BRATISLAVA INTERNATIONAL SCHOOL OF LIBERAL ARTS

AUTISM SPECTRUM ART: A WAY TO LEARN

BACHELOR THESIS

Bratislava, 2023 Katarína Oružinská

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Declaration of Originality

I hereby declare that this bachelor's thesis is my own work and has not been published in part or elsewhere. All used literature and other sources are attributed and cited in References.

My name: Katarína Oružinská

Signature: 

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Abstrakt

Táto práca analyzuje diela výtvarného umenia ľudí na autistickom spektre a ich využitie k ich lepšiemu pochopeniu a šíreniu povedomia o autizme medzi verejnosťou. Prvá časť teoretickej časti zahŕňa klasifikáciu a popis autizmu, základné symptómy, etiológiu a prevalenciu v populácii a empatiu na spektre. Druhá časť zahŕňa aspekty vizuálneho myslenia, Art brut a Outsider art, diagnostické a terapeutické vlastnosti umenia a prehľad literatúry typických čŕt umenia ľudí s poruchami autistického spektra. Empirická časť pozostáva jednak z 2 prípadových štúdií analýzy čŕt autistického umenia a jednak z analýzy prístupu k umeniu ľudí s poruchami autistického spektra na Slovensku.

Kľúčové slová: poruchy autistického spektra, výtvarné umenie, umenie na autistickom spektre, Art brut

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Abstract

This work analyses works of fine art of people on the autism spectrum and their use towards our better understanding of them and spreading awareness among the public. First part of the theoretical part covers the classification and descriptions of autism, basic symptoms, aetiology and prevalence in the population and empathy on the spectrum. Second part covers the aspects of visual thinking, Art brut and Outsider art, diagnostic and therapeutic properties of art and literature review of typical features of ASD art. Empirical part consists firstly of 2 case studies of analysis of features of the autistic art and secondly of the analysis of access to ASD art in Slovakia.

Keywords: autism spectrum disorder, fine arts, autism spectrum art, Art brut

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VOCABULARY

ASD - autism spectrum disorder

Autism/autistic spectrum/autism spectrum/on the spectrum/autistic/ASD - in this work used interchangeably

AS - Asperger syndrome

DSM-5-TR - Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision

HFA - high functioning autism

Neurodevelopmental disorders - a broad spectrum of conditions that affect a child's brain and nervous system and are similar in that they present in early development

Savants/ savant skills - people with mental or neurodevelopmental disability, including people with ASD, who often have a special ability in contrast to their handicap

Synaesthesia - a condition in which stimulation of one sense generates a simultaneous sensation in another

ICD-11 - International Classification of Diseases, 11th revision

INTRODUCTION

Diversity is good, however when it comes to people on the autistic spectrum, the connotation is usually negative. The different way of thinking is often tied with occurence of problems in the social and other spheres, but sometimes also special abilities. We could also claim that the existence of neurodiversity helps us to understand the neurotypical more. Maynard (2019) also states that just as autism needs social psychology, social psychology needs autism. And I believe this is true in general, in our search to achieve better understanding of our brains. As Oliver Sacks (1995) states, autism as a subject, involving a great difference in development of mind and brain, touches on the deepents questions of ontology.

When Leo Kanner started researching autism, he saw it as a curse, and it may well seem like it for many people. Then there is an opposite view, e.g. Lyons and Fitzgerald (2012) emphasise the idea that autistic traits could in certain aspects be regarded as a gift, mentioning notable autistic traits in famous creative individuals such as Einstein or Darwin. Curse or a gift, being autistic means being different, differing greatly even from other people on the autism spectrum, but perhaps this difference should be seen just as that - a difference. It may serve as a call for us to listen better, to be more perceptive and open and to learn from each other.

I chose the topic of visual art on the autism spectrum because it is an intersection of my interests in psychology, functioning of the human brain and art, but not just that alone, but art in the social sphere, art as a way of communication of ideas, feelings and personal views on the world to others and society around us. My mother has been working in a community centre for people with autism spectrum disorder for several years now, and I was always intrigued by her work. Moreover, I have finished 12 years of primary fine art education, and art has always been my subject of interest.

In this work, I aim to explore the question of how fine art can serve towards better understanding of autistic people. Firstly, it is necessary to state that autistic people often think in pictures. It is thus important to understand the basics of this way of

thinking with the differences between different brain processes. Visual thinking is fairly frequent among autistic people, and many of autistic people engage in drawing or painting, which is thus naturally sometimes even their first way of expression. Consequently, even though everyone is unique, which is especially true about autistic spectrum, it can be said that a typical feature of their art is directness of expression. We thus have the opportunity to analyse how certain workings of their minds/brains are exposed in their artistic endeavours, which can literally serve as illustration of certain traits they exhibit, and therefore help us understand autistic people better, since we would be able to connect information with a visual representation. And better understanding is a necessary first step toward better inclusion.

Improving public awareness about autism in Slovakia is still a slow process. There are still many children who do not undergo the screening process and get diagnosed late and with obstacles, and there are still many misconceptions people have about autism spectrum disorder. Inspired by the words of Ostatníková et al. (2022), we should not judge or deprecate, but try to understand and accept otherness and read and think and listen, to create a better world together.

1. THEORETICAL BACKGROUND OF AUTISM SPECTRUM DISORDER

To understand autism spectrum disorder, it is important to understand the journey of discovering autism, its classification and symptoms. Empathy on the spectrum, aetiology of autism and prevalence in the population will also be examined.

1.1 Discovering Autism

The journey of naming, describing and understanding autism has been long and tortuous, and we still have a long way to go. To understand the current knowledge and views on the topic, it is necessary to have basic background information on the formation of our understanding of autism. The term autism is derived from the Greek word “autos” meaning “self”. In this context the term was firstly used by Bleuler who tried to describe the process of patients with schizophrenia retreating to their own world (Ostatníková, 2022).

Autism was first medically described in the 1940s almost simultaneously, but independently by Leo Kanner in the United States and Hans Asperger in Austria (Sacks, 1995). Both of them named it autism and as a cardinal feature underlined mental aloneness, which was their reason for the choice of the name. Although they named it the same, their experiences and views of autism markedly differed. Kanner saw autism as a disaster, because in experience with his patients, it ment living in one's own world, not being able to deal well with changes in the environment, being non-verbal or only repeating the worlds heard, a condition called “echolalia,” and being able to watch or do repetitive actions for hours (Silberman, 2015). However, Asperger’s patients, although keeping a certain distance from other people, were not impaired in the area of speech and language, and were gifted in the subjects of mathematics and natural sciences, which led him to call them “little professors" (Silberman, 2015, p. 16).

Asperger thought that in autism there are also positive features, such as great originality making extraordinary achievements possible in later life. Already these two accounts of the beginning of the journey of understanding autism show us that it incorporates a very wide range of symptoms and phenomena (Sacks, 1995). More systematic research of autism began only in the 1970s in London with the work of

Beate Hermelin, Neil O'Connor and Lorna Wing, who aspired to find consistent features of autism, creating a triad of impairments: social interactions, in verbal and non-verbal communication and in play and imaginative activities. They also suggested that autistic people have no Theory of Mind, meaning they are unable to read and understand mental and emotional states of themselves and others (Sacks, 1995). It was assumed that this is the explanation behind the impaired social perception and interaction, however, since then, many studies have proved that autistic people have rather weakened than absent Theory of Mind and that it evolves later than in their neurotypical peers (Ostatníková, 2022).

Autism is not a homogenous disorder, on the contrary, it has different symptoms and degrees of impairment, which makes it also more difficult to diagnose and measure its prevalence in the population (Ostatníková, 2022). Autism can be more comprehensively defined through the classification and description of its symptoms.

1.2 Classification and description of ASD

In March 2022, the diagnostic criteria in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) were updated by the American Psychiatric Association (APA). There were only minor changes made in the Autism spectrum disorder diagnosis serving to clarify potential ambiguities. DSM-5-TR is the first revision of DSM-5 that was published after the original publication of DSM-5 in 2013 (First et al., 2022). The DSM-5 however represented a major change from DSM-IV-TR, when the diagnostic subcategories of autism were abandoned and the term "Autism spectrum disorder" came into validity instead, together with changes in diagnostic requirements, specific diagnostic criteria etc. (Harker, Stone, 2014). Some of these changes were later incorporated into ICD-11, which can be seen in the next section.

1.2.1 Classification according to ICD-11

The global standard for diagnostic health information that is used also in Europe, is the International Classification of Diseases (ICD). It consists of all known diseases

and diagnostic criteria. In 10th revision (ICD-10) that was valid till the end of 2021, autism spectrum disorder was categorised under Mental and behavioural disorders (F00-F99), in subcategory of Disorders of psychological development (F80- F89), specifically under Pervasive developmental disorders (F84), which included sub-categorical diagnoses of: Childhood autism, Atypical autism, Rett syndrome, Other childhood disintegrative disorder, Overactive disorder associated with mental retardation and stereotyped movements, Asperger syndrome, Other pervasive developmental disorders and Pervasive developmental disorder unspecified (World Health Organization, 2019).

From 2022, the 11th revision of ICD is officially in effect, and being implemented and used in Europe, including Slovakia. There are several significant changes in classification and description of ASD. Firstly, it is categorised under Mental, behavioural or neurodevelopmental disorders (06), specifically Neurodevelopmental disorders. Autism spectrum disorder (6A02) classification no longer includes specific types of autism, but instead includes two subcategories of specifiers for characterising features within ASD: 1.) Co-occurring Disorder of Intellectual Development and 2.) Degree of Functional Language Impairment (World Health Organization, 2022).

