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# The Child Prodigy, Poet, and Scholar Uku Masing

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#### **Abstract**

The poet and scholar of Estonian origin Uku Masing (1909-1985) possessed prodigious level skills in multiple domains and superior eidetic memory. A body of recently published texts and documents, especially the personal letters from the age of 18 to 25 years, allows an analysis of Masing's autistic traits and various forms of synaesthesia. The combination of these two conditions has been demonstrated to promote the potential talents of a given individual to the exceptional levels of savant syndrome. In retrospect, Masing can be shown to have been a child prodigy and prodigious savant who was capable of very fine artistic expression in poetry. He had a wide array of special interests that formed a unique assemblage. He displayed unusual ways of self-expression and language peculiarities that can be partly explained with his autistic traits. The scope of Masing's special interests, his literary and scholarly activities and achievements are analysed as well as various aspects of his everyday life difficulties, such as coping with the social world, anxiety and depression.

Keywords: Prodigiousness; synaesthesia; Uku Masing; autism spectrum; savant syndrome

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### Introduction

Uku Masing was born in a farmer family of Rapla County, Estonia in 1909. During the interwar independence period of Estonia (1918-1940), he studied at secondary school in Tallinn and completed the academic curriculum in theology at the University of Tartu, 1921-1930. Uku Masing was academically very talented. He entered the university at the age of 17 and finished it with master's degree four years later. He pursued his academic career in the Hebrew Bible and Semitic languages with a government stipend in the German universities of Berlin and Tübingen in 1932-1933. He chose the study of ancient Ethiopic manuscripts and the Geez language as his areas of specialization. In Germany his prodigious talent was recognized among others by the Tübingen professor Enno Littmann (1875-1958), who wished to collaborate with him and with whom he remained in contact through letters (Trüper, 2018). In 1935 he published his first collection of poetry *Promontories into the Gulf of Rains*. Throughout his life, he assembled 24 collections of poetry, some of which were published abroad during his lifetime or posthumously in Estonia. Due to censorship he could not publish any books in the Soviet Estonia. He was also the author of one fantasy novel that employed romantic themes related to the South Pacific islands that were popular in the global culture of the 20th century (Masing, 1989).

Uku Masing was capable of very fine artistic expression in poetry and remained a prodigious scholar throughout his life. The manuscript of his dissertation on the book of the prophet Obadiah was almost completed in 1933 but was eventually defended in 1947 (Masing, 2006). Masing had hyperlexia and superior eidetic memory, which enabled him to memorize several hundred book pages in a day. He possessed reading skills in ca. 60 languages (Paul, 1989). During the Soviet period, Masing became a persona non grata due to his academic affinity to theology, experienced restrictions to his self-expression, and was never academically promoted during the last 40 years of his life. He could publish papers only in academic journals. During 1964 to 1974 he was unemployed and could continue his work thanks to the support of his wife

and friends. He was married to Eha Masing (1912-1998) since 1939, but they had no children. His prodigious learning always attracted a small circle of devoted students with whom he maintained a regular contact. In his scholarly writings, the bigger part of which was published posthumously, Masing revealed his massive knowledge in many domains of cultural history and theories. He was also a prolific translator with "brilliant linguistic originality" (Ross, 1988). His new version of the Hebrew Bible in 1939 surprised its readers with novel translation equivalents. The field in which his excellence became well acknowledged was folklore studies - besides many other papers he published 14 articles for the international handbook of fairy tales, Enzyklopädie des Märchens during the last decade of his life. As an example of the level of expertise he achieved it can be mentioned that the popular edition of Armenian fairy tales in West Germany was primarily based on Masing's work (Levin & Masing, 1982). Masing had a lifelong interest in fairy tales and possessed enormous expertise in this field.

In this paper Masing's neurological condition of a prodigious savant will be discussed. Recent studies in neurosciences have established that the savant syndrome may arise in individuals with autism who also happen to have synaesthesia (Hughes et al., 2017). It will be demonstrated that Masing had both conditions. Synaesthesia is the phenomenon of "pairing of senses" in which a stimulus in one perceptive domain automatically triggers a sensation in another, e.g. music as an "inducer" would bring about a colour as "concurrent" (Simner, 2019). The connection of autism with special abilities and creativity has been demonstrated in recent decades (Fitzgerald, 2004; White & Shah, 2020). Baron-Cohen et al. (2007) hypothesized that combination of autism spectrum with synaesthesia may increase the likelihood of savantism, which Hughes et al. (2017) later supported. Synaesthesia was specifically found in individuals with autism, who also reported having savant skills (Hughes et al., 2017). People with synaesthesia can have perceptual and cognitive enhancements e.g. in processing speed (Simner & Bain, 2018), memory (Rothen et al., 2012), time-and-space mappings (Simner et al., 2009), and artistic creativity in general (Simner, 2019). When these advantages are coupled with autism, the latter may confer additional enhancements, which together can promote the talents of synaesthesia to the exceptional levels of savant syndrome (Simner, 2019). Synaesthesia can also increase motivation for learning, because the objects of special interest such as numbers, letters etc. acquire crosssensory qualities that are emotionally appealing (Tammet, 2010).

