional and behavioural activity for eight functional attitudes (psychotypes): the first four are associated with active work special features, the other four are localized in the "shadow" sphere of the unconscious. Eight types of personalities and cognizing subjects are differentiated during individual development, archetypally expressed in the human psyche. Beebe demonstrates the connection between the eight types of consciousness named by Jung and archetypal complexes that give energy and purpose to our emotions, knowledge, and actions.

However, the theory of the archetypes and the hypothesis of the collective unconscious provoke varying reactions among cognitive psychologists. Empirical studies which test these hypotheses are rare (Goodwyn, 2012). Rosen et al. (1991) proposed a cognitive psychological experimental paradigm to investigate the nature of archetypes and the collective unconscious as archetypal (evolutionary) memory. Sotirova-Kohli et al. (2013) and Sotirova-Kohli's (2013) experiment corroborated the findings by Rosen et al. (1991) about the recall advantage for archetypal symbol meanings. Other symbol/meaning pairings. Chang et al. (2013) note that symbols play a key role in translating information from the physical world into human experience, and archetypes are universal means of cognition that form the basis of human experience, the human life world. Jung concluded that there is a layer of the unconscious which contains patterns of behaviour and modes of cognition, accessible to the whole human race (and to the animal world, as well). These specific "empty and purely formal" patterns of cognition and behaviour crystallize in consciousness in the form of unknowable and "irrepresentable" archetypes (Jung, 1969a; Jung, 1969b). Archetype has a "psychoid nature" and affects consciousness from its "ability to organize images" and symbols (Jung, 1969b) and has an invariable nucleus of meaning - but always only in principle" (Jung, 1969b). Many researchers note, however, that archetypal structures are not always fully included in the cognition process: a special situation is needed, for example, the situation of cognizing social and cultural objects, for example, people, religious texts and works of art, etc. (Sotirova-Kohli et al., 2013). The tradition of research in this area, for all its small size, is associated precisely with the study of the influence of archetypes on the understanding of religious, artistic, and social objects and situations (Roubekas & Ryba, 2020). It is interesting that archetypal structures, in the opinion of researchers, are also activated when thinking about the future and building projects. Based on Boschetti et al. (2016), researchers the influence of archetypes and their hyperstructures (myths) on the images of the future. This tendency is consistent with the data of the studies mentioned above by Cona et al. (2019). In particular, such myths of the future as "social crisis", "eco-crisis", "techno-optimism", "power and economic inequality", and "social transformations" were studied. Researchers have shown that attitudes towards technology depend on values: attitudes towards innovation, etc., beliefs about how society and the environment should be governed, and how much technology can be a positive or negative force in this governance are affected.

Uchiyama and Muthukrishna (2019) believe that the application of the theory of archetypes is not too productive

for the development of cognitive research: if someone tries to use Jung as a basis for the theory of knowledge (studies of cognitive schemes and heuristics, mental representations and representations, etc.), now there are much more interesting reasons. Overall, we agree that the cognitive models of the research of Jung and his school are not the most promising approach; however, work at the intersection of the cognitive and psychotherapeutic traditions proposed by Jung's model is very productive.

The choice of Szondi's test (1952) for the study was dictated in many respects by its author's ideas about how people's cognition occurs. In his opinion, a person most well understands what he is inclined to, including what he is drawn to within the framework of those opposites, the choice between which is the essence of his life within a certain time stage. Szondi also believed that the generic unconscious influences the fate of a person. He directed the attention of researchers to the idea that humans have a hereditary nature of fixed forms of behaviour. In the "encoded form", transmitted genotypically and culturally (including through archetypes), the human psyche has from birth, and then in the course of upbringing, increases an additional set of adaptive reactions that ensured the existence of his ancestors. In the formation of the archetype, by which Szondi understood the image of the ancestor, by which, and in no other way, it is necessary to act. For him, the archetype, thus, played the role of a guiding understanding of the world and oneself and a factor determining the choice of a way of life. Szondi believed that each impulse is initially ambivalent. Therefore, it has at least two possibilities for its realization, that is, the possibility of choice: the archetype itself is also dual and gives a person the opportunity to choose. Szondi's approach was and remains the most integrative in studying the unconscious (Maltsev, 2019; Achtnich, 1979).

