

Optimal growth

Which framework conditions do we have to implement to
guarantee an optimal individuation?

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Abstract

The aim of this work is to show more consciously and tangibly how and under which conditions we can optimally develop our inner potential in today's world. The work defines a mathematical model that is intended to show the dynamics of individuation a priori on the individual and collective level and describes the individual associated variables in detail and speculatively. The work also proposes a new paradigm that complements psychology with quantum physics. Two hypothetical courses are described: under which conditions an individual grows and regresses over time. The work concludes with an ethical dilemma about what it means to be and remain a human being who can control his animal instincts and what we should normatively align our individual growth with throughout our lives and which of two options artificial intelligences choose in the ethical dilemma. The work is intended to serve to derive insights on the individual and collective level to be able to progress productively. The work is a conglomerate of well-founded research, personal thoughts, intuitions, observations, social analyses with the best of conscience and should nevertheless always be viewed with a critical eye and healthy doubt, true to the motto: "*sápere aúde*".

Individuation; Humanism; Enlightenment; Integration; Self-Development

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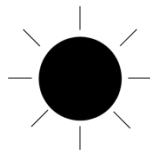
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“In every person there is a sun. Just let them shine.”

-Socrates

Optimal growth – by birth or learned?

Why is it that some people grow more quickly than others in their careers, at school or in other areas of life - or, if we like, are more successful? A well-versed and sufficiently empirically proven construct that answers this question is fluid intelligence - the so-called g-factor (Strenze, 2007). A concept that can be used as the basis for different intelligences and competencies and is biologically determined (Plomin & Stumm, 2018). The question that follows from this - and is the core of this work - is whether there are other more or less independent variables that influence this general intelligence and are therefore also able to predict a person's growth to grow into a vitalizing individual who can control their animalistic urges? There is no easy way to quickly answer this question. Nevertheless, there is a way to get closer to the answer: namely with the help of the law of individuation. A law according to which individual growth is aligned a priori. This law is neither innate nor subject to rigid determinism or exclusive to intelligent, wealthy or academic people. On the contrary, it is a natural process whose conscious understanding and conscious operation can be learned and encouraged. But the emphasis here is on conscious. Why? Because many people are not aware that this process takes place every day because they do not yet perceive it. So how exactly can we bring this process into our consciousness to maintain lifelong progress? Before we address this question, we should first explain the word growth in its entirety. Most people understand growth to mean something that increases continuously, accumulates, is associated with improvement and often efficiency, and is quantifiable. We often read growth in connection with business metrics, such as: Our company aims to grow its return on equity by 10 percent; or in nature: A growing tree whose growth is directly observable. However, the focus of individual growth is not on a physical object, but on the individual on the way to becoming a holistic and integrated unit with themselves and their environment (Erikson, 1993; Jung, 1969). And unlike a company or a tree, which sooner or later encounter natural growth limits due to a lack of resources or scientific limitations, such limits simply do not exist in individual growth, provided the individual is healthy and vital. Why? Because the brain, as a mental impulse and coordination center, is almost inexhaustible; at least as of today there is no individual who perished because they learned too much, causing the brain to shut down. In fact, it is possible to overload the brain. For example, if too much information

and stimuli are processed at the same time (Klingberg, 2009). This limitation slows down individual growth and must therefore be overcome. However, individual growth is more about the sheer potential of the individual, which must be used so that the individual can be productive. Company growth can be quantified using key figures and the growth of a tree is clearly recognizable - premises that are fundamentally not given in the law of individuation due to its complexity, ambiguity and abstract nature. Nevertheless, I would like to try to represent this a priori using a mathematical formula. The formula attempts to describe the dynamic process of individual growth in its entirety and shows how we can use it, promote it optimally and maintain it. In addition, the related variables are described in detail, for which I make claims about how they promote and influence individuation. I then present two hypothetical courses to understand under which conditions an individual grows over time and when it regresses. Finally, an ethical dilemma is used to explore the question of whether the law of individuation should be normatively oriented at its core (Kuhn, 1962) to be able to progress productively as a human species.

Individuation and its variables

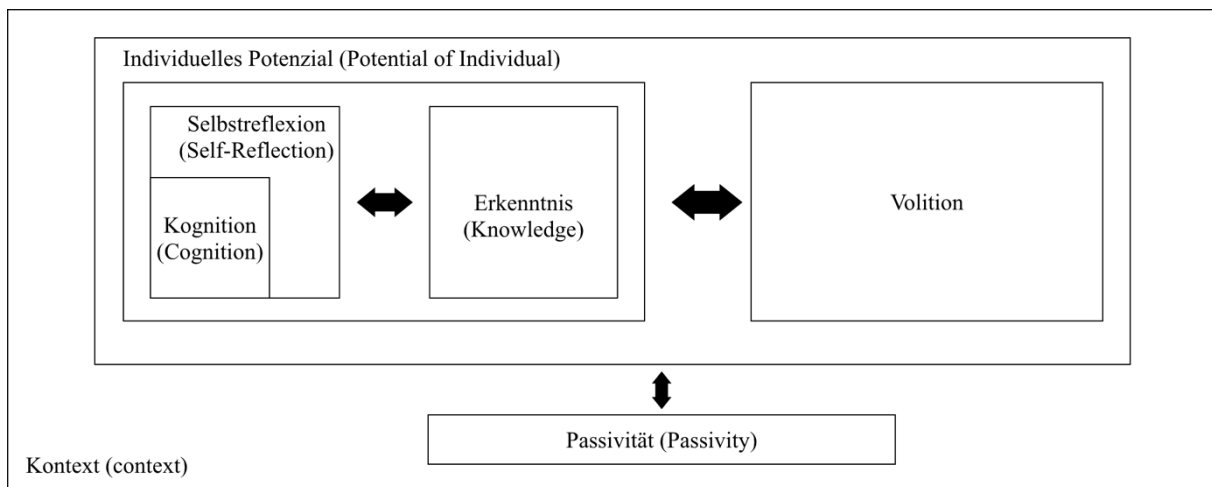


Illustration 1: Own Illustration – How the variables influence each other

K – Kognition (Cognition)

Cognition is the capacity that consists of perception, attention, storage and retrieval of information, thinking, judging and manipulating information (Miller & Wallis, 2009). In this context, fluid intelligence is often subsumed under this definition. It refers to the ability to solve problems, recognize patterns, establish connections and apply logical thinking, regardless of previously acquired knowledge (Fry & Hale, 2000). It is a type of intelligence that enables an individual to adapt to new tasks or situations. Fluid intelligence is considered in contrast to crystallized intelligence, which includes the knowledge already acquired and partly the ability to apply it (Rost, 2013). Fluid intelligence, on the other hand, is more associated with cognitive processes such as short-term and working memory, problem-solving ability and abstract thinking (Greeno, Collins, & Resnick, 1996). Even if fluid intelligence is more or less genetically and biologically determined, it is still possible to improve it, for example through specific training aimed at working memory (Au, et al., 2015; Jaeggi, Buschkuhl, Jonides, & Perrig, 2008).

H1: Cognition is the most stable of all variables. It is determined in the individual from birth. Nevertheless, it can be changed through training. It is inherent in the individual and contributes fundamentally to individuation.

S – Selbstreflexion (Self-Reflection)

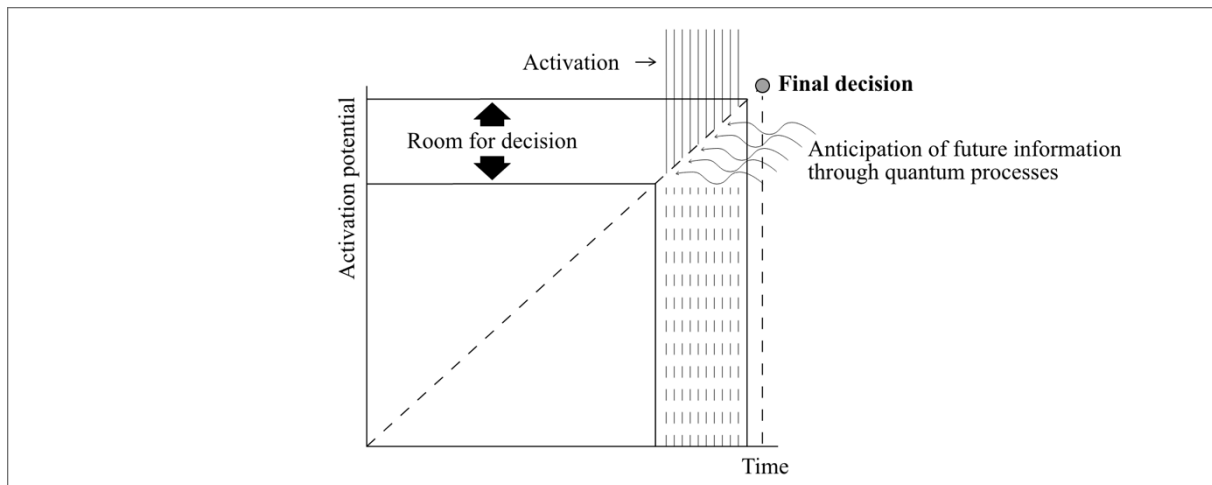


Illustration 2: Own Illustration – Autonomy through self-reflection by Hameroff (2012)