According to Gruber (1989) the case studies of creative persons give account how knowable processes bring about unique outcomes and help to grasp the complexity of each individual. The student of creative work can make the understanding of that uniqueness the central goal of the investigation by focussing attention how the person is organized as a complex system at work. Serious study of the creative work requires careful and prolonged attention to the moving target of changing individual, which should be accompanied by the research into psychometric variables (Gruber, 1989). Although Uku Masing's abilities were never scientifically studied during his lifetime there is sufficient evidence about his personality traits. Masing should be counted among the people with mild autism and synaesthesia who possessed prodigious level skills in multiple domains. The development of his character traits can be analysed using self-reports that are found in his personal letters, especially those written when he was 18-25 years old (Masing, 2006; 2012) and in his autobiography Botanical Recollections (Masing, 1996). The latter book represents an encyclopaedic account of all herbs of interest to Masing as well as his reminiscences about different people and life episodes. These publications contain honest self-descriptions about his everyday sensory experiences and difficulties, anxiety, depression, and problems in social domain, which demonstrate the other side of his personality and reveal a form of broader autism phenotype (Fitzgerald, 2018). As recent research has demonstrated the persons with synaesthesia are also at risk with mental health issues such as anxiety disorder (Carmichael et al., 2019).

# The child prodigy: Masing's special interests

Masing was a child prodigy who grew up in a peasant milieu where his talent was not well understood. According to M. Fitzgerald (2011), for creativity of genius proportions an IQ score over 120 is mandatory as well as an autism spectrum condition. Masing fulfils these two criteria and additionally had synaesthesia that enhanced his cognitive abilities. Recent research in child prodigies has confirmed their connection with autism (Ruthsatz & Urbach, 2012; Ruthsatz et al., 2017). There is a consistent positive genetic correlation between autism and different measures of cognition, which stands in contrast to other psychiatric conditions (Warrier, 2018). Autism has been called the disorder of high intelligence, especially of "fluid" versus "crystallized" intelligence (Crespi, 2016). Another recent account connects autism to enhanced mechanistic and diminished mentalistic intelligence (Badcock, 2019). According to Fitzgerald (2005, p. 21) the notions "Asperger savant" and "Asperger genius" describe high-functioning persons with autism who are also creative geniuses (Walker & Fitzgerald, 2006). Both general and more specific forms of intelligence jointly contribute to the appearance of prodigies and savants (Feldman & Morelock, 2011). According to D. Treffert's evaluation,

"Savant skills range over a spectrum of abilities from splinter skill to talented to prodigious levels. Prodigious level skills represent a very high threshold and are exceedingly rare, persons with skills at this level, absent a disability, would be classified as prodigy or genius" (Treffert, 2012, p. 48).

The child prodigy is someone who achieves a professional level of performance by the age of ten years or during adolescence – primarily in the fields related to rule-based systems of music, art, chess, or mathematics (Feldman & Morelock, 2011). None of these fields was Masing's area of specialization, but he

achieved maturity e.g. in translating poetry during his adolescence (Kasemaa, 2020). According to a recently explored cognitive model the characteristic features of young prodigies are elevated general intelligence, exceptional working memory and attention to detail (Ruthsatz & Urbach, 2012). A child prodigy does not need extensive time for deliberate practice. The investigation into connections between childhood prodigy and autism has provided evidence that the two phenomena share a common genetic etiology as well as numerous cognitive and behavioural traits such as high IQ and excellent working memory, elevated attention to detail, and passionate interests (Ruthsatz et al., 2017). The child prodigies tend to have autistic relatives with whom they share a genetic linkage for which the locus on chromosome 1p31-q21 has been proposed (Ruthsatz et al., 2015). There are numerous examples of children who were diagnosed with autism and later became highly prodigious. Historical cases of some famous individuals follow a similar pattern (Ruthsatz et al., 2017).

Although Uku Masing lived at the time when autism diagnosis was not possible his self-reports support the hypothesis that he was both a prodigy and on the spectrum (Annus, 2015). Moreover, he remained a remarkable savant for the rest of his life. He started to write literature at the age of 10, his early poems contained either science fiction stories or abstract astronomical data. In childhood he much adored Rabindranath Tagore's poetry and imitated his style when 13-17 years old (Masing, 1998). He translated Tagore's English collection The Gardener into Estonian at the age of 13, which was later published as a book in 1936 (Kasemaa, 2020). In his adolescence he could play classical pieces on piano, produce realistic paintings and sculpt wooden objects (Masing, 2006; 2012). He was interested in mathematics, geology, botany, and ancient Oriental studies. He mastered four languages besides his mother tongue at the level of reading skills at the age of twelve and throughout his life he enjoyed reading and memorizing dictionaries (Paul, 1989). According to a self-report he had extensive knowledge of astronomy at the age of 8 years and in his adolescent years he posed insolent questions to the cosmography teacher at school that the latter was unable to answer. He considered a career in astronomy as an academic option for himself but understood that his eyesight was too poor to make astronomical observations. He wrote in a letter on February 15th, 1930:

"But I would have become an astronomer in a philosophical style if I had been a seer. And sometimes that interest re-emerges again, because in my knowledge of astronomy I surpassed my surroundings and tortured the cosmography teacher (in school) with what he said was "superfluous knowledge", but his knowledge was what I had when I was eight years old. But having more knowledge than an older person has never been useful to the younger one" (Masing, 2012, p. 180).