5. Conclusion

According to the analysis, this archetype's basic features should be binary-oppositional (those oppositions should be considered as basic underlying frameworks of representation of human knowledge), dialectical, but simultaneously combined holistically within one profile. Therefore, the development of creative abilities is the management of archetypal resources, particularly such resources of language semantics. The archetype of creative function allows each person and group to activate and use these abilities, including the creative abilities of language. In some cases, the Icarus complex is formed and developed (with a more or less diffuse, closed or open and mobile personal structure). In some cases, it forms and develops a holistic, flexible and open-to-change self-actualizing personality.

References

- Achtnich, M. (1979). BBT: Berufsbilder-Test. *Projektives Verfahren zur Abklärung der Berufsneigung [BBT: Career profile test. Projective procedure for clarifying career inclinations]*. Bern: Hans Huber, 358.
- Akhmetova, A. I., Kolomiyets, O. M., Arpentieva, M. R., & Golubchikova, M. G. (2020, April). Environmental Education and Management: Exclusive, Inclusive, and Indigenous Doctrines. In *IOP Conference Series: Earth and Environmental Science*, 459(5), 1-7. IOP Publishing. <https://doi.org/10.1088/1755-1315/459/5/052086>
- Aksarina, I. Y., Dossayeva, S. K., Kosov, A. V., Stepanova, G. A., Akentyeva, I. Y., Brovkina, S. N., ... & Kassymova, K. G. (2019). Foresight innovations in educational systems in the BRICS countries. *Научный журнал «Вестник НАН РК» [Bulletin of National Academy of Sciences of the Republic of Kazakhstan]*, 4, 123-131. <https://doi.org/10.32014/2019.2518-1467.100>
- Aoki, K., & Feldman, M. W. (2014). Evolution of learning strategies in temporally and spatially variable environments: a review of theory. *Theoretical Population Biology*, 91, 3-19. <https://doi.org/10.1016/j.tpb.2013.10.004>
- Arpentieva, M. R., Gorelova, I. V., Kassymova, G. K., Garbuzova, G. V., Kosov, A. V., Lavrinenko, S. V., ... & Stepanova, O. P. (2020). Human resource management and dynamic capabilities of educational enterprises: psychological, social and economical aspects. *Научный журнал «Вестник НАН РК» [Bulletin of National Academy of Sciences of the Republic of Kazakhstan]*, 1, 242-254. <https://doi.org/10.32014/2020.2518-1467.30>
- Arpentieva, M. R., Gasanova, R. R., Gorelova, I. V., Kamenskaya, E. N., Kassymova, G. K., Kosov, A. V., ... & Lavrinenko, S. V. (2020). Modern concepts and archetypes of the management in education: psychological, social and economical aspects. *Научный журнал «Вестник НАН РК» [Bulletin of National Academy of Sciences of the Republic of Kazakhstan]*, 2, 194-204. <https://doi.org/10.32014/2020.2518-1467.59>
- Arpentieva, M. R. (2018). Psychodiagnostics, counselling and mediation in professional and unprofessional relationships. Actual problem of the practical psychology. Canada. Toronto: Altaspera Publishing & Literary Agency Inc, Russia, Kaluga: KE Tsiolkovskiy Kaluga state University Publishing house, 3, 1-664.
- Arpentieva, M. R. (2015). Cognition and cognitive disorders in elderly mentally ill people. *Advances Gerontology*, 3, 194-199.
- Badalov A. A., Brovkina S. N., Arpentieva M. R., Kalinin S. S., & Kassymova G. K. (2020). Archetype of intellectual activity: modern methodology for the description of protophenomenon *Klinicheskaya i spetsial'naya psikhologiya =*

[*Clinical Psychology and Special Education*], 9(1), 1–16. <https://doi.org/10.17759/cpse.2020090101>

Badalov, A. A., Brovkina, S. N., Davidovich, M. E., Kadyrova, A. S., Kugaevsky, I. A., Mamadumarova, Z. I., ... & Ulitina, Y. V. (2018). «Chimera principle»: qualitative analysis of psychophysiological isomorphism of persons with identity integration disorder. *VM Bekhterev Review of Psychiatry and Medical Psychology*, 2, 3-10. <https://doi.org/10.31363/2313-7053-2018-2-3-10>

Badalov, A. A., & Brovkina, S. N. (2017a). Perspektiv y primeneniya metodov analiticheskoy psikhologii KG Yunga v issledovaniis indroma Ikara (Prospects for the application of methods of analytical psychology of KG Jung in the study of Icarus syndrome). *Vestnik Kyrgyzsko-Rossiyskogo Slavyanskogo universiteta [Bulletin of the Kyrgyz-Russian Slavic University]*, 4, 138-140.