According to the new ICD-11, autism spectrum disorder is characterised by persistent impairment in the sphere of social interaction and communication and by restricted and stereotypical patterns of behaviour, and taking into account the contect, excessive or atypical interests or activities. The onset of the disorder usually occurs in early childhood, but it may become apparent only later when there are greater demands in the social sphere. Deficits influence all areas of functioning and may be observable in all settings, although they can vary according to context. Individuals along the spectrum exhibit different ranges of intellectual and language abilities (World Health Organization, 2022).

Classification according to functionality, assessing people as high, middle or low functioning is being abandoned, and in the diagnostic process are more used the present impairments and their symptoms and degrees (Ostatníková, 2022).

1.2.2 Subcategories of ASD according to ICD-11

6A02.0 Autism spectrum disorder without disorder of intellectual development and with mild or no impairment of functional language

6A02.1 Autism spectrum disorder with disorder of intellectual development and with mild or no impairment of functional language

6A02.2 Autism spectrum disorder without disorder of intellectual development and with impaired functional language

6A02.3 Autism spectrum disorder with disorder of intellectual development and with impaired functional language

6A02.5 Autism spectrum disorder with disorder of intellectual development and with absence of functional language

6A02.Y Other specified autism spectrum disorder

6A02:Z Autism spectrum disorder, unspecified

1.3 Basic symptoms of ASD according to ICD-11

The triad of impairment used to describe basic features of autism, pioneered by Lorna Wing, has since been updated to be only a diad of impairments, namely social communication and interaction and inflexible patterns of behaviour, interests and activities. Required diagnostic features of autism spectrum disorder according to ICD-11 now include the following symptoms:

Persistent deficits in the sphere of social communication and reciprocal social interactions. Manifestations of this may include limitations in understanding, interest and responses to verbal and non-verbal communication, limitations in of use of spoken language along with non-verbal cues, such as eye-contact, gestures, facial

expressions and body language, which may be also used in reduced intensity or frequency, limitations in using language in social contexts and understanding it, and in having reciprocated conversations, limitations of social awareness and consequently behaving inappropriately, deficits in ability to respond to emotions and attitudes of other people, limitations in ability to mutually share interests and to sustain typical peer relationships.

Persistent restricted, repetitive, inflexible patterns of behaviour, interests or activities considering the age and sociocultural context. These may include deficiency to adapt with associated distress caused by minor changes in known environment or unanticipated events, inflexible adherence to created routines, such as precise routs or timing, excessive following of the rules, exorbitant and tenacious ritualised patterns of behaviour, such as sorting or lining objects in a row, repetitive stereotyped motor movements, such as rocking, atypical gait, such as walking on tiptoes, peculiar hand or finger movements and posture, persistent preoccupation with one or more special

interests, objects or other specific types of stimuli, or an excessive attachment to particular objects (except typical comfort objects), and lifelong persisting excessive hyper or hyposensitivity to sensory stimuli or unusual interest in sensory stimulus.

The onset of autism spectrum disorder occurs usually in early childhood, but some characteristic symptoms may become apparent only much later in life due to increased social demands. The consequences of mentioned symptoms usually include substantial impairment in personal, family, social, educational, occupational or other areas of functioning. However, some individuals with ASD are able to balance the deficits with great effort and function adequately in many contexts, without any impairment noticeable.

1.4 Empathy on the spectrum

There are often incorrect ideas about how autistic people feel, or whether they are even able to feel empathy towards others. For a long time, there was a general notion that autistic people are unable to feel empathy, however, this has been disproven.

Definition of empathy is not a simple task, but we might say that to emphasise means to see through the eyes of another person, hear through his ear, feel through his heart (Adler & Buda, 1994). According to some theories, there are different types of empathy, recognising and distinguishing emotional and cognitive empathy. Theory of Mindblindness presents a model of evolution and development of "mind reading," as in the ability to attribute mental states such as thoughts, emotions and intentions to others and to self. Baron-Cohen argues that we mindread mostly unconsciously all the time, however, people with ASD suffer from "mindblindness." This results in the ability to only see the possible temporal qualities, not casual motives or reasons. (Baron-Cohen, 1997). Without this mentalistic framework, difficulties with making sense of the behaviour of others arise. Baron-Cohen argues that children and adults on the autism spectrum are "mindblind" to varying degrees. According to scientific findings, there is atypical neural activity present when thinking about oneself in autism, and people with zero degrees of empathy also have difficulties understanding their own mind, a condition called alexithymia - "without words for emotion" (Baron-Cohen, 2011).

He also developed a theory about zero degrees of empathy, with the idea of empathy as a spectrum and autistic people scoring zero on both affective and cognitive empathy. Baron-Cohen was a significant figure in the research on the field of autism, and his theories helped to push research in autism forward. However, research on the autism spectrum is progressing quickly, and although there is evidence that people on the autism spectrum have an impaired ability to "mindread," similarly described by the lacking Theory of Mind, which also describes an ability to ascribe mental states, emotions and intentions, people with ASD are not lacking affective empathy. Ostatníková (2022) in her systematic review of current information on autism states that it has been proved that autistic people do not have absent Theory of Mind, only impaired, and that it develops later than in their peers, and this is the cause of many difficulties they have to face.

1.5 Aetiology of ASD and its prevalence in population

The cause of autism spectrum disorder has been a matter of dispute for a long time. The answer most likely includes interplay of several factors concurrently influencing

the development of the central nervous system. Apparently, the most significant influence have the genetic factors, but other important factors include also “hormonal influences and other effects of the internal environment, such as immunity, intestinal microbiota, and epigenetic factors influencing the activity of genes and their messengers, e.g. hormones” (Ostatníková, 2022, p.29).

According to the latest data from monitoring the prevalence of autism in the population, we can see a continuous growth of numbers of people who are diagnosed as on the autism spectrum (Zeiden et al., 2022). There might be several reasons for this, including the changed understanding of the diagnosis and overall improvement of the diagnostic tools (Ostatníková, 2022). According to the World Health Organization (2022), the global prevalence of autism is said to be 1% - 1 in 100 children is assumed to have autism spectrum disorder. These data are based on the study of Zeidan et al. (2022), who reviewed the data on the prevalence of autism worldwide, taking into consideration the impact of geographic, ethnic and socioeconomic factors. Other findings included the median of the male-female ratio to be 4.2, and median percentage of autism cases with co-occurring intellectual disability to be 33.0%. Estimates varied according to numerous factors, likely including the degree of community awareness, service capacity, help seeking and other factors (Zeidan et. al, 2022).

In Slovakia, we do not know the specific numbers of the occurrence of ASD, because the prevalence of ASD in the population is not being systematically monitored. We might assume that it is similar to data from other developed countries, for example in the Czech Republic, between 2010 and 2018, 25 967 people with ASD or other pervasive disorder have been recorded (Ostatníková, 2022). However, it is important to have in mind that the data of prevalence of autism in the population in Europe are differing a lot from country to country, since all methods of monitoring have their limitations (Ostatníková, 2022).

2. AUTISM SPECTRUM DISORDER AND FINE ART

People on the autism spectrum usually exhibit different ways of thinking and different brain processes than neurotypical individuals, with visual thinking being a frequent example of predominant mode of thinking differing from the verbal norm. Enhanced visuality logically seems to pave the way for visual creation, and many people on the spectrum indeed have an inclination for drawing or painting. For some people with Autism spectrum disorder, their first way of expression is often visual. Subsequently, the question of how visual thinking works in the mind of a person on the autism spectrum will be further analysed. Furthermore, the field of Art brut & Outsider art and intersection with art on the autism spectrum will be explored, together with the therapeutic and diagnostic potentials of art. Lastly, because ASD art is typical by its directness, it provides us with the opportunity to analyse how certain workings of their brains are exposed in their artistic endeavours, which can literally serve as illustration of certain traits they exhibit, which will be further examined.

2.1 Visual thinking and ASD

There is evidence that many people on the autism spectrum have a different, visual way of thinking (Ostatníková, 2022) and thus proclivity to understand visual modes of communication more easily. Many also have an interest in drawing, painting or other visual arts.

One of the most famous people writing about autism and thinking in pictures is undoubtedly Temple Grandin, American livestock equipment designer, animal science professor, and author, who is also on the autistic spectrum and thus her contribution and take on this topic are very conducive. Grandin (1995, 2006) wrote that for a long time she mistakenly thought everybody thought in the same way she did, which she described as thinking in pictures, creating a “video library of images”, where she could choose concrete tapes of things she saw and play them like a movie, but also rotate objects in her mind and make changes to concrete images, or create new ones by piercing the pieces of images already in her mind library together. The more pictures she added, the better her design ability got, and this way she also improved

her ability to think in a less rigid way by having more videotapes of experiences and pictures of things she read. When she wants to recall something, she “replays a video” in her imagination, which is always specific and includes many details. Grandin also explained that if she lets her mind wander, it looks like a free association process where one picture/video triggers another, which is also a useful thing to mention to understand people with severe autism, who have trouble stopping these associations (Grandin, 1995, 2006). When Grandin was younger, she had to use concrete symbols and pictures which she assigned to abstract concepts to be able to understand them. Today she does not have to do that anymore thanks to having more visuals added in her mind library. Her mind, using her computer analogy, is “more programmed” (Grandin, 2006).