Reading books was the activity of enormous interest throughout Masing's life. In his childhood he started his passionate interest in herbs and botany by memorizing verbatim the few books that were available at home, even in foreign languages (Masing, 1996). Uku Masing had prodigious eidetic memory - in later times he rarely took notes when reading scholarly books and quoted them from memory when writing his own research (Paul, 1989). Masing had an intense passion for his areas of interest that is characteristic for both autism and prodigy (Ruthsatz et al., 2017). Masing grew up in a devout family and read many kinds of religious literature in childhood. When in university, he began his life-long study of the Hebrew Bible, Semitic languages, history of religions, mythology and folklore in which fields he became proficient. He was interested in history, literature, poetry, science fiction, art - in all these fields he possessed a remarkable body of expert knowledge and strong opinions. At the age of 19 he wrote to a friend about his passion of reading books

about ancient history, which was characterized by a youthful rage to learn:

"Right now I have a terrible longing for Tartu, I put together book lists for reading, I study catalogues and think about time when I can get these books somehow – to know the ruins of Tiahuanaco or the results of the Nippur excavations are more important to me than anything else on earth. The wolf's appetite is right now for the books" (Masing, 2006, p. 14).

However, the full account about Masing's passionate interests should also include its quirkier side. He retrospectively explains this part of his personality in an essay he wrote in ca. 1950, "On the misery of normal thinking" (Masing, 1995). He writes that according to his understanding there is a fundamental flaw in the life course of human beings in which a certain innate ability that can still be seen in children gradually disappears when they grow up, because something in everyday life hinders its use. According to his words, this dormant ability can be kept alive and stimulated by pursuing unusual interests. Masing enumerated his passions that he had maintained in order not to let this inborn ability to die out. Masing mentioned his interests in unusual people, fantasyutopian literature, poisons, pornography, and of learning languages that are strange in their analytical principles (Masing, 1995, p. 170).

The scope of Masing's special interests was very wide, unusual, and original. Hans Asperger has emphasised the natural bias of autistic intelligence to do everything with originality, which can be both its strength and weakness (Asperger, 1944). According to a fellow student at the university and later colleague during 1930ies, Masing was extremely talented, but "somewhat quixotic" and everything he wrote "suffered from excessive individual originality" (Salumaa 2010, p. 309). This characterization was believed to be true also by some other university colleagues. Masing himself wrote about his trait of originality twenty years later as follows:

"Indeed, I am similar to other people only when I force myself to something that I do not want to. As soon as I do what I want, when I am how is natural to me – these moments are now very rare – there is nothing common between me and others" (Masing, 1996, p. 98).

His teaching and research activities at the Theological Faculty of Tartu University were regarded with growing concern among some of his colleagues and within the circles of Estonian Lutheran Church because his scholarly attitudes were not far from liberalism. It was feared that Masing's promotion to professorship would make the teaching of Old Testament studies too one-sided. According to his colleague's opinion, Masing was a very talented Orientalist, artist and poet, but his personal views on theology were too original to be understood by others - these consisted of a mixture from the Christian elements of thought and an extremely pessimistic life philosophy, in which certain Oriental views played a dominating role. The works that he wrote after the World War II contained less pessimistic philosophy and were influenced by Buddhism and L. Wittgenstein. However, the students often found his lectures difficult to understand and Masing was reluctant to change his style of teaching (Salumaa, 2010).

Masing's special interest in explicit nude art was exercised privately but nevertheless brought to him adverse consequences. After Nazis had occupied Tartu in autumn 1941 the German military authorities broke into Masing's apartment and searched through his home when he was away. Their primary motivation was apparently Masing's engagement with the Hebrew Bible and other Jewish materials. However, the Nazi authorities also searched through Masing's personal belongings and found a large collection of photographs which depicted "people in nudity and in different arousing conditions" (Salumaa, 2010, p. 569). These photographs were released into circulation in Tartu and the owner of the collection was often recognized. When colleagues at the university asked for an explanation, Masing said that he conducted

certain "psychoanalytic experiments" using these images (Salumaa, 2010, p. 570).

As the consequence of these events, Masing was temporarily banned from entering Tartu and the university could not employ him during the Nazi occupation (Salumaa, 2010). He also wrote about his leaving the university to Enno Littmann on December 9th, 1941 with these words: "The moral character that I unfortunately have, does not fit into this office" (Trüper, 2018, p. 576). However, after the Soviet occupation resumed in 1945 the theology department was closed again, and Masing's lack of employment at the university during the Nazi regime was a benefit in the new political situation that helped to save him from more severe Soviet repressions. After the war he was employed as lecturer in the newly grounded Institute of Theology in Tallinn 1949-1963 but was forced to leave this institution due to negative attitudes towards him among some members of the church leadership (Kasemaa, 2020).