Self-reflection serves to accelerate cognition and, more broadly, individual growth by eliminating factors that drain consciousness. It allows us to hold up a mirror to our inner self, evaluating and questioning our actions, affects, and thoughts to gain more self-knowledge and, consequently, better understand ourselves and how we interact with the environment (Csank & Conway, 2004). Cognitive distortions, such as those achieved through cognitive behavioral therapy, are reduced, which can increase the efficiency and accuracy of cognition (Butler, Chapman, Forman, & Beck, 2006), in part because it allows higher brain regions such as the neocortex to regain control (Tyng, Amin, Saad, & Malik, 2017; Hariri, Bookheimer, & Mazziotta, 2000). Through these biological processes, we can propagate deviations from received signals or stimuli and the expected result back into our inner being to adapt accordingly so that future decisions can be corrected again through anticipatory processes, as is the case, for example, in the backpropagation method in computer science (Lillicrap, Santoro, Marris, Akerman, & Hinton, 2020; Rumelhart, Hinton, & Williams, 1986). Self-reflection is directly related to cognition and promotes it in a significant way (Greeno, Collins, & Resnick, 1996). It is not without reason that one of the leading paradigms in psychology is: Know Thyself. It is precisely these reflected feedback mechanisms, through which we can process information from the future in the here and now through quantum physical time jumps, that enable us to maintain a certain degree of autonomy and free will (Hameroff, 2012), which means that we do not have to fall victim to strict determinism due to our innate instincts and drives (Sapolsky, 2023).

H2: Self-reflection is directly related to cognition and improves it in a significant way. It enables us to maintain autonomy over our ways of thinking and behaving, which enables us to manage our animalistic drives and, at best, integrate them into our self to grow into rational and mature people during individuation. Self-reflection is also deeply rooted within the individual.

E – Erkenntnis (Knowledge)

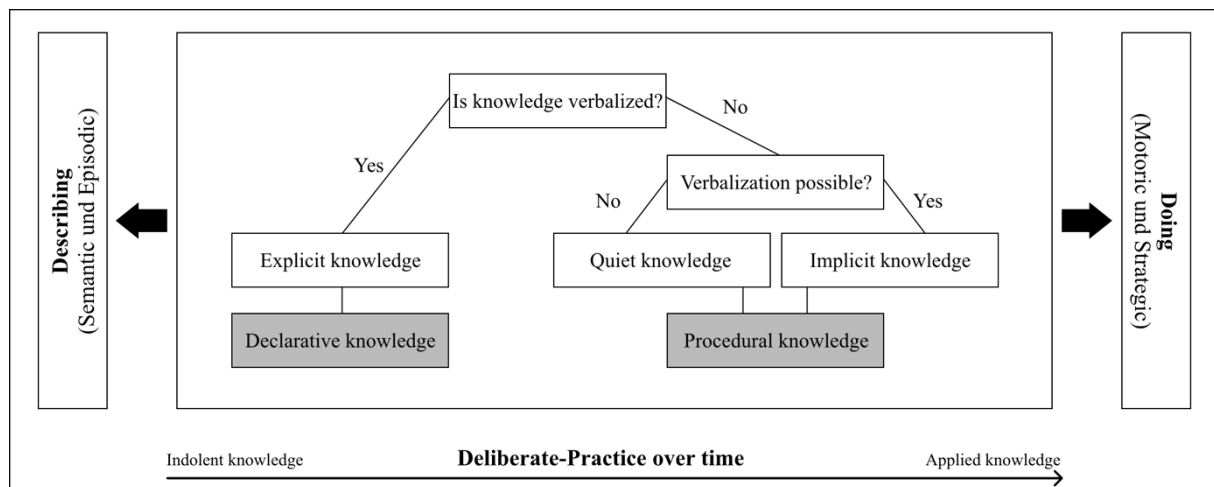


Illustration 3: Own Illustration – Principle of Knowledge by Ericsson (2006) and Nickols (2013)

Cognition describes the learning process through the experiences we gain, insights into new areas that we gain, and affects and emotions that we experience. We often speak of crystallized intelligence here - the intelligence that is not innate, but can be acquired and constructed (Rost, 2013). Cognition is therefore the accumulated knowledge in terms of its procedural, strategic and declarative properties, as well as its intellectual, advantageous and adequate use, which is constructed over time through the interaction of internal mental schemata and the environment to successfully adapt to new external stimuli. More precisely, the declarative attribute describes the conscious facts and specialist knowledge, such as the day of our birthday. In addition, episodic experiences are stored in it, such as personal experiences from our favorite vacation spot. On the other hand, the procedural attribute describes that the knowledge is latent. That is, it is there, but still unconscious. It is made up of patterns, routines and heuristics that help us to master every day or domain-specific things as if by themselves, such as driving a car or improvising musically. In other words, processes that can take place intuitively without mental effort. Procedural knowledge can be built up primarily through deliberated practice methods (Ericsson, 2006). The strategic attribute is a kind of subsumed conglomerate of procedural and declarative knowledge, i.e. a kind of toolbox in which the declarative and procedural knowledge elements are the tools that enable us to make well-founded and long-term decisions in the future - strategic decisions - and thus better anticipate

and solve variable and universal problems. The goal of an individual should be to apply this accumulated knowledge and its three attributes sensibly, consciously and sensibly and to build it up throughout a lifetime through advantageous information processing and elaboration measures.

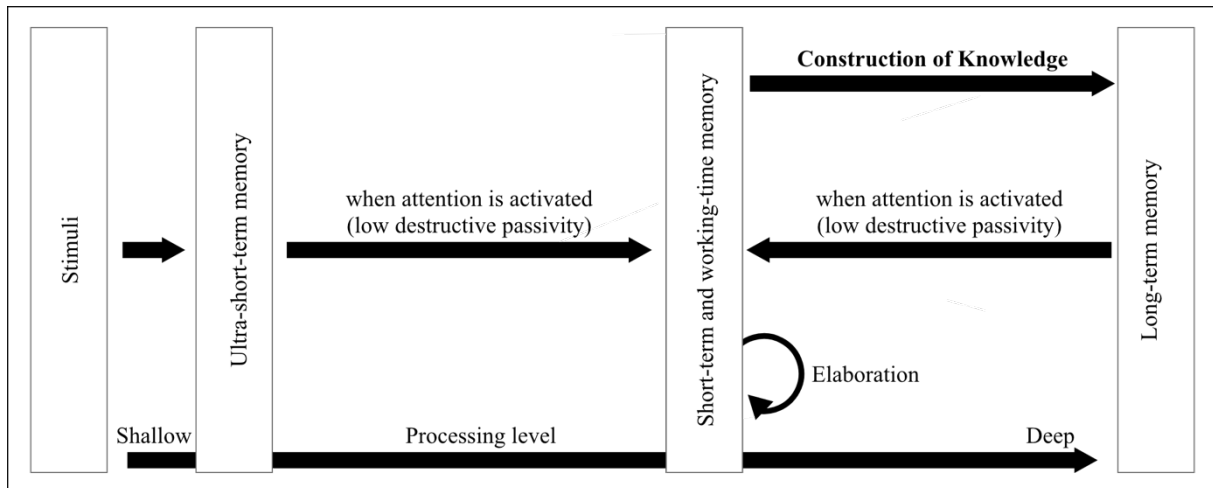


Illustration 4: Own Illustration – Constructing Knowledge in the Individual by Baddeley (1983)

Whether we will ever achieve omniscient knowledge is questionable and not even necessary - but if we focus on the curious, questioning process with which we can approach the absolute truth step by step, we are well on our way there. For example, Marcus Aurelius states the following in Book 6, Section 21: If any man is able to convince me and show me that I do not think or act right, I will gladly change; for I seek the truth by which no man was ever injured. But he is injured who abides in his error and ignorance (Aurelius, 2006).