Many people with ASD think in a similar way Grandin does, however, there are more ways of thinking patterns. Some people think in pictures, some in combination of words and vague pictures and some are completely verbal. Grandin (2009) divided people into three categories of thinkers. Firstly, people like her, who are photo-realistic visual thinkers, secondly, pattern thinkers - music and maths minds, and thirdly, verbal logic thinkers, or word-fact thinkers, thinking in word details. Grandin (2009) further states that brains on the autism spectrum are specialised, and they often have difficulties forming concepts, because the frontal cortex of ASD individuals may have poorer connections to some other parts of the brain.

In her book *Chlapec, ktorý myslí v obrazoch a vyjadruje sa kresbou alebo sprevádzanie malého nadaného autistu [The boy who thinks in pictures and expresses himself through drawing, or accompanying a gifted autistic child*] Martinková (2006) writes that her son Matej, diagnosed with ASD, does not think in numerical-logical way, but in pictures and associations. She states that he started reading, writing and drawing sooner than communicating verbally in the form of a real dialogue. He understood encyclopaedias better than fairy tales, because he was able to understand the structure of professional texts accompanied with pictures more easily, and later communication with him also had to be short and clear. Matej liked the principles and structure of different systems, but in society and interpersonal communication, there is a lack of systems. Like Grandin, the boy has photographic memory, is more visual

than verbal, and "adds new information into his system of already placed pictures" (Martinková, 2006, p.58), similarly to the way Grandin was explaining the way her mind works. Martinková also wrote that when he was writing, it was as though he was translating from the pictures, and not knowing how to describe some of them, he created his own words (neologisms) that "fit sonically to things he saw in his mind" (Martinková, 2006, p.72).

According to quantitative meta-analysis of enhanced visual functioning in autism, people with ASD often exhibit enhanced perceptual abilities when engaging in certain visual tasks, and engage the visual system more in a range of other perceptual and cognitive tasks. Different neural plasticity development, reflected in atypical organisational patterns can have results such as enhanced visual skills, atypical face processing and hyperlexia (Samson et al., 2012).

Statements "if you know one autistic person, you know one autistic person" (Silberman, 2015, p.25), and that "even though one meeting is sometimes enough for clinical diagnosis, to understand an autistic person, we need to know about his whole life" (Silberman, 2015, p. 17) illustrate a great diversity of the autism spectrum disorder. Obviously, this makes it difficult to develop a certain way to better understand people with ASD, since individual cases differ greatly, but just thanks to the knowledge that there are very different ways of thinking, with the visual one being common among many autistic people, we can modify our mode of communication so it is easier for both sides to understand each other.

2.2 Autistic art in the field of Art brut & Outsider art

The term "Art brut," literally meaning raw or rough, was invented by French artist and theorist Jean Dubuffet around 1945 to describe a very wide range of visual production made by varied group of individuals, usually by self-taught artists, often, but not necessarily people with a mental dysfunction, and/or in a certain way on the outskirts of society, either recoiling the notion of art being publicly defined and having certain standards (Cardinal, 2009), or socially marginalised or excluded from the mainstream. The term "Outsider art" was created around 1972 by Roger Cardinal

and was meant to serve as an anglophone equivalent of Art brut (Rhodes, 2022), and, like Art brut, it described the art of individuals outside the influence of high culture. However, the term also marks a conceptual shift from Art brut that focuses on the roughness of the art, and adds the spatial concept of being cut from the art world as a defining feature (Prinz, 2017). Over time Outsider art came to describe a wider range of production than Cardinal envisaged, spanning from mid-nineteenth century till the present, international and transcultural in scope. Although production included under the term varies in time, geography, culture and neurodiversity, it could be characterised by common aesthetic qualities of directness, honesty, spontaneity, freshness and insightfulness (Rhodes, 2022, p.7). Such art is also characterised by its unconventional nature, idiosyncrasy, distance from artistic norms and commonplace experience, offering the audience unexpected thrilling and distinctive visual experience, enabling us to peer into private worlds of its creators, often strange and remote from our normal experience (Cardinal, 2009). Dubuffet proposed that Art brut is characteristically dealing with the representation of inside world and mental states, and furthermore, that features like repetition, chance, automatism, micro or macroscopic views, rejection of perspective, scale and proportion are present, as well as naturalistic colouration, combining images and text and bricolage - using unconventional materials (Glimcher, 1987). Cardinal (1972), although stating that one should be careful with generalisations, noted as characteristic features of Outsider art the dense ornamentation, leaving no space unfilled, repeated patterns, configurations in between the figural and decorative, representation and peculiar calligraphy, etc., or searching for a perfect combination of words and pictures, or favourite subjects, however, the ultimate feature describing Outsider could be said to be authenticity. According to Prinz (2017), aiming to narrow the characteristics of outsider art, he states that amateurism, labour-intensiveness, insensitivity to beauty norms, and a compositional business are the key features. The last of these features refers to the fact that some of the most valued Outsider works exhibit so called “kenophobia”, or “fear of emptiness, manifesting as a tendency to fill every bit of artistic surface, with a minority showing the opposite tendency to leave an empty space” (p. 262).

Some people, including Dubuffet himself, saw Art brut as the purest, rawest possible artistic creation, in a sense in opposition to culture, with the idea of “non-cultural”

production representing the ideal aspiration. On the other hand, others, such as historian and psychiatrist Hans Prinzhorn, do not even want to classify Art brut/Outsider art under the term “art” (Prinz, 2017). There is also a critique present against Outsider art as a category, deeming it problematic due to several reasons, for example because of no significant coherence within the category and no clear boundaries distinguishing it from other artists, with some “outsider characteristics” being present also in artists not labelled as such, and the other way around (Prinz, 2017). Dubuffet himself eventually created also the category for the works falling in between the Art brut and the mainstream, calling it the Nueve Invention (Rhodes, 2022). Other problems of the concept of the Outsider art include processes of in- and exclusion, (de)stigmatisation, telling hidden histories of traditionally marginalised groups and multiperspectivalism (Bloos, 2019). Museums and Outsider art have the potential to promote social inclusion, but also exclusion, thus it is important to include perspectives from often socially excluded groups (Bloos, 2019), and to ask questions about the narrative we are promoting and its consequences. Whether the separate exhibitions of Outsider art serve the purpose of inclusion and emancipation, or serve as a dividing element in history, culture and society. How to include and select art from the Outsider art world in exhibitions in a way that actually promotes inclusion, and paying attention to the stories that are told.

Cardinal (2009) explored the overlap between Art brut/Outsider art and autistic art, noting the goal to situate autistic art inside the field of Outsider art. He stated that a certain strangeness, idiosyncrasy, can be seen in autistic art, which he considers to be a mark of a private world captured in the image, which allows us to explore the world of that person, in a way we travel to a foreign country, it allows us to experience the otherness, which can provide us not only with aesthetic pleasure, but also serve as another medium of human contact (Cardinal, 2009).

2.3 Art as a diagnostic and therapeutic tool

The characteristic symptoms of ASD can be distinguished from typical development or other developmental conditions in around 18-24 months, and thus that is the time around which the diagnosis of ASD can be made (Zeidan et al., 2022). However, the age when the first symptoms become visible differs, and the symptoms sometimes do

not look specifically like autism, and the majority of neurodevelopmental disorders at this age manifests themselves similarly (Ostatníková et al., 2022). The diagnostic process of autism spectrum disorder thus usually consists of complex multifaceted examination, including examination of the behaviour of the child/adult, detailed interview with the parent or caregiver, using specific designed observation schedule (ADOS-2) and questionnaires. In Slovakia, Autism diagnostic interview - revised (ADI-R) questionnaire is currently available. Although we are able to gain valuable information necessary for diagnosis this way, we are not able to get an absolute answer, and the final diagnosis can be made only by the psychiatrist, taking into account all the examinations conducted by various experts. Diagnosis in adulthood is difficult, because of other possible comorbid disorders, or because many core symptoms of ASD are present also in other mental disorders (Ostatníková, 2022). Regarding the use of drawing in the diagnostic process, there are specific tests that are designed to detect ASD, such as drawing human, house and tree and others.

There are several case studies that see the potential in the use of analysis of drawings in a large-scale screening of ASD, which would be advantageous due to the fact that paintings can be obtained fairly easily, and their production as such can have therapeutic effects. Shi et al. (2021), trained a Support Vector Machine (SVM) model to classify the paintings of children on the spectrum and neurotypical children based on the previously found and extracted features, which proved to be a very effective way for classification of ASD. Bergmann et al. (2021) also noted that drawings of people with ASD with intellectual disability could be helpful in the diagnostic process.

Art creation also has therapeutic qualities, and there is growing evidence of benefits of art-based programs and their potential to positively impact a person's wellbeing (Brydn e et al., 2020). Art therapy has a great quantity of benefits, there is evidence that it can reduce stress, and also enhance cognitive functions, improve self-esteem, develop social skills and become more emotionally resilient (Stuckey & Nobel, 2010). In many cases, drawing skills in people with ASD do not really change with time, but in certain cases, individuals with ASD could perhaps also be able to learn new art

techniques and widen the guardrails of their creative process (M. Kralovič, Personal communication, December 8, 2022).