# Uku Masing's Synaesthesia

At the age of seventy-two Uku Masing wrote the essay How I write poetry in which he described his poems as spontaneously emerging from visual images perceived in his mind (Masing, 1998). Masing had poor eyesight since childhood, but his thinking and learning style was characterised by excessive visualization. Thinking in pictures is a feature often found in autistic cognition (Kunda & Goel, 2011). Seeing was the most important perceptual domain for him and in his essay Masing wrote that he saw music "in flowing pictures" while listening to it when he was young (Masing, 1998, p. 380). This indicates a form of cross-sensory perception that can be called sound-colour, sound-image, or music-colour synaesthesia (Simner, 2019). In later life Masing had lost this ability, which is consistent with the finding that synaesthesia appears to decline in older people (Simner et al., 2017). Masing seems not to be aware about the concept of synaesthesia as he never uses this word when describing his experiences. However, he appears to have been a genuine synesthete, who possessed various forms of it. Throughout his life Masing had a special interest in the study of plants that found its fullest expression in his book *Botanical Recollections*, which often speculates about sound-like and person-like qualities of herbs (Masing, 1996). The next quote from this book is written at the age of ca. 47 years in which Masing compares the differences of colour shades in the flower of amaryllis as seen in the daylight and darkness using terms related to sounds, smells and letters:

"If only one interval in a chord is changed so that it will sound a little more cavernous, as if somebody were opening a seemingly empty hand and thence would start to seep over some slippery smelling palm vodka or rum. Something dark, glowing, intoxicating, something with U and M, but no sound by itself can express its coloration and change. Music can, but neither music can be verbalised nor the variability of colour shades" (Masing, 1996, p. 157).

This passage exemplifies Masing's perceptual ability for mixing the domains of hearing, vision and smelling. These synaesthetic perceptions occurred in connection with the objects of his special interest, the plants and their appearances. Moreover, Masing often described the plants as mindful animate beings, e.g. when writing about the characteristics of heath speedwell (Veronica officinalis): "it has two pollen so scattered as if it were a tiny wonderful butterfly who in addition to its heaven-blue appearance is even happy in mood" (Masing, 1996, p. 91).

This and very many other examples testify to Masing's sequence-personality synaesthesia in regard to herbs. This phenomenon is also called ordinal linguistic personification (Simner & Holenstein, 2007). In this form of synaesthesia there is no pairing of senses but it is triggered by thinking about sequences (Simner, 2019). For sequence-personality synesthetes their

favourite objects (e.g. numbers, letters) trigger personalities or gendered objects and can form a complex cast of characters that have clear and detailed in-depth descriptions, which by itself is a key feature of synaesthesia (Simner, 2019). The sequence-personality synaesthesia mirrors the social surroundings of the given person. This is in accordance with Masing's view that plants are much more worth of attention and serious study than human beings (Masing, 1996). The following excerpt is the example from Masing's text where the herbs from the smartweed family (Polygonaceae) form a cast of human characters:

"Redshank is very crude and with silly appearance like a half-educated person, who is fully convinced that he will live forever and therefore behaves arrogantly. The water smartweed is dirty and slippery like a young girl, who terribly wants to marry a man and is sloppy, forgetting everything else because of this beautiful plan. Snakeroot is quite beautiful in the first sight, but when seen a third or fourth time I cannot shake off the feeling that it is terribly sour like a young girl who has become an old maiden without being able to understand why boys have left someone like her with unique value unreaped" (Masing, 1996, p. 90).

Research has established that sequence-personality synaesthesia is especially experienced by these people who already have other forms of it – multiple forms of synaesthesia tend to cluster within individuals (Simner & Holenstein, 2007). Moreover, Masing also found a place for himself in his society of plants and herbs. He expressed the opinion that he was similar to a chestnut tree, with which he had several commonalities (Masing, 1996). According to his assessment cited below he was different from other human beings in having less drive for goal pursuit and less plans for the future, but more enthusiasm for new ideas and more identity diffusion. Masing revealed his observation that he cannot understand himself so well as normally do other people and he had cerebral

restlessness that is more a characteristic of children than adults. All these traits were related to his autism spectrum condition in which he differed from others (Baron-Cohen, 2008; Fitzgerald, 2014). In the context of his autobiography, he suddenly noticed that there was not much coherence in his already written text:

"This work of mine no longer has a style or plan. All right, there is no plan in myself either. Even in this shamelessness I am similar to a chestnut tree: I do look shapely from distance but in fact I'm just a rafter with sparse prone-to-fall flowers that accidentally have amassed together. Everyone else I know is different, very often the opposite. They are like long fine stems that bear flowers, leaves and fruits at the same time, but quite firm and clear in their plans and essences. They are exactly what they have wanted to be. They no longer strive to anywhere, they no longer have "stupid" aspirations and if, for the sake of looking more intelligent, they still have problems, they tackle them with the necessary dignity" (Masing, 1996, p. 80).