H3: Knowledge is the intersection of the declarative, procedural and strategic attributes. It is constructed in the individual. Although all attributes are important for individuation, the procedural property is particularly crucial, as we can be productive with little energy expenditure and use application knowledge to shape our environment around us in a targeted manner.

V – Volition

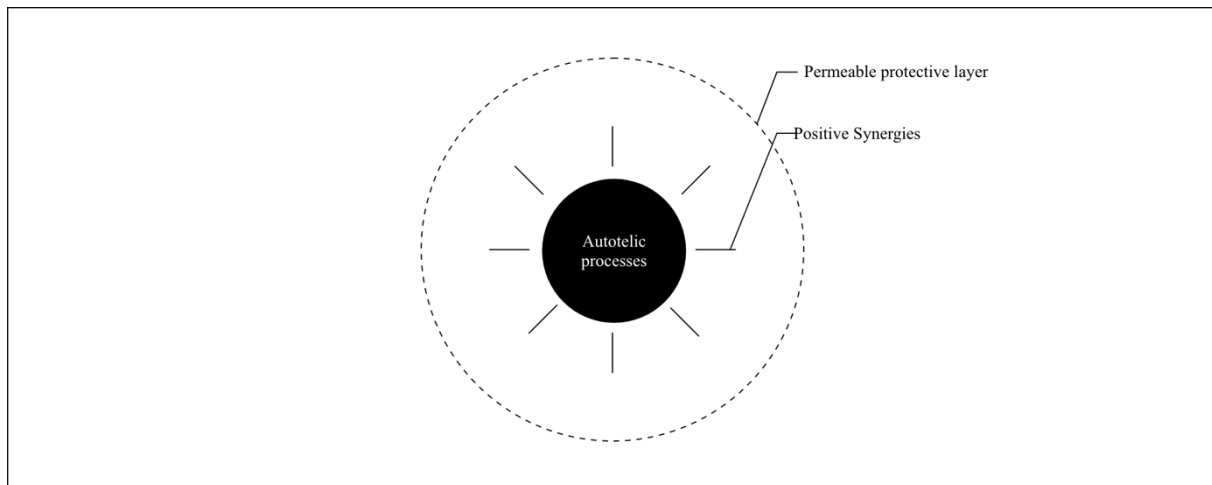


Illustration 5: Own Illustration – Principle of Volition

Volition is the inner drive and willpower that makes us move forward, or if we like: the blazing fire like the burning bush that manifests itself through us, in us and from us (Ex 3). Volition is physiologically deeply rooted in humans and is activated and mobilized by biochemical processes (Haggard, 2008). This happens primarily through the following paradigm of psychology and psychiatry: facing one's fears and confronting and overcoming (existential) challenges (Silvestrini, et al., 2020). This triggers natural learning processes (Deci & Ryan, 1985), which in turn trigger biochemical processes such as the release of dopamine or neurotropic growth factors (Angoa-Perez, Anneken, & Kuhn, 2017) to construct new memory traces (Josselyn & Tonegawa, 2020), whereby the initially purely conceptual idea of volition is constructed in a very concrete biological way in the organism over time. What is fundamentally important here, however, is that the fears and challenges are overcome by the individual step by step and in small chunks, ideally with the support of other individuals - at least until a mature degree of autonomy has been established, as is the case with the scaffolding principle, for example (Berk & Winsler, 1995). This ultimately creates a powerful bridge (World 2) that connects the limited finite physical world 1 of objects and the infinite objective world 3 of the products of our minds, such as theories, music, and art (Socrates, 1992; Popper, 1973). Whenever we build this bridge and an individual begins to cross it, autotelic processes (Csikszentmihalyi, 2008) are optimally generated that maintain volition, since such processes are self-rewarding and thus do not require external energy input. Volition is unique to each individual and is based on

their goals, needs, visions, and drives, so its autonomy must be strengthened throughout life (Fischer & Boer, 2011). Since it is the driving force for each person to progress productively, it must be protected from harmful biochemical-psychosocial influences by the other factors: knowledge, cognition, constructive passivity, self-reflection, and a healthy context. Only then can all the bundled energies in the individual be used infinitely and openly to their advantage (Job, Dweck, & Watson, 2010), so that the individual becomes a true asset to themselves and their environment. If this harmonious bundling of all energies and drives fails, volition dies out (Baumeister R. F., Bratslavsky, Finkenauer, & Vohs, 2001), which in the worst case leads to a mortal collapse and end of the organism.

The ideal state of the individual in World 2 by Popper (1973)

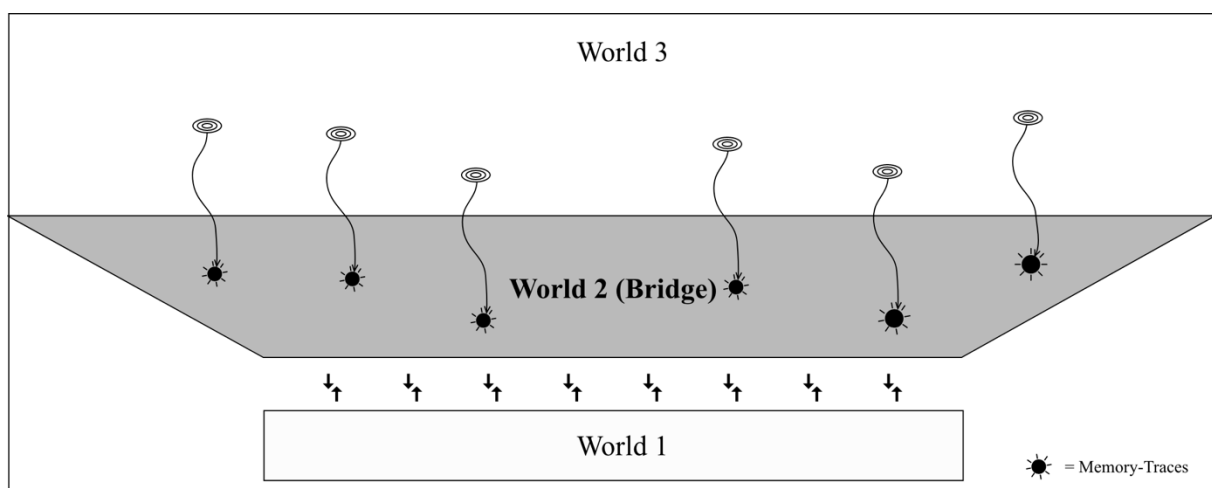


Illustration 6: Own Illustration – Bridging World 1 and World 3 by Popper (1973)

The figure above shows how a connection can be made between World 1 and World 3. First, the bridge is activated by harmony-promoting, autotelic states that trigger a kind of quantum physical superposition state in our consciousness, whereby we become one with everything. This in turn expands our conscious capacities, which is why we can obtain the still unconscious information from World 3, which can later manifest itself in us as conscious thoughts in the form of memory traces and can gradually penetrate into World 1 if we carry out the necessary concrete action steps. If we like, the bridge maintains the state of psychophysiological parallelism, which allows us to communicate between these worlds, as the two become entangled with each

other. In this context, Carl G. Jung introduced the idea of synchronicity to describe meaningful coincidences that cannot be explained by a direct causal relationship. He considered synchronicity a form of relationship that is not based on cause-effect dynamics, but on the simultaneity of events that have significant meaning. According to Jung, there is a collective subconscious, a layer shared by all living beings that exists in the archetypal images and symbols that we see in our mind's eye; for example, in dreams, which represent a kind of gateway to our unconscious (Freud, 1952). And at this point I discovered something interesting during my work as an integration teacher in which I could not communicate using linguistic elements: When I began to symbolically introduce the principle of passivity (chapter 2.5) to the students, we were able to communicate with each other despite linguistic limitations. One student even expanded the principle of passivity through an insight that I could not have constructed. When I explained to him in a visual way that in life we protect ourselves from dangerous intruding stimuli and have to consciously decide what becomes a part of our self, he expanded the intruding arrow in the opposite direction. What he wanted to express to me was that - precisely through the opening to volition - it can happen that parts of our self are carried into the outside world and changed by third parties for malicious motives, which does not correspond to our truth, which is why we should learn healthy protection and coping mechanisms. For me, this is clear proof that we can indeed communicate not only through linguistic elements, but through a deep unconscious, collective and culturally independent connection through symbols. At this point, it is certainly worthwhile to conduct further research into the extent to which these findings are correct and why. For example, after symbolically explaining the passivity principle, one should also determine in which context these symbols have already been seen or learned. Synchronicity occurs when an event occurs in the outside world that resonates in some way with an inner psychological state or an archetypal pattern (Jung, 1952). And it is precisely when the resonance between World 1 and World 3 is in harmony that the bridge is opened, the worlds are intertwined, and information can be transferred between them. Thus, Gottfried Wilhelm Leibniz states the following in *Monadology* § 79: "Souls act according to final causes [...]. Bodies act according to effect causes [...]. The two realms, that of effect causes and that of final causes, are harmonious with each other." (Leibniz, 1885). And in this context, I would like to refer to the quantum physics principle of entanglement. Einstein et al. (1935) first argued