2.4 Literature review of typical features of ASD artworks

Artworks created by people with mental and other disorders or illnesses had been inciting the interest of people for decades. The cases of several autistic savants engaging in artmaking have been studied and documented very thoroughly, however any definite answers are difficult to reach because of a number of reasons. Evolving classifications and definitions of autism spectrum disorder, vague nature of the category of Art brut/Outsider art, common misdiagnoses and complicated aetiology are some of them (Schott, 2012). Artwork of people on the autism spectrum specifically has been studied mostly through case studies of a small number of individuals, with focus on different aspects of the phenomena of art in autism. I would claim that the small sample size, fragmented studies and constantly evolving research on autism spectrum disorder is the reason to continue thoroughly expanding research on the topic. What can be said with certainty is that although it has been studied relatively sparsely, the artwork created by these individuals has the potential to serve as a very valuable tool for investigating differently functioning brains (Schott, 2012).

2.4.1 Features of autistic art

According to research conducted on the topic, several authors came to the conclusion that certain specific features can be observed in ASD artworks (Bergmann et al., 2021, Cardinal, 2009; Kellman, 1998; Mendonca & Savoie, 2018; Schi et al., 2021; Schott, 2012;). Many others explored different phenomena of ASD artworks as well, focusing on different specificities. In search of specific common features in artworks of people with ASD, Schott (2012) mentions a significant preference for a single art medium, repetition, restricted themes, compulsion and need for achieving perfection. Repetition of drawn motifs and ritual-like drawing process might reflect the repetitive sensory and motor behaviour and insistence on sameness identified in HFA with ASD by Barrett et al. (2018). Lesinskiene (2002) analysed free drawings of Asperger children with a good drawing ability, who exhibited originality and personal style and shared some common traits, such as “good depiction of perspective, proportion and movement, certainty and sensitivity of line and shading and detail accuracy,

reflection of children's narrow interests and disinclination to draw people" (p.91; 92). Ivanova (2021) aimed to create different categories of drawings and compare them with the severity of autism measured by The Childhood Autism Rating Scale , 2nd Edition (CARS2). 120 children with ASD were given a task to draw a person, with results showing a tendency for predominant use of circles and colourful spots with vague boundaries in severe and very severe degrees of disorder, but there was a whole variety of drawing categories in mild and moderate degrees. Thus, according to Ivanova (2021), there is not a statistical dependence between severity of autism spectrum disorder and types of drawings. However, some conclusions can be drawn about children's perception of their own bodies, such as that they often identify with non-living objects such as towers, street signs or eccentric houses. Shi et al. (2021) constructed databases of 478 ASD paintings and 490 paintings of typically developed individuals (TD), to analyse the differences and find characteristic features of ASD art, with the use of Support Vector Machine (SVM) model trained to classify the paintings of ASD based on the provided features. Several significant hallmarks found in the work of ASD children included more faces compared to the TD group, which conflicts with the common conception that people with ASD show less attention to human faces, however the faces drawn appeared to be different from the TD controls and weird for others to understand. Jolley et al. (2013) also notes that compared to the control groups, people with ASD (sample size 60 people aged 5-19) did not draw fewer people, although they have drawn more immature forms than their mental age controls. Research by Shi et al. (2021) is one among very few quantitatively and qualitatively conducted works on this topic, and the significant features of ASD art that they noted include the structuring logic, face, repetitive structure, composition location, edge completeness, etc. Compared to the TD group, paintings of ASD children tend to show less logical structure, less complete edges, abnormal composition location, fewer clear boundaries and filled colour blocks (Shi et al., 2021). Baron-Cohen et al. (2009) states that the origins of the relationship between autism and talent begin at the sensory level, include great attention to detail and end with hyper-systemizing. Perreault et al. (2011) investigated visual grouping in autism by measuring sensitivity to mirror symmetry, concluding that HFA people with ASD were markedly more sensitive to symmetry than neurotypical people. This enhanced perception of symmetry in people with ASD may be reflected also in the symmetric

drawing style in the study of Bergmann et al. (2021). Eames & Cox (1994) tested a group of 13 children with ASD on a range of drawing tasks, and compared the results with control groups of 13 neurotypical children of the same age, 13 neurotypical younger children and 13 children with Downs syndrome. They concluded that non-gifted ASD children do not seem to have a special aptitude for drawing, and their visual realism scores were lower than those of the children of the same chronological and mental age. Bergmann et al. (2021) also did not observe realistic design, proportion or colouring that seem to correlate with enhanced visual skills and photographic memory in gifted people with ASD. I would suggest this just goes to show that just as there are differences in drawing aptitudes of neurotypicals, the same is true for neurodivergent people. Bergmann et al. (2021) examined 120 drawings of people with intellectual disability with and without ASD, finding 9 features distinguishing the groups, and being present in artwork of the people with ASD, with most significant markers being line structure and repetition. The typical features in drawings of adults with ASD and intellectual disability included repetitive design, developed varying order, repetition of varying shapes and sequencing as the dominant design features. This is in accordance with restricted, repetitive and inflexible patterns of behaviour and interests or activities stated as a characteristic feature of ASD in ICD-11. However, the variations of order and repetition of shapes suggest certain flexibility. Children also sometimes compensate for processing deficits by "using a serial processing style of creation" (Bergmann et al., 2021, p.6). Regarding the line order, Bermann et al. (2021) speculated that it might correlate with specific play behaviour often observed in toddlers with ASD, such as lining up toys, and in adults with intellectual disability, this might manifest in "the artistic design of lining up pictorial objects and shapes" (p. 7). Mendonca & Savoie (2018) created an evaluation grid to compare visual productions of artists with ASD and found some notable common features, such as use of repetition, figurative themes, fascination for realistic themes and limited colour variation,which could be caused by impairment in perceiving colours (Mendonca & Savoie, 2018). They also suspected dominance of the preattentive perception, which is connected to high fidelity representation of reality, its objects and locations, while 60% of their sample artwork showed elements of perspective, which could connect to a Baron-Cohen's (2009) theory of compensating the weaknesses in ToM, and adopting a form of "spatial systemization,

high preattentive, but poor conceptual vision" (Mendonca & Savoie, 2018, p.9). Kellman (1996. 1998, 2004) noted as significant the focus on repeating structures, systems, patterns, motifs, realism, linearity, contours, dominating lines, limited use of colours and use of perspective and 3D shapes. Sacks (1995) was also contemplating the possible existence of distinctive features in ASD art, when he encountered uncannily similar artwork of two boys with ASD, José and Stephen. He then also notes that visual savants seem to have a better ability to extract the essential features from scenes or designs than neurotypicals and claiming that their memory was categorical and analytic rather than photographic or eidetic, having the ability to select and capture significant features to create their own pictures (Sacks, 1995). However, Roth (2018) claims that although some autistic artworks have some similar characteristic features, the art of people with ASD as a whole cannot be seen as sharing a unified autistic style, which is important to acknowledge, because ASD artworks, while undoubtedly sharing some common characteristics, remain distinctly unique as well.

2.4.2 Creativity and autism

One of the theories explaining success in art states that it is likely associated with great or superior visual thinking ability, that is normatively thought to be associated with right-hemisphere functions. However, although superior visual thinking ability is an asset for reproductive drawing ability, that is important for visual artists, it may not be enough to be a creative artist, coming up with novel or innovative ideas, which may be a different, additional ability (Lowman, 2022, p. 185). Martinková (2006) also noted that she perceived her autistic son's drawing ability more as a technical skill. So how is it with creativity on the autism spectrum ?

Creativity represents a very complex construct, that could be defined as the ability to produce original work, theories, techniques or thoughts. Creativity usually goes hand in hand with displaying originality, imagination and expressiveness (American Psychological Association, 2023).

Roth (2018) emphasises that we should reevaluate our understanding of creativity to be able to make better assessments, since we normally do not see for example

repetition as creative, although it was celebrated in artwork of certain artists, such as Andy Warhol. Mullin (2014) states as a clear message of her book of drawings by people with ASD from all over the world: “Individuals with autism have a spectrum of talent as well as a spectrum of creativity” (p. 16). These statements are necessary to have in mind while assessing creativity on the spectrum.

According to Zaidel (2014), when people turn to the creation of art as a mode of communication while having language deficits, it reflects a natural survival strategy. Creativity most likely seems to be dependent on intact knowledge and semantic conceptual systems represented in several pathways in the cortex. When these systems are not functioning in the usual way, as for example in ASD, creativity is impaired, but artistic talent or skill much less so (Zaidel, 2014, p.1). Kasirer et al. (2020) suggests that there differences between types of creativity have to be noted as well, differentiating between verbal and figural creativity which rely on different cognitive resources. Individuals with ASD are possibly not impaired in verbal creativity, and children with ASD participating in the study have shown more creativity in figural tasks as well, using many cross-category insertions such as house with a tail, etc. Thus, individuals with ASD differ in their cognitive abilities while performing metaphor-generation tasks. Pennisi et al. (2021) explored the relationship between autism and creativity by reviewing and meta analysis of studies of the last decade, coming to conclusion that in ASD population are fewer creative performances than in neurotypical control groups, and that in average people with ASD are impaired in fluency and flexibility, however, they also display higher levels of detail and originality.

On the contrary, Lyons and Fitzgerald (2012) suggest that many features of ASD are advantageous for creativity, for example special abilities in perception, attention, memory and information processing. Similarly, there is more evidence that people with autistic traits are more likely to produce unusually creative and original ideas (University of East Anglia., 2015).