Both autism and synaesthesia are characterised by unusual experiences induced by increased sensitivity across several sensory domains compared to controls (Ward et al., 2017). As is usual in the population of synesthetes, a range of several activities can trigger these experiences (Simner, 2019). That Masing indeed possessed multiple forms of synaesthesia is further supported by the letter he wrote to his girlfriend Lii at the age of 21 (August 20th, 1930). In this letter Masing reported hypersensitivity to a range of stimuli causing a flood of sensations running through his body and unusual experiences such as hearing music when reading a book:

"Life is getting weirder every day. It seems that this part of me, of which I am clearly aware no longer controls the unknown part. [---] Every little thing brings huge waves to me, but only their tops reach to consciousness. Have I ever told to you that many relatives from my mother's side have been epileptics? Epileptics, however, allegedly possess lunatic tendencies. And I find something like this in myself now. When the moon shines, I see the remoteness and everything is like a road to eternity, the light and myself only remain. And in an unpleasant way a lethargic sleep tends to take me over from which there seems to be no hope of awakening. And even weirder is the thing that when I read a book, a tremor runs through my body, as if the book were music." (Masing, 2012, p. 215).

Masing's account about epilepsy in his mother's genealogy also occurred in a letter to Enno Littmann (Trüper, 2018). Although this information cannot be controlled for validity it is highly probable because epilepsy is often comorbid with autism (Baron-Cohen, 2008).

Masing also had experiences of conceptual synaesthesia, which enable to see abstract concepts such as mathematical operations or units of time, as shapes (Shaw, 2018). Masing reports of having seen on a particular occasion the five proofs of God's existence, which "stood before me as images and geometrical shapes" (Masing, 1995, p. 172). In Masing's case synaesthetic reactions were also triggered in response to the sounds of words. When he learned the word Tuscarora, the name of an Iroquois tribe in North America, it immediately became for him a symbol of the world and eternity. In his letter to Lii he wondered that no such associations to this word were found in others whom he had asked (Masing, 2012, p. 215). All this evidence points to various forms of synaesthesia in the ways Masing perceived the world that also enhanced his cognitive abilities.

# A Stranger on Earth: Masing's autistic traits

This article reports the findings from an inquiry into Masing's letters written in the age of 18-25 years (Annus, 2015). These letters abound with self-reports that also offer a good overview of everyday problems related to his autism spectrum condition (Masing, 2006; 2012). Masing often expressed his feeling of profound loneliness and his deficits in the sense of social relatedness and understanding others. These sentiments in early letters are also consistently found in his autobiography written quarter of a century later, where the same problems were analysed with more maturity and hindsight (Masing, 1996). For example, at the age of 21 he reported a lack in the sense of social relatedness that he also remembered from his childhood: "Sometimes I have this feeling [---] that I often had in childhood: adult people are strangers and enemies" (Masing, 2012, p. 241). This psychological feature is related to autism. The adults around him often said that he was an unusual child, e.g. "the child like an old man" when he was seven years old (Masing, 2012, p. 258). He remembered of hearing comments that his head is "too large" in relation to his slim body (Masing, 1996, p. 83). Enlarged head circumference is a characteristic of autistic children (Baron-Cohen, 2008).

The young Masing reported autistic deficits in understanding and relating to others that impaired his social interactions: "I can't do anything because I don't understand them in any way — people are so far away" (Masing, 2012, p. 223); "I am stranger than a stranger on earth, because I do not understand anything in other people. I don't understand them" (Masing 2012, p. 237); "There are only a few people I can sit at the table with, others are as good as the stumps that shine, I do not understand them anymore. And I'm not even trying" (Masing 2012, p. 271). Masing also reported problems with social and emotional reciprocity: "It is terrifying to me to be

alone among a number of people, only a few of whom I know. And it's hard to be there when everyone is happy as if they found the elixir of life and I am like a crow among songbirds" (Masing 2012, p. 105). His autobiography demonstrated a progress in Masing's social understanding of other people, e.g. when using botanical similes for describing them (Masing, 1996).

Throughout his life, Masing reported sensing himself as a stranger in the company of others: "I am a human being who has come from an alien world" (Masing, 2012, p. 96). He preferred solitude and often wrote that he is not interested in other people: "Sometimes I feel myself as if the single inhabitant of the world, which is a little scary, but still really fine, sometimes there are more people in the world and then it's weird to see them around like something that shouldn't be like that" (Masing, 2012, p. 49). His autobiography contained a longer elaboration about his sense of strangeness that often overwhelmed him:

"I am like a lifelong emigrant who never feels as if he is among people of his kind and in a familiar country. I'm really the stranger on earth who steals a day or night to try to visit homeland, and with every impossible means tries to attract others to accompany him. Of course, it is useless because I don't even know the way anymore" (Masing, 1996, p. 99).

Throughout his life Masing was interested in reading science fiction that also influenced his understanding of himself. As a theologian, he thought of science fiction as a genre of religious literature (Paul, 1989). Interest in science fiction is often a feature in autism (Baron-Cohen, 2008). During the second half of his life he developed the literary character of a transgalactic missionary with whom he could identify himself – The Messenger from the Magellanic Clouds – which is also the title of his last collection of poetry (Masing, 2005). In this preoccupation of imagining himself as a stranger on earth Masing's identity diffusion is clearly discernible that is often found in autism

(Baron-Cohen, 2008; Fitzgerald, 2018). Masing easily identified himself with other people sympathetic to him: real, historical or imaginary. He was interested in experiencing mystical ecstasy during the sessions of which he often imagined famous ecstatics and turned his current self into these characters. According to one of his personal letter written at the age of 55, these changes in his identity brought about ecstatic experiences that lasted about 4-5 hours or sometimes a few days after which they disappeared (Annus, 2015).