that quantum mechanics may be incomplete because, in their opinion, it transmits information faster than light, which contradicts the special theory of relativity, which in turn states that the speed of light acts as a constant upper limit - namely approximately 300,000 km/s - for the speed of information and matter (Einstein, Podolsky, & Rosen, 1935). And it is precisely this limitless information transfer that is supposed to be possible through entanglement, which Aspect et al. (2022) were able to prove experimentally and for which they received the Nobel Prize (Aspect, Clauser, & Zeilinger, 2022). In this context, Shirmonvsky and Chizhov (2023) simulated the biological process of migration of a single energy stimulus along a chain of amino acids in cell microtubules connected by electrostatic interactions and were able to demonstrate that this amino acid system can be considered as an environment that allows the existence of entangled states during time. They argue that the specificity of energy transfer mechanisms in microtubules is determined by the internal nature of the interactions of these amino acids, as well as the influence of the external environment (Shirmonvsky & Chizhov, 2023). Interestingly, our neural pathways are about 5,800,000 km long if we line them up (Allen, Damasio, & Grabowski, 2002; Bäumer, 2015). Furthermore, nerve impulses transmit information at a general speed of 1-120 m/s (Schmidt & Heckmann, 2010). For example, let's imagine that we process an external stimulus and need two neural networks A and B that are about 5,800,000 km apart. Given the maximum signal transmission speed of 120 m/s (432 km/h), it would take 1.53 years for a nerve impulse to be transmitted from A to B, assuming that the brain areas to process the stimulus are as far apart as possible. But even if we assume that A and B are only located in the cerebellum, which makes up 11 percent of the adult brain (Solovev, 2006) and furthermore assume that it has the same proportion of neural networks - i.e. 638,000 km - it would still take about 60 days for a stimulus to be transmitted. Given the length of the neural pathways and the relatively slow speed of signal transmission, this does not seem to be proportional to the sheer complexity of the brain and its information and perception processing processes. Therefore, we must rightly ask ourselves: Isn't there an alternative way of exchanging information in the organism? And the answer to this could lie in the entangled and holistic neuronal communication, for reasons described (see Jedlicka, 2017), which can be coherently maintained by the autotelic process. For example, Kagan et al. (2022) show in a simulated game world that biological neural networks learn considerably more

efficiently, more receptively and faster than artificial neural networks (Kagan, et al., 2022). It is also worth mentioning that the human brain requires far less energy for cognitive processes than is the case with artificial neural networks (Patterson, et al., 2021; Sandberg, 2016). We can also use the following thought experiment to illustrate how (energy) efficiently our brain processes incoming stimuli: An individual is blind from birth. Therefore, it can only process verbal and written stimuli (through Braille). Now the individual perceives an average of 16,000 words per day through a more or less constructive passivity. We assume that a word has an average of 10 letters and that one letter requires 1 byte of data storage. The individual also reads a book with an average of 285,000 words every week. The individual now matures into a 30-year-old adult. During this time, he has constructed a mental folder ("data set") of almost 3 GB. In addition, the individual has consumed 2000 calories every day (1 calorie = 0.001136 Wh). Accordingly, after 30 years, he has consumed 25.5 kWh. This is a share of just about 0.000885% of the energy required by a large language model such as Chat-GPT 3 - namely 28,800kWh (considering 100x A100 Nvidia GPUs for 30 days, with each GPU consuming 0.4 kWh) to imitate human cognitive processes using a 570GB dataset (= "mental map with which incoming stimuli [prompts] are processed"). The large amount of data required by current artificial neural networks to imitate cognitive processes - compared to the small amount of data required for human cognitive processes - also suggests that current artificial neural networks are inferior to human ones in terms of (energy) efficiency, which could result from the holistic, coherent processing of stimuli in the human brain.

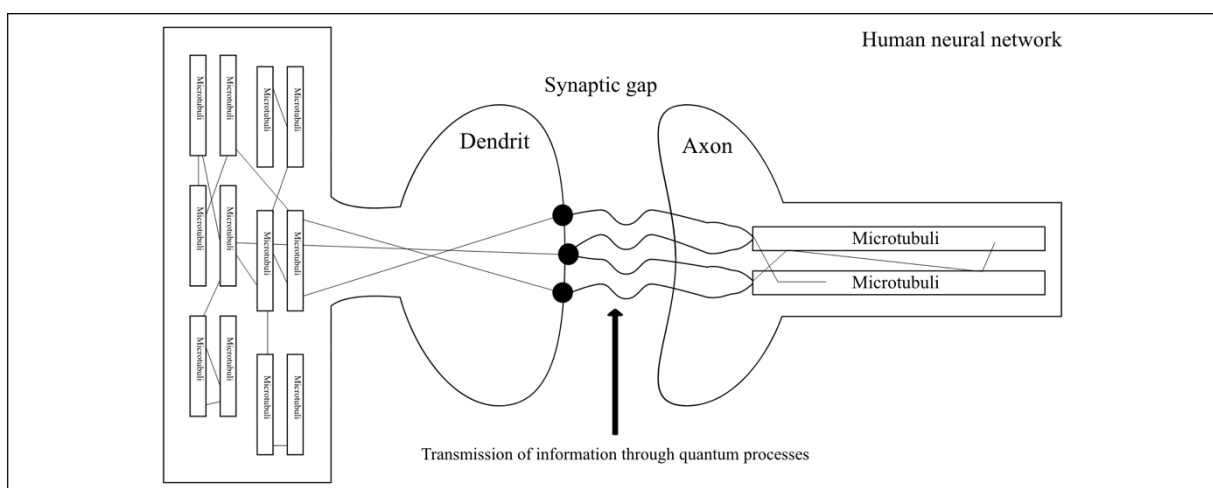


Illustration 7: Own Illustration – Transmission of Information by quantum-states in the brain by Hameroff and Penrose (1996; 2021)

In this sense, I would like to use the example of making music to concretize this state of the individual during the journey across the bridge, which can create this harmony, which follows the principle postulated by Galileo Galilei: "How is it possible to generate almost infinite possibilities such as ideas in the form of language from a finite set of symbols, for example the alphabet?" Let us first imagine a keyboard. It has a finite number of keys. Only when we supply energy to the lifeless keys in the form of vibration does something great begin to happen: Little by little, due to autotelic processes, we immerse ourselves in an infinite world and are able to compose unlimited harmonies that - almost a priori like a mathematical axiom - activate us emotionally, cognitively, physiologically, socially and culturally (Dorris, Neely, Terhorst, VonVille, & Rodakowski, 2021; Harney, Johnson, Bailes, & Havelka, 2022; Shi, Lin, & Xie, 2016). This state is characterized by being one with the process and forgetting space and time (Csikszentmihalyi, 2008). In addition, it is easier for us to learn new things and change in such a state (Harris, Allen, Vine, & Wilson, 2023).