Badalov, A. A., & Brovkina, S. N. (2017b). Perspektivy primeneniya metoda geneticheskoi obuslovlennykh arkhetycheskikh analogiy v issledovanii sindroma Ikara [Prospects for applying the method of genetically determined archetypical analogies in the study of Icarus syndrome]. *Vestnik Kyrgyzsko-Rossiyskogo Slavyanskogo universiteta [Bulletin of the Kyrgyz-Russian Slavic University]*, 3, 86-90.

Beebe, J. (2016). *Energies and patterns in psychological type: The reservoir of consciousness*. Routledge.

Bickel, W. K., Yi, R., Landes, R. D., Hill, P. F., & Baxter, C. (2011). Remember the future: working memory training decreases delay discounting among stimulant addicts. *Biological Psychiatry*, 69(3), 260-265. <https://doi.org/10.1016/j.biopsych.2010.08.017>

Bickel, W. K., & Mueller, E. T. (2009). Toward the study of trans-disease processes: A novel approach with special reference to the study of co-morbidity. *Journal of Dual Diagnosis*, 5(2), 131-138. <https://doi.org/10.1080/15504260902869147>

Boschetti, F., Price, J., & Walker, I. (2016). Myths of the future and scenario archetypes. *Technological Forecasting and Social Change*, 111, 76-85. <https://doi.org/10.1016/j.techfore.2016.06.009>

Bradshaw, S., & Storm, L. (2013). Archetypes, symbols and the apprehension of meaning. *International Journal of Jungian studies*, 5(2), 154-176. <https://doi.org/10.1080/19409052.2012.685662>

Buckner, R. L., Andrews-Hanna, J. R., & Schacter, D. L. (2008). The brain's default network: anatomy, function, and relevance to disease. *Annals of the New York Academy of Sciences*, 1124(1), 1-38. <https://doi.org/10.1196/annals.1440.011>

Chan, W. S. (2017). Delay discounting and response disinhibition moderate associations between actigraphically measured sleep parameters and body mass index. *Journal of Sleep Research*, 26(1), 21-29. https://brill.com/view/journals/ijjs/5/2/article-p154_4.xml

Chang, H. M., Ivonin, L., Diaz, M., Catala, A., Chen, W., & Rauterberg, M. (2013). Experience the world with archetypal symbols: A new form of aesthetics. In *Distributed, Ambient, and Pervasive Interactions: First International Conference, DAPI 2013, Held as Part of HCI International 2013, Las Vegas, NV, USA, July 21-26, 2013. Proceedings, 1*, 205-214. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-39351-8_23

Chudek, M., & Henrich, J. (2011). Culture–gene coevolution, norm-psychology and the emergence of human prosociality. *Trends in Cognitive Sciences*, 15(5), 218-226. <https://doi.org/10.1016/j.tics.2011.03.003>

Cona, G., Koçillari, L., Palombit, A., Bertoldo, A., Maritan, A., & Corbetta, M. (2018). Archetypes in human behavior and their brain correlates: an evolutionary trade-off approach. *bioRxiv*, 325803. <https://doi.org/10.1016/j.neuroimage.2018.10.050>

Dehaene, S., & Cohen, L. (2007). Cultural recycling of cortical maps. *Neuron*, 56(2), 384-398. <https://doi.org/10.1016/j.neuron.2007.10.004>

Dunbar, R. I. (2009). The social brain hypothesis and its implications for social evolution. *Annals of Human Biology*, 36(5), 562-572. <https://doi.org/10.1080/03014460902960289>

Enquist, M., Strimling, P., Eriksson, K., Laland, K., & Sjostrand, J. (2010). One cultural parent makes no culture. *Animal Behaviour*, 79(6), 1353-1362. <https://doi.org/10.1016/j.anbehav.2010.03.009>

Feinstein, D., & Krippner, S. (2007). *The Mythic Path: Discovering the Guiding Stories of Your Past—Creating a Vision for Your Future*. New York, Fulton, CA: Elite Books.