Masing often complained about sensory problems, especially in regard to sounds and lights (Masing, 2012). In his young age he grumbled about the white summer nights, once with a flavour of synaesthesia: "white nights are spooky like scrumptious currants" (Masing, 2012, p. 89). Because of his passionate interests Masing was often engaged in repetitive behaviours and loved his routines, e.g.: "you're doing something pretty trivial and suddenly it comes like this to the brain: then I did the same and everything was just the same" (Masing 2012, p. 105). In autobiography he disclosed his difficulties in breaking routines even when these became burdensome. As a highly creative person with autism, novelty seeking was a feature of his personality (Fitzgerald, 2018). As a way of relaxing, Masing liked to wander in nature, which habit well associated with his interest in botany. During these walks he enjoyed the sights of open space, which conveyed to him a sense of freedom and relaxation, probably through synaesthetic associations:

"Although I am introvert by nature – even if I try to deny it – my constant and incessant self-restriction is very tiring. Or rather it bothers. It is extremely disgusting to stick to normal, which I do constantly, and to realize that it is difficult to step out of it, and to do anything new. I am not bothered that I have to do something new, but that I do not have time to do anything new, something very different from the usual. Wandering on this path, on all the paths where

there is enough open space and visible heaven, it seems as if I am doing something completely extraordinary, everything at once for which there has been no time." (Masing, 1996, p. 23).

In his autobiography Masing also describes various roles, clothing styles and behaving options he deliberately used when he was young to fit in to the everyday social world (Masing, 1996). He used camouflaging and building temporary identities in order to be socially more successful. This is the autistic coping strategy that often has stressful consequences for the individual (Lai et al., 2017). However, in more advanced age he understood the futility of this strategy of social coping. By admitting his cognitive deficits in the social realm he now preferred to remain himself even in adverse circumstances:

"Half of my life has been spent learning the ways of others, to test and wear their clothes. The other part has been spent to take them off, realizing that I will never acquire their mentality because I am unable to comprehend it, unable to acquire the language of the world. Inevitably something of it has stuck on me and persists" (Masing, 1996, p. 114).

The difficulty in autistic people is not copying others, but the deficient capacity to absorb the culture they inhabit in a neurotypical way (Fitzgerald, 2018). As a religious person, Masing used the term "language of the world" for the aspects of common sense he failed to grasp that social neuroscience calls Theory of Mind, mentalizing, etc. As the quotations above testify Masing had difficulties with understanding the social world whereas his abilities in learning systems and facts were much above average. This cognitive profile fits the description of autism as the condition of high systemizing (Baron-Cohen, 2020). More generally, Baron-Cohen's theory of high systemizing occurring in autism can be applied to the learning and experimenting the rules of any kind of human behaviour (Baron-Cohen, 2008). Masing liked to carry out "psychoanalytic experiments" related to eroticism and sexuality in his younger age (Salumaa, 2010). The general exploration pattern of input, operation, output, and feedback can be used to systemize any kind of behaviour, including sexuality (Baron-Cohen, 2020). Interest for sexual experimentation is not uncommon among creative individuals with autism, although such activities tend to be regarded as immoral and labelled as perversities in common opinion (Fitzgerald, 2005).

# Masing as a Poet and Scholar

Masing's poetry is typically - but not always characterised by a flow of images and experiences that follow one another in kaleidoscopic fashion. Masing's poetry consisted of visual imagery rather than expression of ideas. These images are often influenced by synaesthesia and they don't form any symbolic content for exegesis. This is what the poet has seen during writing when images spontaneously emerge, expand, and associations freely flow (Masing, 1998). This mental condition can be called a "dissociative state" of mind in which intense concentration and focus in solitude are used for creative purposes (Andreasen, 2005). In Masing's own words the imagery of his poetry was composed by the "other self" of himself, which was separate from his everyday identity and the poems aspired to wake up this dormant self also in the reader (Masing, 1998). According to Masing, all true poetry is written with inspiration and therefore it is something standing apart from everyday self and common sense (Masing, 1998). As is characteristic to Masing's thinking, selfhood in his poetry was a restrictive entity similar to prison, from which the poet aspired to break free to a union with divine (Leitch, 1974). Therefore, Masing's poetry writing was partly stimulated by the autistic identity diffusion that searches for the true self through a creative process (Fitzgerald, 2005). As an illustration of Masing's flowing imagery and religious vision the short poem written in 1934, Only the Mists

are Real is cited below. V. Leitch has aptly called the poem "the elegy to existence" (1974, p. 289):

"The wind is a shuttle made of elm-wood, / I am but an airy web of dusk / Which God's tapering fingers of a unicorn's bone / Wove in the warm room of the stars. / The wind is a shuttle, but of what yarn the woof / On the earthen loom is, I do not know; / The radiance of mists, perhaps, when their power died, / Since my head did not reach to the clouds" (Masing, 1999).