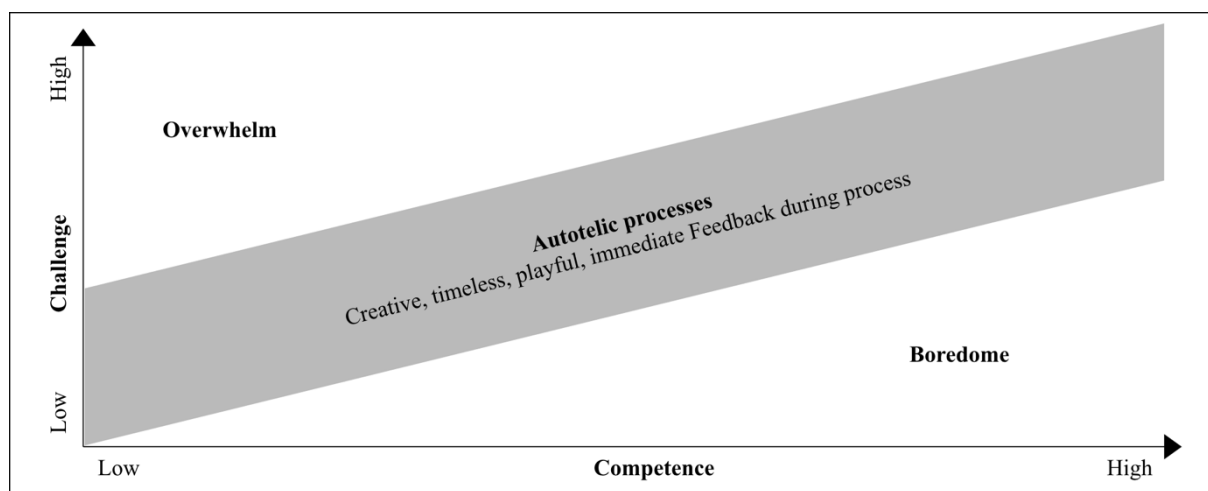


Illustration 8: Own Illustration – Characteristics of autotelic processes by Csikszentmihalyi (1975)

In this context, it is interesting that it is precisely in such a state that we feel complete inner harmony, as many of us tend to say, and harmonies are caused by resonances and it is resonances in the form of brain waves that in turn influence and maintain the neuronal communication and energy in our brain and our consciousness (Aserinsky & Kleitman, 1953) and our consciousness may arise through quantum physical processes in which dualistic states exist simultaneously (Saxena, 2023; Penrose & Hameroff, 1996) and in turn the wave function collapses into a certain state in the

quantum system as soon as it is measured, whereas before the measurement all states existed simultaneously due to supercompensation (Feynman, Leighton, & Sands, 1965) - as in the autotelic process, which seems to decay as soon as we start to think consciously about it (Mor & Winkquist, 2002). If we want to explore the final causes and find answers to the origins of our existence that are found in World 3, we must begin to explore the neurophysiological processes that occur during the bridge (World 2) that connects World 1 and World 3.

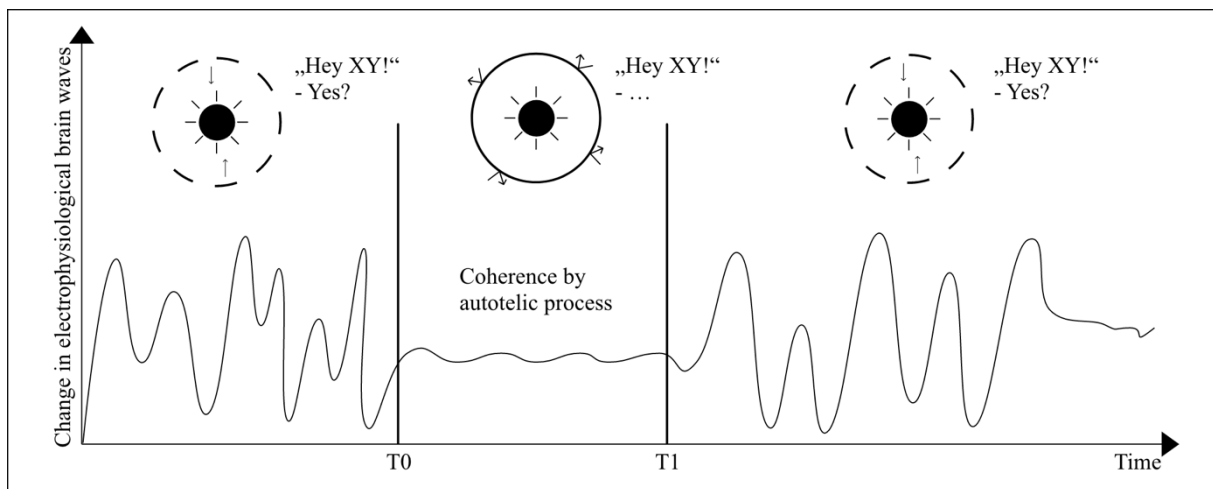


Illustration 9: Own Illustration – Measuring quantum coherence in the individual

For example, the electrophysiological processes during the autotelic process could be measured to retrospectively decode it mathematically, as is the case with images in our mind's eye (Takagi & Nishimoto, 2023). If the electrophysiological amplitudes of many randomized individuals are similar, general inferences could be derived from them to deductively explain the autotelic process or which harmony or frequency is ideal to maintain this state. However, it remains questionable whether we will ever succeed in fully penetrating World 3, for the aforementioned reasons of the observation problem in quantum physics, as well as the paradoxical fact that we can use finite measuring instruments that are available to us in World 1 to explore infinite states in World 3. For example, Alan Turing came to the conclusion in his famous halting problem, which can be subsumed under the decision problem, that there are certain problems for which there can be no general solution: for example, programming a higher-level, omniscient algorithm that is able to determine whether any algorithm stops for any input or continues to run indefinitely (Turing, 1936) - so if you like: an

algorithm that is able to explain the states in world 3, from which all our ideas and consequently our existence as we know it come. Paradoxically, it seems as if it is precisely for this reason that the conscious, the unconscious, which we understand through our deep connection within and from us, and it is precisely this that makes us volitional individuals and our task is to simply live in harmony - even if it is only for a few brief moments throughout the day. And ultimately to see the essential with the heart, since most things remain hidden from the eyes (Saint-Exupery, 2015). Nothing more and nothing less. But although it can be as simple as starting to strike a lifeless key (<https://soundcloud.com/composer-philipp/pure>) - in today's fast-moving and technocratic society, only a few manage to do it. However, these harmonious conditions would have to be in place to integrate this deep connection within oneself and from oneself for others and everything. How this deep connection is constructed in concrete terms is something that each individual has to find out for themselves. However, the beginning lies gradually in the challenges that life gives us and that make us who we are (Touroutoglou, Andreano, Dickerson, & Barrett, 2020).

The path to an integrated individual

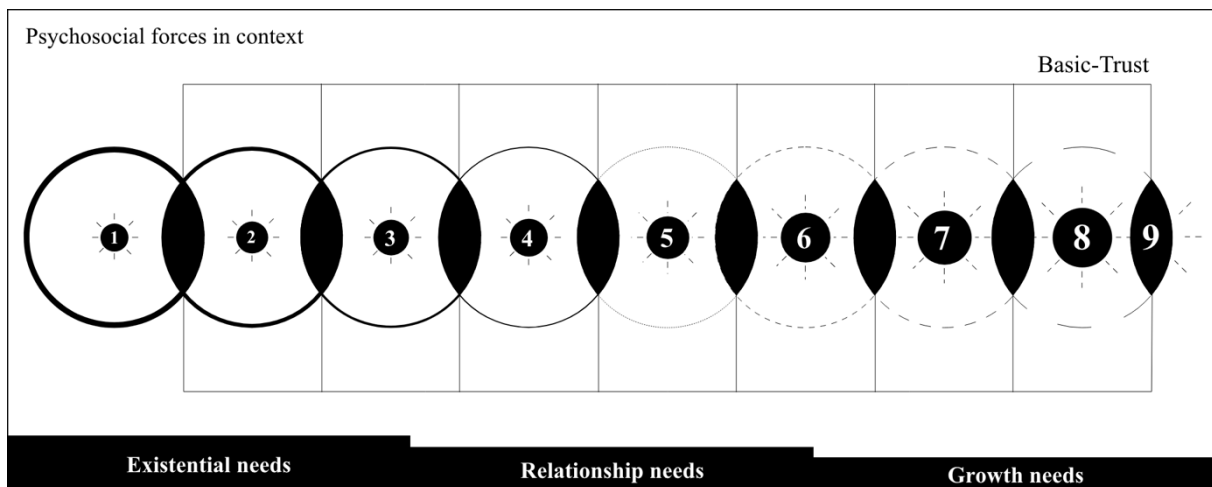


Illustration 10: Own Illustration – Emergence of an integrated individual by Caulton (2012) Hy and Loevinger (2014)