2.4.3 Local processing bias theory

There are opposing theories aiming to explain exceptional visuospatial performance often present in some individuals with ASD. Firstly, weak central coherence proposition, showing local processing bias, and secondly, superior local and intact global processing theory (Drake, 2011). Investigating visual grouping in autism by measuring sensitivity to mirror symmetry, Perreault et al. (2011) found autistic people to be more sensitive to symmetry, and proposed an argument for access to both local and global information. However, a case study by Drake (2011) indicated support for superior local, but poor global processing. Spikins et.al (2018) also argued that exceptional realism, often typical for autistic art, is connected to local processing bias, or detail focus, which can be found both in autistic art and non-autistic artists with great talent for realistic depiction. Drake (2013) noted that performance on local processing assessment was predicted by drawing realism score, not by ASD diagnosis and pointed out possible bias in drawing conclusions on ASD functioning by focusing on work of the most gifted autistic people. Coderre et al. (2018) proposed that "people with ASD use a more bottom up style processing during narrative comprehension" (p.44), which was shown by their difficulties with comprehension of both linguistic and visual narratives, which signifies a more global impairment. However, Bergmann et al. (2021) note that focus on details and individual components, that is, preferred local processing, should not be seen as a disability in global processing, but rather as disinclination, and that it might result in a specific drawing style associated with visual strength. Thus, there is still an ongoing dispute present and further research is necessary to fully answer the question of common exceptional visuospatial performance often associated with ASD.

MAIN OBJECTIVES AND METHODOLOGY

The first objective of my work was to answer the question of how fine art can serve towards better understanding of autistic people through analysis of characteristic features of artworks of people on the autism spectrum and finding out whether we can see the inner world, emotions and social relationships of a person on the spectrum in their artwork through analysis of 2 case studies. The second objective was to analyse the benefits of ASD art being accessible to the public and the situation of access to art made by people on the spectrum, specifically in the field of Art brut in Slovakia.

Data collection and analysis

General foundation for my practical part were findings from scientific literature, based on which I wrote the theoretical part of my work. In the empirical part, based on the specific nature of my research question and information acquired from previous research, I used the qualitative method conducting analysis of data, specifically artworks, observation during the creative process, non-structured and semi-structured interviews with selected subjects. The analysis is presented in the form of case studies, with personal information gained from employees in community centres for people with autism Drahuškovo, from a personal website of the subject and a conducted interview. For my second main objective, I used existing relevant literature and conducted semi-structured interviews and consultations with relevant professionals in the topic, consulted psychiatrist MUDr. Ján Šuba and slovak painter and teacher Vladimír Kordoš, who are pioneers of the Art brut in Bratislava and curators of majority of the organised exhibitions, art therapist Mgr. Michal Kralovič who works with clients on the spectrum on a usual basis, and also consulted 2 people on the autism spectrum.

Sample characteristic

I analysed visual artworks of 2 women on the autism spectrum, Lucia aged 31, diagnosed with atypical autism with light mental retardation, according to the new ICD-11 under the section 6A02.1 Autism spectrum disorder with disorder of intellectual development and with mild or no impairment of functional language, and Alexandra aged 21, diagnosed with Asperger's syndrome, according to ICD-11 under

the section 6A02.0 Autism spectrum disorder without disorder of intellectual development and with mild or no impairment of functional language. The first set of visual data was obtained firstly through employees in the community centre for people with autism Drahuškovo, and then subsequently also by visiting the community centre. Part of the process of the analysis of drawings by the first subject was also art therapy in the community centre, where I was able to observe and participate in the whole creative process and engage in a non-structured interview. The second set of visual data was obtained from the website of one of the subjects.

Method

I chose to do 2 case studies due to the reason that analysis of artworks in this sense provides more informative results and is devoid of unnecessary speculations only with relevant context provided. I did not compare my sample with a control sample of neurotypical examples due to the specificity and heterogeneity of the condition, and relevant sources discouraging from such comparative analysis (Ivanova, 2021). When choosing the artworks for case study 1, I resorted to the process of random selection, attempting to include a wide variety of most intriguing artworks. For case study 2, I included all artworks available. In my case studies, I include a selection of several artworks by the same authors, because some elements present could be insignificant in the whole body of work, and thus for objective results a large amounts of artworks of the same person should be analysed (Mendonca & Savoie, 2018). Especially in case of people with differently functioning brains, the context of the artwork creation is very important, as well as examining a large number of the pictures from the same author, since a large sample can provide more objectivity in evaluating and studying the artworks (Schott, 2012). Autism spectrum disorder has been diagnosed in men more frequently, and the women on the spectrum often escaped attention, and thus my case studies focusing on 2 women provide enrichment of existing research in this manner. Regarding the second objective of my work, I decided to connect the case studies with analysis of the field of Art brut and art on the autism spectrum in Slovakia to provide context for possible future improvements in this sphere. The combined method of theoretical research and consulting the experts on the topic has been utilised, which has ensured the most relevant information on the topic directly

from the source of people actively participating in the sphere of Art brut in Bratislava from the very beginning.

3. EMPIRICAL PART

The empirical part of this work includes two in depth case studies complemented with the artworks that are analysed, followed by the analysis of the evolution of the field of Art brut in Bratislava and its current state, and subsequent propositions for the future.

3.1 Analysis of artworks and creative process

In the following sections, I will attempt to analyse obtained artworks of 2 individuals with autism spectrum disorder in 2 case studies. I will begin with brief personal anamnesis providing necessary context, and continue with analysis of content and form of the artworks. Part of the first case are also observations gained from participating in art therapy in a community centre for people with autism Drahuškovo. Some of the information and observations in the second case are gained through a semi-structured interview with the author.

3.1.1 Case study 1

Fig. 1. Lucia's self-portrait from a reference photo

Lucia is a 31 years old woman, diagnosed with atypical autism with light mental retardation, and tuberous sclerosis. She went to school at Szš Dolinského and Spojená škola at Halkova, Bratislava, has divorced parents, mother working as a teacher, father as a butcher. She has lived in a community centre for people with autism Drahuškovo since 2017.

Content: The topics and subjects of Lucia's drawings are sometimes drawn from a reference, but she usually draws from her memory. She usually depicts various figures from pop culture, mostly her favourite singers. She also often draws animals, cartoon topics, and figures from her favourite movies and tv shows, e.g. mermaids from H2O, Just Add Water. Sometimes she portrays specific places she has visited and animals she has seen. Her topics are usually figurative, she does not create abstract themes at all and would most probably not be able to produce such themes. The faces she draws are in many cases bigger than the rest of the body, which indicates more special attention paid to them than we would perhaps expect based on some previous findings and observations in the relevant literature. Lucia's drawings usually have a background filled with one or various types of colours.

Form: Lucia does not use perspective nor knowledge of actual physical properties of the objects she draws. She exhibits the compositional business, "kenophobia" - fear of emptiness, having the tendency to fill every little bit of artistic surface, mentioned by Prinz (2017, p. 262). Typical features of Lucia's art are a characteristic childish style, preoccupation with using the dedicated drawing surface, however big or irregular it would be (see first picture in Figure 8, Bambitky). She has a specific style which is observable almost in all of her drawings. The topical and style stereotype is present, which creates the perception of a series of drawings. She does not shade or mix colours, she usually creates outline and then just fills in linearly defined shapes. She draws from an inner impulse, the process is more important than final products, in which she does not exhibit great interest.

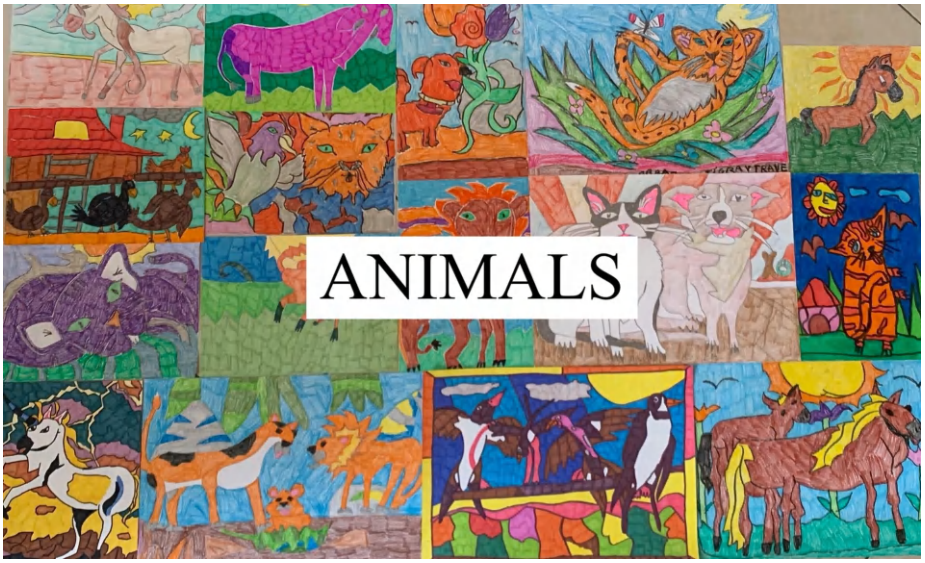

Fig. 2. Animals mixed selection

Lucia draws a wide variety of animals, and is not concerned with the realistic use of colour. Sometimes the way she draws results in certain melting or breaking up the typical shapes, which although not intentionally, nevertheless creates an interesting slightly abstract impression.