Masing's poetic images tended to cluster in a way that no single one of them became more important than others. Therefore, these poems were marked by weak central coherence, an autistic tendency to concentrate on local details instead of conceptual processing and global meaning (Happé & Frith, 2006). Autistic poets in general use all important poetic techniques, but they tend to reflect extensively on themselves and write mostly from their own perspective (Roth, 2008). The fragmentation of language and strong tendencies to visualization can make Masing's poetry difficult to follow. Fitzgerald's general assessment also applies to him: "Autistic poets of genius are likely to do what Walt Whitman described as laying 'end to end words, never seen in each other's company before' using poetry for self-expression rather than communication" (Fitzgerald, 2005, p. 23). Masing's self-expression was sometimes characterized by "autistic narrative" that can be difficult to interpret for precise meaning (Fitzgerald, 2005). Masing's pragmatic use of language was full of peculiarities such as rare words, words that occur in a weird and unexpected meaning, words of unusual derivation, vulgarisms, low style, literal meaning, idiosyncratic syntax, and unusual morphology (Ross, 1988). However, this highly unusual language often has an artistic attraction for its readers.

The autistic peculiarities of language development combined with sensory sensitivities can impair the narrative organization of perceptual experience.

Fitzgerald (2014) writes that persons with autistic brains perceive a huge amount of raw details without the higher meaning and possess a heightened sensitivity to parts without recognizing the whole. Concept formation is impaired in autistic minds (Snyder et al., 2004). This requires from people with high-functioning autism to work hard against perceptual chaos, in which they use very intense and deliberate processes of narrative organization that can also produce unusually deep insights (Belmonte, 2008). Autistic individuals have less mental models or conceptions than neurotypical individuals and therefore they can be more aware of novelty. Persons with autism have "continuous infantile awareness of raw sensory data which produces a vastly increased number of conscious sensations" (Fitzgerald, 2014, p. 9). The autistic poet is more conscious of the effort of narration and therefore can achieve a better understanding of the events around him precisely because (s)he must concentrate hard to construct a theory of reality, to piece it together from perceptual fragments (Belmonte, 2008). Effortful narrative construction was a characteristic of Masing's poetry, which also preserved the perceptual fragmentation for aesthetic reasons. The fragmentation of language and images in poetry can have positive impact adding to its appeal. The ability to leap from one idea to another conveys more attraction to poetic language, which becomes tantalizing and intriguing for readers (Roth, 2008).

According to Masing's own account he found his style of poetry in 1932 while watching a snowfall at home, when his inner monologue suddenly changed to an eye-opening experience of outside world (Masing, 1998). He has written about this moment of sudden insight:

"I had some calm and wakeful leisure time to watch in a quite quiet weather a sparse snowfall: how the flakes got stuck in a large lime tree with lichen trunk or fell back, floated lower or down. Then I suddenly realized that I had never seen

snow, snowfall, tree trunk or anything else in the world, and from that moment on I can really see everything" (Masing, 1998, p. 377).

This vision in the snowfall provided the model of poetry writing for Masing that was artistically independent and original. According to his memoirs he used to imitate other styles and poets before this momentous event (Masing, 1998). Finding himself as a poet and writer had been a serious pursuit to him for many years before. While searching for his artistic identity he used to rely on external influences and theories. The poetry he composed under these circumstances did not satisfy him. Already in childhood he felt disappointment with lack of the independence in literary production that he aspired to achieve. For example, the following account about a sample writing in school at the age of ca. 11 years was told in his autobiography:

"In the fifth grade I was once late for an Estonian language class, when for the Ministry's auditor the children wrote about "piling a haystack". I noticed that three other boys had begun with the phrase approximately "Dry weather is chosen to make the pile." I also began like them and continued in this impossible popular style of agricultural science. However, I did not like to write like this anymore, I already had come out from the period of logical analysis a few years before. But I could not comprehend that under such a heading it can be written differently at all. However, the girls wrote narratives in several styles, and I was very ashamed later that I had written such a poor work and had not narrated about my participation in the piling, which nevertheless constantly waved before my eyes." (Masing, 1996, p. 111.)

Autism research has shown that persons on the spectrum can remember facts and details of the eye-witnessed events very precisely whereas episodic recollection of their own participation and

recall of personally experienced events tend to be impaired (Maras & Bowler, 2014). Persons with high functioning autism retain a sentient interaction with their physical environment and therefore also the ability to see novelty and arresting experience (Fitzgerald, 2014). Before finding the form of his poetry, Masing was distracted by many current ideas in his contemporary world. Through the experience of "seeing" his model in snowfall Masing acquired a very strong individualistic perspective to narrative construction that is necessary for great creativity. His poetry began to describe the experiences of the world without preconceptions and in accordance with enhanced perceptual processing that is often found in autism (Mottron et al., 2006). In his essay Masing stressed that the world is unique at every moment and whoever perceives it is unique also (Masing, 1998). It is this sentiment that Masing's poetry strives to share with the reader. Some studies in autistic creativity have stressed its strength in persistent ability to experience the world and oneself with fresh details and novelty (Fitzgerald, 2014). Persons with autism can be less prone to dogmatism and less dependent on current theories, which gives them the better position to describe the world in novel ways and to move towards new methods and theories.