Become who you are! (Pindar). This is indeed not an easy path. Nevertheless, I would like to discuss a more or less stable course of how an individual can develop well over the course of his or her life (Erikson, 1993; Erikson, 1994; Hy & Loevinger, 2014). I would like to illustrate this with the above figure. First of all, the gradual foundation should symbolize our needs, which we must satisfy with varying degrees of intensity (Maslow, 1943; Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009) throughout our lives. These are mainly: autonomy, stimulation, hedonism, success, power, security, conformity, tradition, benevolence and wholeness (Maslow, 1943; Graves, 1970; Schwartz, 2012; Hofstede, 2011; House, Hanges, Javidan, Dorfman, & Gupta, 2004). These can in turn be divided into three overarching categories: existence needs (i.e. food, warmth and security), relationship needs (i.e. security and trust) and growth needs (i.e. prestige and power) (Caulton, 2012; Alderfer, 1969). The protective layer that opens over time, which protects our inner strengths, potential and autonomy, is intended to symbolize that we must indeed be able to gradually open ourselves to life, to welcome it and awaken, to be able to promote our individual growth and ultimately the entire context benefits from our inner potential. The illustration also shows how our volition gradually grows and thrives and in the final phase the protective layer is no longer even necessary because we are completely ourselves and radiate the good that is aimed at being and remaining human. Ultimately, the illustration shows how basic trust holds and connects individuals in the context. Now I would like to explain the 9

different phases in more detail how the individual can mature into an integrated being. First, the individual must learn basic trust in the first infantile phase. This is possible when the immediate caregivers satisfy the existential needs unconditionally, since the individual is not yet able to take care of themselves autonomously. Through this initial support, the individual can learn a first form of autonomy in the second phase. Here it is important that the individual tries things out and learns exploratively, without having to feel pathological guilt or shame and without basic trust suffering as a result. If these favorable conditions are also present, the individual can progress further into the third phase. In this phase, the individual further separates himself from the first caregivers and thus increasingly strengthens his own autonomy and willpower. In this phase, the individual ideally learns to progress unbundled without becoming arrogant. If this healthy detachment from the initial symbiosis succeeds, the individual wants to explore and get to know his autonomy more and more in the fourth phase and feel security and recognition for it. This development of autonomy is an important axiom for our biochemical-psychosocial development. Unfortunately, however, this is severely curbed in today's technocratic society, which accordingly leads to a regression of our individual growth (Twenge, 2017; Huang, 2022). The individual begins to want to belong to the adults and wants to be rewarded for his cognitive performance. In this phase, it is important not to overstrain the individual. Otherwise, inferiority and arrogance complexes can develop (Adler, 1933). However, if the context is challenging but not too demanding or too demanding, or if we like: if autotelic processes are encouraged, the individual moves on to the next fifth phase: Here, during puberty, they are confronted with finding their own role and identity – the individual further consolidates their autonomy and can, at best, distance themselves from the peer group, but is also still part of it at the same time. First encounters with conforming patterns are learned and ideally not blindly obeyed and questioned sensibly. In the sixth phase, it is the task of the young adult individual to learn and build intimacy. If this succeeds, the individual can endure and accept contradictions and differences: They learn to love. This enables them to enter the seventh phase: carrying love into the future and integrating into society as a useful being. In the eighth phase, the individual is then faced with the task of looking back on their life and reflecting on it. Time cannot be turned back. The task here is to accept life as it is, to care for oneself and others, but without giving up on oneself and others - to find a healthy harmony, if we like. In

the last stage, the individual has then reached an integrated state and is in a constantly flowing autotelic process and is an integral part of basic trust, promoting it, protecting it and building it up for oneself and other generations in the future (Erikson, *Childhood and Society*, 1993; Erikson, *Identity and the life cycle*, 1994; Hy & Loevinger, 2014).

H5: To optimally maintain our volition, we must trigger autotelic processes, which maintain a quantum physical coherence that expands our conscious capacities. This process can be measured by neurophysiological processes, i.e. electroencephalography. The higher the volition of an individual, the more advantageous their individuation. Furthermore, it is deeply anchored in the individual. However, without educational work, technocratic progress has a regressive effect on the integrative individuation process of individuals – especially children and adolescents, because on the one hand symbiotic conditions and dependencies are promoted, because at the core the autonomy of the individuals is unconsciously attacked.

P – Passivität (Passivity)

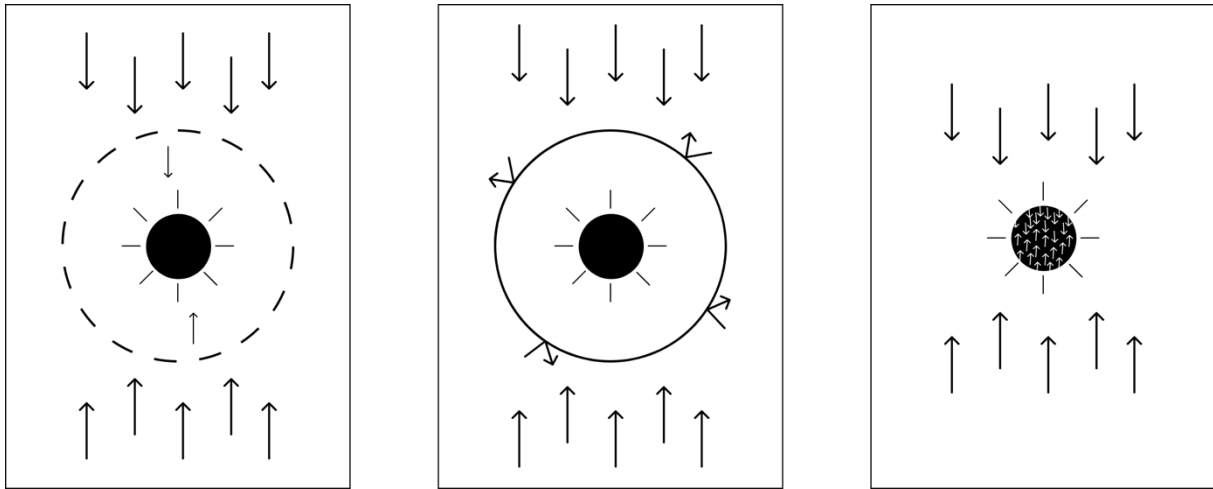


Illustration 11: Own Illustration – Principle of Passivity

Passivity is associated with the vital protective layer of volition and regulates its opening and closing. This means that as passivity increases, the natural regulatory mechanisms of the protective layer stop functioning. This increases the risk of losing one's own autonomy - especially if the protective layer is too permeable (right). There is also an increased risk of succumbing to one's own illusions - especially if the protective layer is completely closed (middle). Passivity increases, for example, through an uncontrolled and chaotic overflow of information, drugs, fear of being judged or the widespread phenomenon of mental laziness - that is, not wanting to think about anything anymore because it is exhausting, which limits one's own ideas, creativity and imagination - processes that are necessary to form and maintain our self. Mental laziness also includes the system of fast thinking. This system is fundamentally advantageous because it solves certain problems quickly and efficiently. However, there is also a greater risk of falling into ignorance, succumbing to illusions, or solving variable problems quickly and thoughtlessly using rigid heuristics and instincts. Most people prefer the fast behavior and thought system because it requires less energy (Kahneman, 2011). This is inherently advantageous, such as when driving a car. Here it is not helpful to think over and question every step, as mental overload is likely to quickly set in due to an abundance of information (Sweller, Ayres, & Kalyuga, 2011). But it is fatal to use the fast system exclusively, especially in disciplines that require new solutions and insights to grow individually. Why? Well, we can only be productive

and solve problems if we learn new things and maintain an open attitude to learning (Dweck, 2006) – in other words, we assimilate and accommodate new mental patterns (Piaget, 1952). But why don't we just choose the slow, deliberate and reflective behavior and thought system? I suspect that it is because it takes enormous energy to change, give up and question certain acquired schemata, as these become more and more entrenched over time (Seel, 2012). Why? Well, our individual experiences and insights - these schemata - are what make us who we are, so that we can (re-)act appropriately with the environment and other people, and nobody wants to give up or change fundamental parts of themselves, as these determine how subjective reality is perceived. I define subjective reality as the schemata or mental programs - or if you like, the filters that shape our consciousness and perception through the incoming stimuli from objective reality. The schemata are on the one hand biologically determined by our nature, needs and our neurological systems, and on the other hand they are shaped by socialization, conditioning and value systems. I also suspect that it is so difficult to change these patterns because they literally merge with us biologically through the new memory traces triggered by the learning processes described above. This is precisely why it seems so exhausting and energy-sapping to change them: Because, on the one hand, these schemas have become a part of us and nobody likes to give up, question or reflect on parts of themselves, for the aforementioned reasons of orientation in the environment; and, on the other hand, because it requires energy. That is why we tend to use the fast system rather than the more sensible slow system. As mentioned, this can be advantageous, but it also increases the risk of destructive passivity, as we do not have to change, expand or even create new schemas, which hinders our growth. However, the world is too diverse and complex for us to be able to rely on individual schemas for a lifetime and use them to fully understand our environment. For example, Buzsaki and Mizuseki (2014) write, "although 10 [Percent] of highly active neurons can provide remarkable solutions in most encounters, optimal performance requires the commitment of a very large fraction of the brain through a very low level of engagement" (Buzsaki & Mizuseki, 2014; p. 276). Both extremes – middle and right – can threaten our organism. To prevent this, the individual must be open to external stimuli on the one hand, but at the same time consciously decide when and which of these stimuli - mostly in the form of emotional charges - become a part of us. Or if we like: consciously and independently decide