Fig. 3. Animal examples

Art therapy in Drahuškovo

When provided an exemplary artwork to draw, she looks at it only briefly. She notices certain essential features that she copies, but is not bothered with the details or correctly reproducing the colours. She usually draws with markers or crayons, and when introduced to a new medium or technique, she tends to proceed the usual way of filling in the shapes, not showing interest in learning a new technique, e.g. shading or creating abstraction. She used acrylic paints similarly to crayons and just filled the spaces with colours without any mixing. When asked to write on the other side of the paper what she drew, she did not remember the names of the people and objects introduced and explained to her at the beginning of the session, and wrote different names. *The Tower of Babel* (by Pieter Bruegel the Elder) was labelled as Colosseum, and Girl with a Pearl Earring (by Vermeer) as Empress Sissi. The motives she was familiar with beforehand were labelled correctly. When asked about the motives of the drawings she did in a more distant past, while remembering some of them correctly, she tended to forget many of them, and had a tendency to just repeat after the person that was asking her about the drawings and suggesting the possible motives. She likes the attention she gets thanks to her drawings, and is keen on showing or giving her drawings to other people.

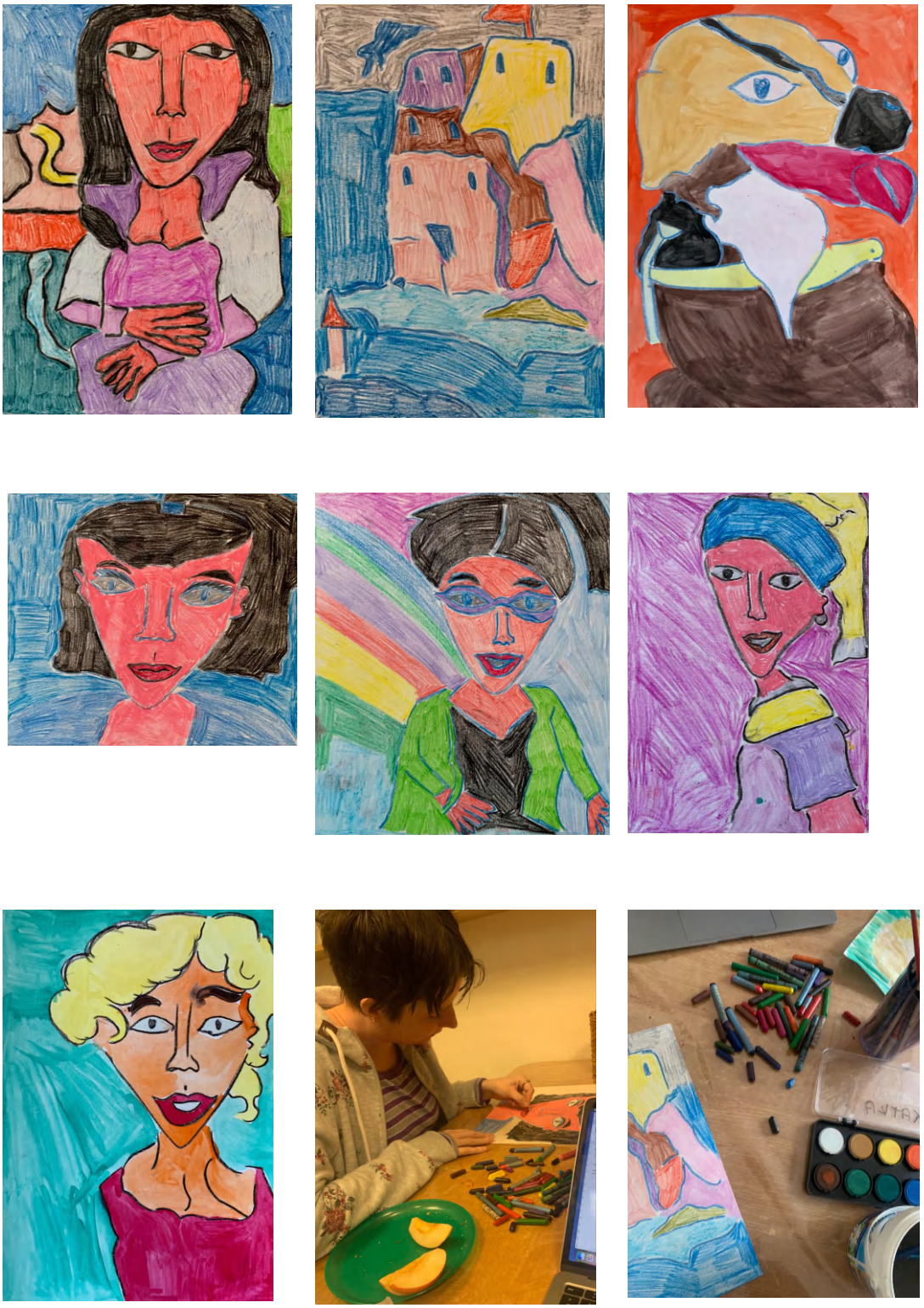

Fig. 4. Art therapy paintings and documentation

Fig. 5. People

The most common motif of Lucia's drawings are people. The most common motif are pop culture figures, which connects to her interest in music and singing. However, she is not directed at correct replication of their basic features, and often uses random eye, hair and skin colours. She usually includes certain details she notices that are visible in pictures of the person she draws, for example jewellery. She draws fingers in a specific, simplistic way, and other notable elements include peculiar teeth, eyes and broken-like limbs, which sometimes add to the drawing a queer, perhaps startling aspect.

Fig. 6. Mermaid topics

Fig.7. Singers

Fig.8. Unspecified selection

Fig. 9. China

Inspired by famous artworks

Included artworks are clear interpretations of famous works of art, The birth of Venus by Sandro Boticelli and The Kiss by Gustav Klimt.