Fossati, A., Barratt, E. S., Carretta, I., Leonardi, B., Grazioli, F., & Maffei, C. (2004). Predicting borderline and antisocial personality disorder features in nonclinical subjects using measures of impulsivity and aggressiveness. *Psychiatry Research*, 125(2), 161-170. <https://doi.org/10.1016/j.psychres.2003.12.001>

- Fox, K. C., Muthukrishna, M., & Shultz, S. (2017). The social and cultural roots of whale and dolphin brains. *Nature Ecology & Evolution*, 1(11), 1699-1705. <http://10.1038/s41559-017-0336-y>
- Frankenhuis, W. E., Panchanathan, K., & Clark Barrett, H. (2013). Bridging developmental systems theory and evolutionary psychology using dynamic optimization. *Developmental Science*, 16(4), 584-598. <https://doi.org/10.1111/desc.12053>
- Golubchikova, M., Suyunova, G., Kairova, M., Arpentieva, M., & Kolomiyets, O. (2019). The transformation of identity in ecological education: personal, interpersonal and professional aspects. In *E3S Web of Conferences*, 135, 1-10. EDP Sciences. <https://doi.org/10.1051/e3sconf/201913504019>
- Golubchikova, M., Kharchenko, S., & Nikitina, E. (2017). Local educational cluster as a means of development of students' training independence. *Revista ESPACIOS*, 38(49), 32-35. *Scribbr*. <https://www.revistaespacios.com/a17v38n49/a17v38n49p32.pdf>
- Goodwyn, E. D. (2012). *The neurobiology of the gods: How brain physiology shapes the recurrent imagery of myth and dreams*. Routledge.
- Gorelova, I. V., & Arpentieva, M. R. (2018). Archetypes and concepts of modern management. *Public Administration*, 3, 23-33.
- Gottschall, J. (2012). *The storytelling animal: How stories make us human*. Houghton Mifflin Harcourt. New York.
- Green, M. C., Fitzgerald, K., & Moore, M. M. (2019). Archetypes and narrative processes. *Psychological Inquiry*, 30(2), 99-102. <https://doi.org/10.1080/1047840X.2019.1614808>
- Haddad, H., & Moulin, B. (2007, July). Using cognitive archetypes and conceptual graphs to model dynamic phenomena in spatial environments. In *International Conference on Conceptual Structures*, 4604, 69-82. Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-540-73681-3_6
- Hoppitt, W., & Laland, K. N. (2013). *Social learning: An introduction to mechanisms, methods, & models*. Princeton, New Jersey: Princeton University Press.
- Hunziker, M. (2016). Depth typology, CG Jung, Isabel Myers, John Beebe and the guide map to becoming who we are. *Clayton, NC: Write Way Publishing Company LLC*.
- Jung, C. G. (2011). *L'analisi dei sogni-Gli archetipi dell'inconscio-La sincronicit  [The analysis of dreams - The archetypes of the unconscious - Synchronicity]*. Italy, Turine: Bollati Boringhieri Publications.
- Jung, C. G. (1969a). Psychological aspects of the mother archetype, 1954. *The Archetypes and the Collective Unconscious*. Princeton, New Jersey, USA: Princeton University Press.
- Jung, C. G. (1969b). On the nature of the psyche. *Modern Library*, 77. Princeton, NJ, USA. Princeton University Press.
- Kassymova, G. K., Tokar, O. V., Tashcheva, A. I., Slepukhina, G. V., Gridneva, S. V., Bazhenova, N. G., ... & Arpentieva, M. R. (2019a). Impact of stress on creative human resources and psychological counseling in crises. *International Journal of Education and Information Technologies*, 13(1), 26-32.
- Kassymova, G. K., Yurkova, M. G., Zhdanko, T. A., Gerasimova, J. R., Kravtsov, A. Y., Egorova, J. V., ... & Larionova, L. A. (2019b). Personal self-development in the context of global education: the transformation of values and identity. *Научный журнал «Вестник НАН РК», Научный журнал «Вестник НАН РК» [Bulletin of National Academy of Sciences of the Republic of Kazakhstan]*, 6, 195-207. <https://doi.org/10.32014/2019.2518-1467.162>
- Kendal, R. L., Boogert, N. J., Rendell, L., Laland, K. N., Webster, M., & Jones, P. L. (2018). Social learning strategies: Bridge-building between fields. *Trends in Cognitive Sciences*, 22(7), 651-665. <https://doi.org/10.1016/j.tics.2018.04.003>
- Kholodnaya, M. A. (2002). Psychology of intelligence: paradoxes of research. *St. Petersburg*.
- Knox, J. M. (2001). Memories, fantasies, archetypes: an exploration of some connections between cognitive science and analytical psychology. *Journal of Analytical Psychology*, 46(4), 613-635. <https://doi.org/10.1111/1465-5922.00270>
- LeCun, Y., Bengio, Y., & Hinton, G. (2015). Deep learning. *Nature*, 521(7553), 436-444. <https://doi.org/10.1038/nature14539>
- Luria, A. R. (2017). *The Neuropsychological Analysis of Problem Solving (Classic Soviet Psychology Series)*. New York: Routledge.
- Makovsky, M. M. (2018). *Indoevropskaya mifopoetika: miry iantimiry slova. [Indo-European mythopoetics: worlds and anti-worlds of word]*. Moscow: LENAND.