when we unite the three parts of the soul, consisting of reason, ambition and instinct (Socrates, 1992), to integrate external energies into our self and expand it (left) (Satir, 1972). When we create, a constructive passivity sets in within us. This state is the ambivalent of destructive passivity. This form of passivity has a beneficial effect on individual growth. The protective layer here is permeable, but still protects sufficiently against the chaotic intrusion of external stimuli. In this way, we maintain a healthy and open attitude towards life to be able to learn and progress throughout our lives. If we like, a coherent psychological quantum state has been established in the individual. It lives in complete harmony with itself –

H6: Passivity regulates the opening and closing of the protective layer that surrounds the volition and entangles the individual with the outside world. The higher the destructive passivity, the more likely it is that an individual will lose resilience, lose autonomy and submit to illusions and vice versa. Due to the increased abundance of information and the increased rate of information transfer in today's technocratic society, coupled with unhealthy coping strategies, the regulation of the protective layer is increasingly at risk. In individual cases, complete protection makes sense; for example, when individuals occasionally live in complete coherence to promote regenerative and vitalizing processes. Both pathological states can be harmonized to the optimal state by strengthening resilience and through educational work with regard to the regulatory mechanisms.

C – Kontext (context)

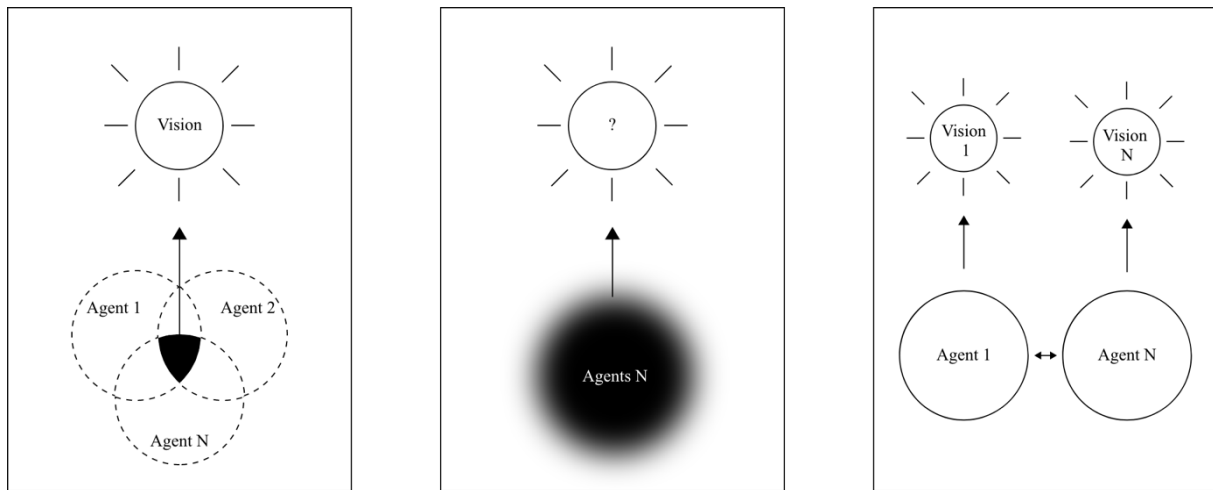


Illustration 12: Own Illustration – The 3 states in the context

The context describes the dynamics and effects that arise when several individuals meet and interact with each other. I would now like to describe the following three more or less universal states in more detail, although in reality all states naturally occur in a mixed form. In the first state (left) - the ideal state - the individuals come together and at the same time are still delimitable, i.e. they do not enter a complete symbiosis. They are one and not the same. This allows the strengths of each individual to be used. At the same time, an overarching vision is clearly agreed upon. This allows limited states to be transcended to mobilize the volitional drive and will powers, as it is accepted by everyone through the connection entered into. During productive activity to achieve the vision together, the connection between everyone is strengthened as common memory traces are constructed. In constant interaction, everyone promotes their individual growth and ideally learns together for a lifetime. In addition, they are open to new stimuli and patterns from outside in a mindful way, characterized by the partially opened circles. On the way to achieving the vision, an exchange of inner potentials takes place - for example through insightful dialogues among individuals. This exchange leads to the environment growing from within. In this state, the individuals enter into a logical AND connection. In addition, there are clear principles and values. In this context that are lived out pragmatically and concretely - not abstractly - which is why it is strong, robust and resilient. In addition, no classic hierarchy or top-down regulation is necessary in this ideal state, as long as there are a few responsible, truly

good individuals that the other members can imitate (Bandura & Walters, 1977). However, these individuals also have a duty to gradually expand their responsibility to gradually convince others of the good to move forward together. Expanding responsibility does not mean winning over and convincing others of your own views during the process, but rather letting them decide for themselves to what extent they want to follow them - in principle, however, even the most rigid individuals will be persuaded if they can recognize, witness and ultimately experience what is truly good and competent (Henrich & Gil-White, 2001); although we must not ignore the reality that there may well be individuals who do not succeed in doing so. The individuals in such a context are constantly productive, strive for knowledge and jointly pursue the following goal: harmony or state 1 to achieve the defined vision. In this way, optimal collective growth is possible, where everyone pursues their task and role with their own goals and needs, which are ideally derived from the overarching vision. Since it is almost impossible to define a universal and collective vision for all individuals, we should nevertheless limit ourselves to one most fundamental form: namely, being and remaining human and preserving the autonomy of all individuals in the context. Nothing more and nothing less. Another premise in this context is defined as follows: The autonomy of individuals begins where the autonomy of other individuals is not endangered. If individuals open up consensually and consciously, taking the inherent order into account, an AND connection can be created.