Uku Masing also presented novel ideas in scholarship. For example, in 1956 he hypothesized about the existence of an early Christian treatise Gospel of Thomas. As a synaesthete he distinguished certain early Christian documents as different from others by the sense of hearing music when reading them (Masing, 1962). When the Nag Hammadi manuscripts later became widely known the existence of the Gospel of Thomas was confirmed (Paul, 1989). Besides the scholarly interests already mentioned Masing was also passionate about Sapir-Whorf hypothesis of linguistic relativity, reconstruction of ancient boreal cultures and contrasting Indo-Europaen and Finno-Ugrian mentalities (Paul, 1989). Some of Masing's theories are unnecessarily complicated from modern standards whereas some of his findings are brilliant.

Masing was often full of novel ideas, some of which led to discoveries. In one remarkable letter to Enno Littmann, written on May 15th, 1941, Masing gave an overview of his current mental breakdown and self-medication practices to keep his anxiety under control. He mentioned the use of sodium bromide and a form of acetylsalicylic acid with caffeine enrichment (Cofeopyrin). He also wrote about his scholarly findings the amount of which sometimes became unmanageable. He complained that his nerves are currently on the verge of collapse due to a disease or hereditary burden:

"Every day is more restless for me than previous one and I live mainly on sodium bromide, which is very cheap (about 5 kopecks for a gram) and on cofeopyrin. How long it will go on, I have no idea. I was always thought to be "a little abnormal", and now there might be a reason. [...] If I didn't have sodium bromide I would always think about my "discoveries" without being actually able to carry out any of them. I should finish about forty works, but I don't know any more which ones of them. Without sodium bromide, I would always think of the ones I don't have visibly around, but when I use this (substance) they no longer exist for me" (Trüper, 2018, p. 575).

This letter demonstrates that Masing occasionally suffered from the loss of executive function and concentration due to his vivid imagination. He mentions a proclivity to daydreaming also in his autobiography (Masing, 1996). In the personal letters written two decades later 1963-1965 he admitted regular self-administration of the pharmaceutic substances Aethaminalum and Adalin to alleviate his anxiety and insomnia (Läänemets, 2018). Masing lived more than half of his life in the Soviet Estonia, where his working conditions were often substandard and the flow of information from the rest of the world was quite restricted. He often had to rely to friends who could bring him books from big libraries in

Moscow and Leningrad. In a letter written on October 4th, 1964 to a younger colleague he complained about the Soviet regime that had hindered his productive life for the last 23 years since 1940:

"It would be good to live in Moscow and to read day after day, even if I know that it would be of no avail. But the situation of my kind is hopeless in another way – 23 years have people thought, moved, done things (in the free world). I scarcely have an idea about that. I have been forced to sit in the cell of a madman. It is good that you don't know how I feel when I realize – I will have to live under these bad conditions until my death!" (Läänemets, 2018, p. 197).

Despite of these adversities that the Soviet era brought to Uku Masing, it could not stifle his creativity. Masing's often experienced the subjective feeling of being mentally incarcerated in the ideological restrictions of the Soviet Union as is expressed in the letter above. However, his legacy in scholarship and literature is enormous. Both as a scholar and poet Masing possessed huge imagination and creativity. His literary production enjoys enduring popularity in Estonia, whereas some parts of his scholarship still wait to be evaluated from modern standards.

### **Conclusions**

Uku Masing was a prodigious savant with synaesthesia and autistic traits. Occasionally he suffered from depression and anxiety (Masing, 2012). In his young age, Masing was prone to suicidal ideation that he often wrote about in his personal letters (Masing, 2006; 2012). Whether his special interest in poisons was also related to a potential suicide is unknown. Suicidal ideation is often found in autism and a timely diagnosis is necessary to help these people to access services and avoid adverse outcomes (Cassidy et al., 2022). For example, the following excerpt from Masing's letter delivers his elaborate suicidal thinking

that had lasted for many years at the time of writing on August 3rd, 1929:

"Sometimes and mostly I wait for death of myself. But you cannot kill yourself because people at home would go mad with anger and I don't know what tricks they would do with the sinful pile of my flesh and bone. And for some reason I don't like it. - I don't know whether I should tell you about the methods I have used to die a natural death. I have been standing in the river and hoped for a seizure, I have carried a piece of iron in my pocket in the hope of thunder striking in, I've hoped that a horse would hit my skull, etc. But this way the death would not come. I often have this half-crazy idea in the brain of going to sea with a boat during storm and to wait there for my luck. My existence would make some sense if I would escape from there alive. But I hardly ever do that because it requires more than I have. My crisis will probably never pass" (Masing, 2006, p. 7).

Uku Masing was a child prodigy the nature of whose talents cannot be precisely investigated in hindsight. However, Masing can be called a prodigious savant or "Asperger savant" and "Asperger genius" in medical terminology (Walker & Fitzgerald, 2006). Masing was exceptional in the scope of his abilities as the artist, poet, and scholar even in the context of savantism. However, his cognitive style was also characterized by several idiosyncrasies that would be difficult to comprehend without the notion of autism spectrum. Masing has been a person difficult to interpret because his character is somewhat enigmatic that defies an easy understanding. Masing seems to conform to no stereotypes as a scholar and poet but understanding of him will be greatly advanced when his neurological conditions of autism, synaesthesia and savantism are taken into account. The uniqueness of his creative persona becomes fully appreciable in the light of these observations.

# Conflict of Interest:

No conflict of interests to declare from the part of the autor(s)

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