- Maltsev, O. V. (2019). *Filosofiya L. Sondi*. [Philosophy of L. Sondi]. Ukraine, Odessa: Serednyak T.K. Publications.
- McAdams, D. P., & Reischer, H. N. (2019). Rehabilitating Jung. *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory*, 30(2), 83-86. <https://doi.org/10.1080/1047840X.2019.1614810>
- Muthukrishna, M., Doebeli, M., Chudek, M., & Henrich, J. (2018). The Cultural Brain Hypothesis: How culture drives brain expansion, sociality, and life history. *PLoS Computational Biology*, 14(11), e1006504. <https://doi.org/10.1371/journal.pcbi.1006504>
- Muthukrishna, M., & Henrich, J. (2016). Innovation in the collective brain. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 371(1690), 1-14. <https://doi.org/10.1098/rstb.2015.0192>
- Nakahashi, W., Wakano, J. Y., & Henrich, J. (2012). Adaptive social learning strategies in temporally and spatially varying environments: How temporal vs. spatial variation, number of cultural traits, and costs of learning influence the evolution of conformist-biased transmission, payoff-biased transmission, and individual learning. *Human Nature*, 23, 386-418. <https://doi.org/10.1007/s12110-012-9151-y>
- Nardi, D. (2011). *Neuroscience of Personality: Brain Savvy Insights for All Types of People*. New York: Radiance House.
- Oatley, K. (2019). The human unconscious in evolution. *Psychological Inquiry*, 30(2), 76-78. <https://doi.org/10.1080/1047840X.2019.1614809>
- Panksepp, J. (2015). The neuroevolutionary sources of mind. *The Constitution of Phenomenal Consciousness: Toward a Science and Theory*, ed. SM Miller (Amsterdam: John Benjamins), 481, 226-259. Scribbr. <https://www.torrossa.com/en/resources/an/5015160#page=235>
- Reynolds, B. (2006). A review of delay-discounting research with humans: relations to drug use and gambling. *Behavioural Pharmacology*, 17(8), 651-667. <https://doi.org/10.1097/FBP.0b013e3280115f99>
- Roesler, C. (2012). Are archetypes transmitted more by culture than biology? Questions arising from conceptualizations of the archetype. *Journal of Analytical Psychology*, 57(2), 223-246. <https://doi.org/10.1111/j.1468-5922.2011.01963.x>
- Rogers, C. R. (1951). Studies in client-centered psychotherapy III: the case of Mrs. Oak—a research analysis. *Psychological Service Center Journal*, 3(1-2), 47-165 Scribbr. <https://psycnet.apa.org/record/1953-01220-001>
- Rosen, D. H., Smith, S. M., Huston, H. L., & Gonzalez, G. (1991). Empirical study of associations between symbols and their meanings: Evidence of collective unconscious (archetypal) memory. *The Journal of Analytical Psychology*, 36, 211–228. Scribbr. <https://psycnet.apa.org/record/1991-26244-001>
- Roubekas, N. P., & Ryba, Th. (eds.) (2020). *Explaining, Interpreting, & Theorizing Religion and Myth*. Leiden, Netherlands: Brill. https://doi.org/10.1163/9789004435025_009
- Rounds, J. S., Beck, J. G., & Grant, D. M. (2007). Is the delay discounting paradigm useful in understanding social anxiety? *Behavioral Results of the Therapy*, 45(4), 729-735.
- Shchepanovskaya, Ye.M. (2008). Arkhetipicheskiy podkhod kak sredstvo filosofskogo ponimaniya ideyi mezhkul'turnoy kommunikatsii [Archetypal approach as a means of philosophical understanding of ideas and intercultural communication]. *Tsentral'naya Aziya i kul'tura mira [Central Asia and the culture of peace]*, 1, 263-273.
- Sohn, S. Y., Kang, J. I., Namkoong, K., & Kim, S. J. (2014). Multidimensional measures of impulsivity in obsessive-compulsive disorder: cannot wait and stop. *PLoS One*, 9(11), 1-8. <https://doi.org/10.1371/journal.pone.0111739>
- Sotirova-Kohli, M. (2013). *Empirical study of the associations between archetypal images and their meanings: evidence of archetypal (collective unconscious) memory* (Doctoral dissertation, University_of_Basel). <https://doi.org/10.5451/unibas-006248907>
- Sotirova-Kohli, M., Opwis, K., Roesler, C., Smith, S. M., Rosen, D. H., Vaid, J., & Djonov, V. (2013). Symbol/Meaning paired-associate recall: An “archetypal memory” advantage? *Behavioral Sciences*, 3(4), 541-561. <https://doi.org/10.3390/bs3040541>
- Stepanova, G. A., Tashcheva, A. I., Stepanova, O. P., Menshikov, P. V., Kassymova, G. K., Arpentieva, M. R., & Tokar, O. V. (2018). The problem of management and implementation of innovative models of network interaction in inclusive education of persons with disabilities. *International Journal of Education and Information Technologies*, 12, 156-162.
- Sven. (2006). Mapping Jungian Archetypes on Cognitive Processes. Symbol Thinking: Mapping the Collective Unconscious. Scribbr. <http://symbolthinking.blogspot.com/2006/12/mapping-jungian-archetypes-on-cognitive.html>