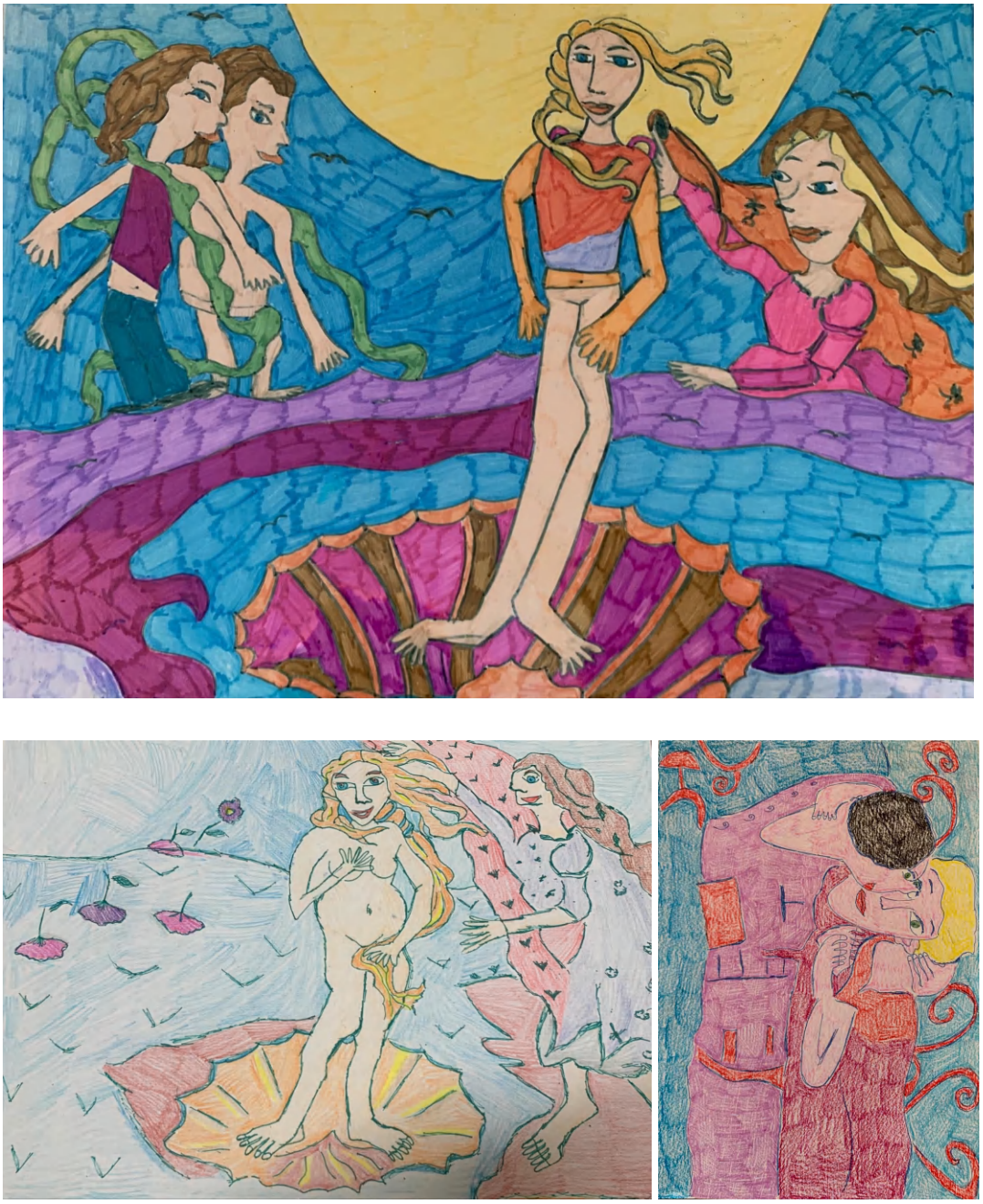

Fig. 10. Inspired by other artworks

3.1.2 Case study 2

Alexandra is a 21 year old girl diagnosed with Asperger syndrome, she has high IQ, and currently studies Pure Mathematics at *FMPH CU BA*, is a research associate of an internship at *SAS, Mathematical Institute*, member of *Triatlon Team Nereus Žilina* and an independent painter. She started drawing in childhood, when she was 5, she started attending primary art school, and later participated in many art competitions. At this time, she was not creating her own art, she did not feel the need to, and the rules and demands in the school did not really motivate her, more on the contrary. When she creates her own art, the process is very intuitive, and she could not really explain this to her teachers at a time. During high school, she did not draw at all, but then at 17 wanted to create a gift for her maths teacher, and in the process of creating it realised she misses it, and it is a part of her personality that nothing else can replace. She then started creating her own artworks, without any professional guidance, just exploring it on her own. She thinks that the length of time she is painting does not really significantly influence her technique and so on, and although she thinks the formal art education and focus on technical drawing could result in some progress in her painting, it is not her natural way of expression, and she has her own style that is free from the grip of technicalities. She feels that the quality of her paintings did not really change since she started actively painting at 17, although she noted that she is able to finish the paintings faster. Regarding her artworks at primary art school, she noted that she thinks that when the topic did not resonate with her, it was hard to make any progress in it, she had to be personally involved to paint/draw well. However, when she did like it, it went well right from the start.

Form: Her artworks are specific by high fractal dimension, with very dissected details. Having OCD, she is very focused on the details, and is able to make minor insignificant changes in the painting for a very long time until she is fully satisfied. Her first painting took her 2 years to finish because of this, she wanted to find the perfect colours to convey the message she wanted to and it took a long time. Extreme detail, interface between realistic and abstract art, using real motifs and complementing them with her feelings or personal perspectives are some elements specific to her artworks. A's paintings are sometimes conceptual, rather than visual, expressing her personal thoughts and feelings, often about romantic or unconventional

relationships, she likes to hide intimate feelings in symbolic visuals. She compliments external motifs with personal emotional level, and being a synesthete, the colours she uses to express her emotions are connected to them internally. She has alloys of colours associated internally with certain emotions, and she associates colours also with numbers, letters and music, and touch, although weaker, and taste, but not with colours, but with other objects, people etc.

Content: In most of her paintings figurates the sky, sometimes with stars, she likes to paint motifs of the universe, and most of her paintings also include maths, since she has a very mathematical way of thinking. She tries to connect maths with art, showing people the beauty of maths as a language of natural laws, and as elegant, sophisticated and majestic. She tries to do this by including maths formulas in her paintings, for example in her painting Numeni Nexus, Numbers of connection, she added the maths formula for love as a fusion in complementarity, birth of an energy. In another painting, she mathematically expressed how she and someone else changed in time and consequently, so did the dynamics of their relationship. In conclusion, she usually paints people, sky and maths. She feels she uses a specific type of imagination, and intuitively connects real components in a new, original way. When she paints, she does not really think about it, and feels that it just happens and works just like that. She thinks in a combination of patterns, visuals and symmetries, which complement each other, and feels like she has to do a translation to verbal language, which is sometimes tiring. She notices small elements in the visual world that can create a compound or jigsaw puzzle together, and then it connects to a colour as well, and then this translates to different types of information (A. Dyalee, Personal communication, January 9, 2023).

Fig. 11. Arbor Diligat (Parturient Love)

It was created for a high school professor. “The salient calling of Arbor Diligat stands for the light. The deep and playful sparkling of the very alive and blooming soul of nature.”

Fig. 12. Nova Sententia (Viewpoint of Freshened)

Alexandra’s friend with AS.

Fig. 13 Tribus (The Triplet)

A wedding gift, Alexandra's brother and his wife, creating one unit, how 1 + 1 can be equal to 3

Fig. 14 Beatitudo Pura (Mercy)

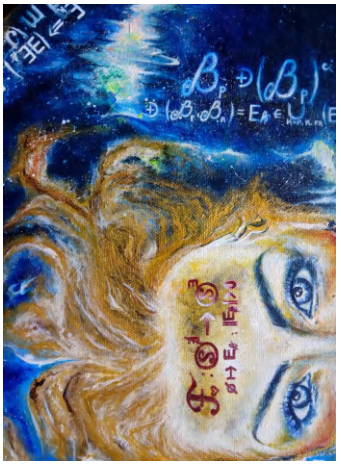

Fig. 15 Numeri Nexum (Figures of Interconnection)
About friendship between two women scientists with AS.

Fig. 16 In Via (The Pathway)

The internal stamina and "trust toward one's own self during moments of getting

emotionally broken." Inspired by a romantic relationship, "portraying formulas of the energy of a complex human being undergoing the heavy transformation"

3.2 Understanding through art - the argument for ASD art in public space

It is recognized by art educators that visual arts are a form of communication (Efland, 2022). According to Furniss (2008), drawings are in fact the evidence of the thoughts children have during their creation, although they can often be only representations of repetitive obsessions or depictions showing very narrow interests. For many children, art facilitates understanding in a way that otherwise would not be possible, and it is claimed that autistic children are "able to create a visual vocabulary that both creates and then expresses meaning" (Furniss, 2008, p.11).

As Kellman (1998, p.39) concludes in a study of two autistic boys with predilection for drawing, through the "development of their personal narratives, enhancement of social interactions and continual meaning making through their art, they can engage the social world more fully" and that is the reason to see their art making as an important activity serving their integration and a way to become more involved in the world. In this study art is viewed as having narrative, integrative and interpretive attributes, and also as "means for creating meaning and personal structure." Finding or creating a narrative through which life makes sense means finding one's self (Kellman, 1998, p.46.).

Because each case is very specific, and each individual needs a different approach or help with different areas, identifying and addressing specific areas is more useful than a generalised approach. Many people with Asperger syndrome are more receptive to visually experienced information and also may dislike repetitive complex verbal explanations (Martinovich, 2006), and thus a necessary step of an effective process would be expressing information in a way that would meet their needs for processing. According to Martinovitch (2006), it is "useful to integrate non-verbal strategies congruent with the AS way of thinking to facilitate effective learning" (p.34.) and it is art that provides a way to communicate more expressively without the constraints that the conventional language has and cannot cross. Lesinskiene (2002) also claimed that the drawings reflect the specific features of Asperger syndrome, and that they can

serve as a tool for understanding the inner world of the children with ASD and thus a good means of communication.

Nardacchione, G. (2021) also explores Uta Frith's views on the intersection between art and neuroscience, noting that this intersection could generate new understanding of the intrapsychic and interpsychic worlds.

Art can thus also be very useful as a subject for social interactions, holding a space for interpretation of other people and at the same time being an “existing invitation into the world of the author” (Kellman, 1998, p.47). Moreover, Darewych (2018) noted on the basis of expressed affinities for art activities by people with ASD, that the possibility to attend art galleries or museums should be provided for them as well. This also calls for adjustments in such public spaces to be inclusive also for people on the spectrum.

Keeping in mind all the benefits art can provide, and the fact that engagement with visual art promotes social connection, the question is, what are the real-life findings and experiences. Is art on the spectrum accessible? Why should it be more on display and how can it be really beneficial?

3.3 Access to ASD art in Slovakia and abroad

Autistic art is often included in the category of Art Brut. One of the pioneers of Art brut in Bratislava has been Vladimír Kordoš. He created activities for people with mental illness with prospects in fine arts under the organisation Liga za duševné zdravie [Slovak League for Mental Health] which was founded and led by many ears by a psychiatrist Peter Breier. Within the Nezábudka Gallery, Art therapy atelier was established and there was an open call for artworks, then some of them were selected by a group of professionals, and then the couple of people came to Bratislava once a week to consulate their work, create and have activities together, which led to the creation of a collective. They were aware of their conditions, often very intelligent, but from different regions of Slovakia and in their environment often lonely. This way they were able to find a common denominator, able to find and create a community. They were looking forward to the meetings, and the exhibitions of their works gave

them more self-confidence, and they became less isolated (V.Kordoš, Personal communication, February 21, 2023).

There has been a smaller exhibition done in 2010 in Gallery Z, preceding the big one in Gallery 19 in 2013, that was also curated by V. Kordoš and J. Šuba. The exhibition in Gallery 19, *Art brut na Slovensku [Art brut in Slovakia]* was a first large project of its kind, with core artworks from Nezábudka Gallery collection, but also from other civic associations helping people with mental illnesses. It was aiming to contribute to better awareness of mental illnesses, and to contribute and shape the discussion in a positive way, and was complemented with a rich accompanying program (Art brut na Slovensku, 2013).
In 2014, the beginnings of collaboration between Bratislava and Brno in the field of Art began. This collaboration brought many activities in several fields, art workshops, exhibitions and so on. However, later the creative workplace under Liga za duševné zdravie was closed, and many of the things went to the hospital in Pezinok. Last exhibition was made in Čin-Čin gallery mostly from the archive of V. Kodoš, with help of Dušan Nágel, Igor Minárik and others, and they tried to create a complex view on this phenomena. However, the responses, although positive, did not generate much further action. Many people came to the exhibition, but without an institution this was the end of their endeavours under Liga za duševné zdravie (V.Kordoš, Personal communication, February 21, 2023).