- Szondi, L. (1952). *Experimental diagnostics of drives*. Grune & Stratton: New York, USA. Scribbr. <https://psycnet.apa.org/record/1953-05910-000>
- Tomasello, M. (2014). *A natural history of human thinking*. Cambridge MA: Harvard University Press.
- Tompkins, D. A., Johnson, P. S., Smith, M. T., Strain, E. C., Edwards, R. R., & Johnson, M. W. (2016). Temporal preference in individuals reporting chronic pain: Discounting of delayed pain-related and monetary outcomes. *Pain*, 157(8), 1724. <https://doi.org/10.1097/j.pain.0000000000000576>
- Uchiyama, R., & Muthukrishna, M. (2019). Archetypes are a Poor Primitive for a Theory of Mental Representations. *Psychological Inquiry*, 30(2), 87-92. <https://doi.org/10.1080/1047840X.2019.1614806>
- Valerievna, G. I., & Ravilievna, A. M. (2018). Problems of context and conceptual management. *Публічне урядування*, 4(14), 102-114. Scribbr. <https://cyberleninka.ru/article/n/problems-of-context-and-conceptual-management>
- Vaughn Becker, D., & Neuberg, S. L. (2019a). Archetypes reconsidered as emergent outcomes of cognitive complexity and evolved motivational systems. *Psychological Inquiry*, 30(2), 59-75. <https://doi.org/10.1080/1047840X.2019.1614795>
- Vaughn Becker, D., & Neuberg, S. L. (2019b). Pushing archetypal representational systems further. *Psychological Inquiry*, 30(2), 103-109. <https://doi.org/10.1080/1047840X.2019.1618069>
- Zlatev, Y. (2006). *Znachenie= zhizn' (+ kul'tura): Nabrosok edinoy biokul'turnoy teorii znacheniya [Meaning= life (+ culture): Sketch of a single biocultural theory of meanings]. Yazyk i poznanie: metodologicheskie problemy i perspektivy [Language and cognition: Methodological problems and prospects]. Studia Linguistica Cognitiva, 1, 308-361.*