Then, with help from initiative people from Brno, some activities continued in collaboration with atelier KreAt. In Brno, activities around Art brut are concentrated around Antonín Krejčíř, who was also the initiator of exhibition *Art brut Brno.* The differences in possibilities in Bratislava and Brno are incomparable, with Bratislava having much less options. With a huge help and in collaboration with Brno, there have been several activities, exhibitions and workshops since. Czecho-slovak workshop KreAt Brno, OZ DZD, Motavian Gallery Brno connected with a lecture and exhibition of naive art from the archive of Slovak National Gallery in 2016. In 2017, there were several activities, including a workshop connected to the exhibition *Best of Art Brut* in Gallery Čin Čin, where later some more lectures and other happenings took place. Then there was an exhibition *Best of Art Brut & atelier KreAt* in Brno,

which also included works from Slovakia, and lastly another workshop in Brno. In 2018, there was a literary evening in Radnička, screening of samples from a prepared movie *Drsne a nežne* about the people with mental illnesses and connecting with the Art brut gallery in Budapest. In 2020, there were several projects in civic association *Krídla* (Art brut Brno 2020, 2021). The collection of naive art in the Slovak National Gallery was started in 1965, with the initiative of Štefan Tkáč. Today it consists of more than 800 works of more than 80 artists both from Slovakia and abroad, mostly from the 20th century, and a significant part of it consists of works of Art brut and Outsider art.

However, many people who were trying to raise awareness and push things forward in the field of Art brut are gone, and Art brut in Slovakia is lacking any systematic financial and institutional backing. Having a place for discussions, lectures, exhibition and art therapy is much needed for creating awareness about mental health issues and illnesses and softening the wider public (Hvorecká, Art brut Brno 2021, 2022). In 2022, there was an Art brut exhibition in the gallery of Slovak Radio Building, which was the second largest exhibition of this kind in Slovakia. In September this year, there is going to be another exhibition, however, this will be possible again only thanks to the initiative of a couple of individuals and their connections (V. Kordoš, Personal communication, February 21, 2023).

Bratislava, and Slovakia in general needs more spaces for Art brut, Outsider art and art on the autism spectrum as well. It has a great potential for facilitating discussion and spreading awareness, which is greatly needed, in Slovakia especially, since we have no screening for prevalence of autism in the population and late diagnosis can come with consequences that could have been prevented. Speaking with a young girl on the autism spectrum, Sabina, she stressed the importance of the diagnosis and described the difficulties she experienced regarding the diagnostic process. She was diagnosed with Asperger's syndrome only when she was older, and it significantly helped in creating better understanding between her and her family members, which she valued greatly (S. Čechová, Personal communication, March 1, 2023). Art on the autism spectrum should be displayed for spreading greater awareness and understanding of autistic people, because as it was found, certain features of ASD art are similar and could help to better illustrate certain aspects of what being on the

autism spectrum includes. When we ask the question what is the role of art nowadays, the answer could be simply to make us feel, to activate our emotions, and since art conveys the inner world of the author, in the case of some people on the spectrum, it can be a way of connecting otherwise unconnectable. There have not been many bigger exhibitions specifying on the art on the spectrum, other than the small ones realised by community or art therapy centres, which thus reached only a certain group of people, often already somehow involved with it. Wider public remains unaware, and the existing potential of the artworks is unemployed.

RESULTS AND DISCUSSION

The first main objective of my work was to analyse the characteristic features of artworks on the autism spectrum based on 2 in-depth case studies. I can conclude that based on my analysis, there are certain characteristic features present also in my case studies, and they are connected to the specifics of the autism spectrum disorder.

In case study 1, I found certain recurring parallels, like stereotypical repetition, in the sense of both content and form, with drawing very similar motifs over and over using the same technique, which could be in a sense described as a "factory drawing production." Even the line order in many of the drawings is repetitive, creating peculiar blocks design, mostly when using markers. The repetition can be seen also in the use of mostly the same medium, drawing with crayons or markers, there is also a certain need to create a present, with the focus on the process, not the outcome, resulting in an extremely large number of finished artworks. These typical repetitive features and production are in accordance with repetitive patterns of behaviour and activities characteristic for people with ASD (ICD-11). Other typical present features included "kenophobia", making sure to fill in the whole artistic surface and figurative and realistic, although infantile-like themes, which are in line with the hyper realistic view on reality typical for people with ASD. The inner world of the author was observable in drawings, she drew what she was most interested and focused on, her favourite characters from movies, shows and cartoons and pop culture, with special focus on musicians and singers.

In case study 2, typical features present are the high focus on details, perfectionist tendencies, with the author having the need to make minor changes in the painting until she is fully satisfied. Other features include the high fractal dimension, dissected details, interface between realistic and abstract art, realistic motifs complemented with personal feelings or perspectives. Regarding the inner world of the author, it is almost always present and observable in the artworks, she uses painting to express her thoughts and feelings, often about relationships. Being a synesthete, the colours she uses to express her emotions are connected to them internally. The elements recurrently present in her work are usually people, sky and mathematics. Because she thinks in a combination of patterns, visuals and symmetries, which complement each

other, painting for her is very natural, since she does not have to do a translation to verbal language.

When compared, although the artworks of the 2 case studies included in my work seem visually very distinct, they do share certain common characteristics. Frequent use of various colours, the need to create, with drawing/painting being a very natural way of expression, figurative, mostly realistic topics, and inclusion of the inner world of both authors in the paintings are some of the most apparent observable features. Many aspects of their artworks and their process differ as well, however, in both cases are present some of the spectrum of features typical for ASD artworks observed in previous studies.

In my analysis of the situation regarding access of the public to the artworks by people on the autistic spectrum, I have found that although the activities that were done enabled often isolated individuals to create a community, became less isolated and gained self-confidence, there is insufficient financial and institutional backing for such activities and exhibitions. Art on the autism spectrum is presented to the public mostly only through small initiatives of community and diagnostic centres and art therapy ateliers, that often reach only the people already involved with the topics of Autism spectrum disorder and Art brut. Art brut in Bratislava is surviving thanks to the persistent work of a few individuals and support from Brno, and the potential of activities and exhibitions in this sphere in Slovakia remains unemployed, which calls for further action.

Limitations

First of the possible limitations of this research might be the small sample size and also the broad range of functioning included. Although it provides a more comprehensive view, a case with light mental retardation and a highly intelligent case differ significantly. Thus there is a limited generalizability, although certain features and aspects presented a recurring theme. Secondly, evaluation based on my assessment might include a potential bias in the analysis process, with focus on the known facts and features and being oblivious to others. Thirdly, regarding my second

objective, enlarging my sample size would be beneficial as well, since it would provide more objectivity and diversity of views that are crucial especially to this topic.

CONCLUDING REMARKS AND FUTURE WORK

In conclusion, although manifested differently, it can be evaluated that there are certain typical features of autism spectrum disorder present also in the 2 case studies analysed. Regarding the analysis of the inner world and social relationships, these themes were largely present in both case studies and perhaps also because of the influence of gender. Expression through art can serve as a means of visual communication, compensating or enriching communication abilities, going beyond what the words can describe. Creating in this sense is an act of communication which could be analysed and utilised for gaining better understanding. Thus, more attention should be paid to visual creations of people with ASD. Furthermore, the autism spectrum art scene in Slovakia is still not properly explored and the Art brut activities contained only to smaller projects, yet it has potential that should be further analysed and employed.

Because more and more people are diagnosed with ASD, and understanding and disposing of myths is a first step towards inclusion, ASD artworks should be utilised for gaining better understanding, since they provide a good way of educating the general public. People with autism spectrum disorder are thinking and feeling differently, not worse. In a more perceptive society, this could be seen also as an enrichment, but often, our inability to understand otherness makes it a disability. In the words of Martinková (2006), “what we see, people with ASD have to learn, and what we have to learn, they see.” (p. 247). Thus, socio-emotional education is the key thing, because it affects the degree of integration into society. And art has the capacity to enable the both sides to meet, and to learn from each other.

RESUMÉ

Záverom možno zhodnotiť, že určité typické črty poruchy autistického spektra sú prítomné aj v 2 analyzovaných prípadových štúdiách. Čo sa týka analýzy vnútorného sveta a sociálnych vzťahov, tieto témy boli vo veľkej miere prítomné v oboch prípadových štúdiách. Vyjadrenie prostredníctvom umenia môže slúžiť ako prostriedok vizuálnej komunikácie, kompenzujúci alebo obohacujúci komunikačné schopnosti, presahujúci rámec toho, čo môžu slová opísať. Tvorenie v tomto zmysle je akt komunikácie, ktorý by sa dal analyzovať a využiť na získanie lepšieho porozumenia. Preto by sa mala venovať väčšia pozornosť vizuálnym výtvorom ľudí s poruchami autistického spektra. Okrem toho je výtvarná scéna autistického spektra na Slovensku stále riadne neprebádaná a aktivity Art brut, ktoré sa dejú patria do iba do menších projektov, a teda potenciál tohto umenia by mal ďalej analyzovať a využiť.

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