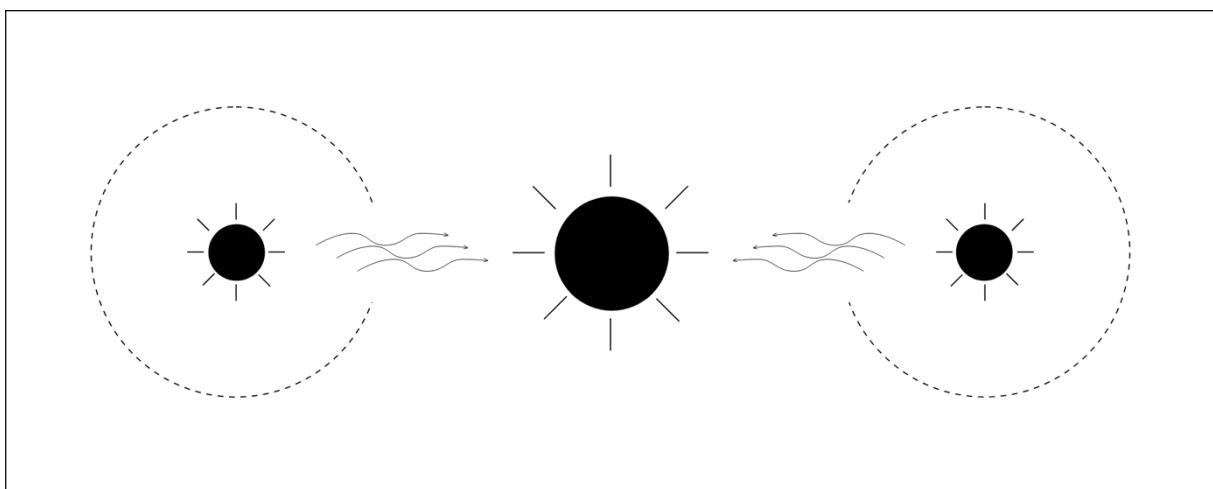


Illustration 13: Own Illustration – Building AND-Connections

The circles that symbolically represent the individuals in the context are constantly moving. If this entangled AND state between the individuals cannot be maintained coherently due to too much entropy and chaos (Kaur, Bagchi, & Pati, 2023; Gregersen & Sailer, 1993), the following two extreme contexts can arise: In the second state (middle), the individuals enter into a complete symbiosis (Mahler, 1967). This is a hindrance because they now act in complete dependence on one another; thus, the advantages of each other's strengths can no longer be used, since the strengths of one become the strengths of the other, and vice versa. In addition, this state is characterized by not having defined a clear vision. This makes it difficult to activate volitional forces and grow individually in a targeted manner to promote lifelong learning and growth. In addition, in this state there is no longer any structure and orientation, characterized by the blurred and dissolving protective layer. It seems that we are currently in this state - especially in Western society - because at a macrosystemic level we are questioning objective truths that have been firmly determined in our organism for millions of years, such as our gender (Federman, 2006). This disorientated progression in space and time leads to all individuals regressing their growth because they focus on everything and yet nothing. In this second state, individuals have not yet learned to fully control their natural drives or have not yet established an inherent order such as an independent identity, resulting in becoming very vulnerable to change due to the lack of a stable identity and vision. This in turn is made possible by the following dimensions: knowledge, volition, cognition, constructive passivity and self-reflection. The third state (right) is characterized by strong egocentrism and competitive thinking. All individuals develop away from one another and define their own visions. This state also harms individual growth because the positive contextual forces are no longer present. In addition, no one is permeable to new knowledge and is completely closed to external stimuli, characterized by the closed circles. This means that new knowledge is absolutely absorbed - if it penetrates - and there is no longer any comparison with other subjective realities, as well as a fundamental objective reality - a modern phenomenon that we can subsume under this is that of the echo chambers in the area of social media (Terren & Borge, 2021) or the out-group phenomenon (Tajfel, 1970). This means that only individuals who share the common subjective realities and visions can live together; otherwise, a lot of friction, malice, bias and impulsivity arises (Lewin, Kaur, & Meshi, 2023; Tajfel, 1970). This

context is more or less stable against change because each individual has constructed a consolidated subjective reality and pursues his or her own vision. In summary, the first state is the most conducive and desirable for individual growth, as it draws on the inner strengths of all individuals. A supportive environment is created that radiates goodness - everyone benefits from everyone and everything from everything. This state is kept stable by a continuous comparison of all the realities of the members in the context of, for example, a society - above all by listening and asking questions to get closer to the common truth and vision, as is the case in direct democracies, for example. Technological progress, for example through language clusters, could indeed help to compare many different subjective realities, as a kind of objective reality can be filtered out from the many subjective intersections. In this way we could ensure that every individual in the context is involved in the democratic decision-making process - at least on very important issues - which further promotes an AND connection. The other two states are to be avoided for the reasons mentioned, as they create a pathological context that harms individual growth. To counteract the emergence of the second state, the following is necessary: organizing principles and universally valid behavioral norms. This can restore the lost protective layer. Or, if we like: consistent boundaries that must be anchored in the context so that it does not fall apart because the disorder becomes too great. We can deal with the third condition as follows: Access must be created that all individuals in the context share and that enables them to at least partially break out of their subjective realities.

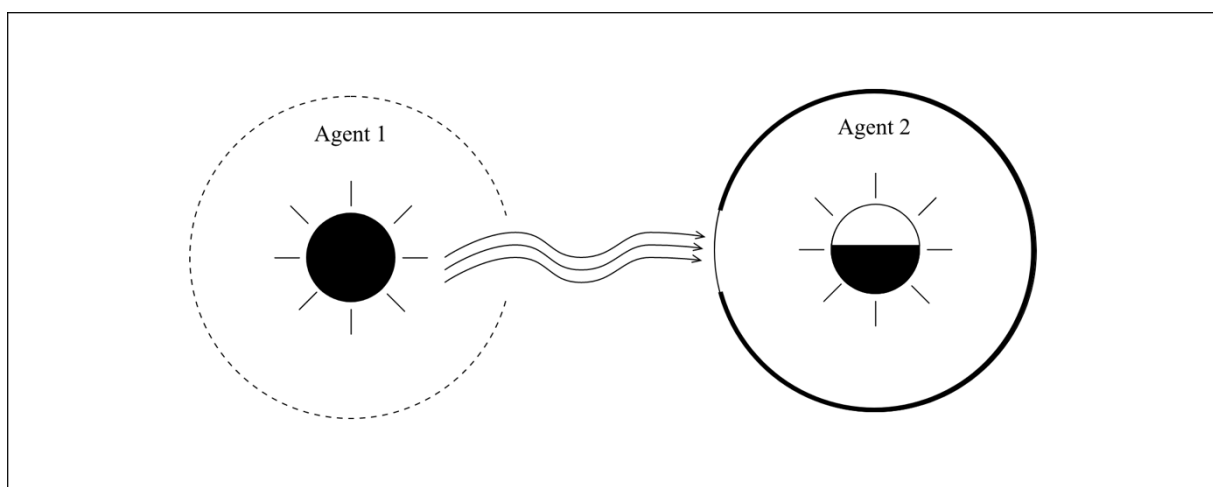


Illustration 14: Own Illustration – Enabling access

To enable access, an individual (Agent 1) must first open up. This process of opening up, in turn, requires a great deal of self-discipline, forgiveness, hope, mindfulness and true strength, as otherwise one's own volition can be extinguished, as during this opening, pathological stimuli from external influences can also penetrate the core due to high emotional charges; and negative charges in particular have a greater effect on changing the core than positive ones (Baumeister R. F., Bratslavsky, Finkenauer, & Vohs, 2001). For example, the generous-tit-for-tat (GTFT) strategy from game theory shows that the probability of harmonious reciprocity increases and the potential for conflict decreases if one of two actors has the courage to approach the other to forgive instead of punishing the other actor, even if the costs of punishment would be lower (Rand, Ohtsuki, & Nowak, 2009) than for cooperation. It is almost as if the urge for natural harmony outweighs the urge for conflict. Another prerequisite for access is that this process is communicated to the penetrator (Agent 2) using conscious, clear and direct language - instead of priming methods or the so-called psychological soft power (Nye, 2008). Otherwise, we may encounter resistance and defiance (Herr, 1986), caused by the natural protective mechanisms (and possibly the high level of networking and information), as these mechanisms protect and maintain volition and automatically recognize when it is reluctantly changed by external influences. In addition, priming methods endanger the autonomy of the individual, as they can have a manipulative character, as the priming methods are often not consciously made accessible to the individual. In a few exceptions, for example in raising children, such methods are appropriate, as children are not yet able to fully question and reflect on their behavior to act in a mature and autonomous manner (Piaget, 1976). Ultimately, it is important that the opening individual (Agent 1) is aware of his or her volitional powers and can clearly distinguish them from other individuals. Otherwise, there is a risk of falling into one of the pathological states mentioned above, as the comparison of the various subjective realities through constant communication is no longer possible, which can significantly increase the potential for conflict and harden subjective realities (Glasl, 2004). However, if this consensual connection can be created (Pettigrew & Tropp, 2006), a new holistic schema can gradually be constructed: basic trust, which must be shared, valued and protected by all individuals in the context, as it is the lifeline that individuals can always fall back on should they ever need support. However, those individuals who consciously abuse this basic trust for their own benefit or for evil

motives must be strictly sanctioned by necessary evil, since otherwise only a few individuals can endanger the entire context (Wilson & Kelling, 1982; Weisburd, Uding, Hinkle, & Kuen, 2023). Those who unconsciously endanger this basic trust should be treated with leniency and nevertheless clearly, directly and consciously explain the consequences of their behavior, since - whether consciously or unconsciously - the most important lifeline has been threatened. And the more intensively the consequences of the individuals' behavior are sensibly demonstrated and anticipated, the more likely the context will harmonize itself from within, without external intervention. This reduces the likelihood of having to apply concrete punishments, since the individuals can come to their senses on their own (Gaaba, Rohleder, Natera, & Ehlert, 2005; Thorsteinsson, Schutte, & Rooke, 2009). This voluntariness is important because concrete punishments from outside can cause the ideal state to regress into one of the two pathological states (Freire, 1978; Gershoff, 2002; Ferguson, 2013).

On the path to a harmonic context

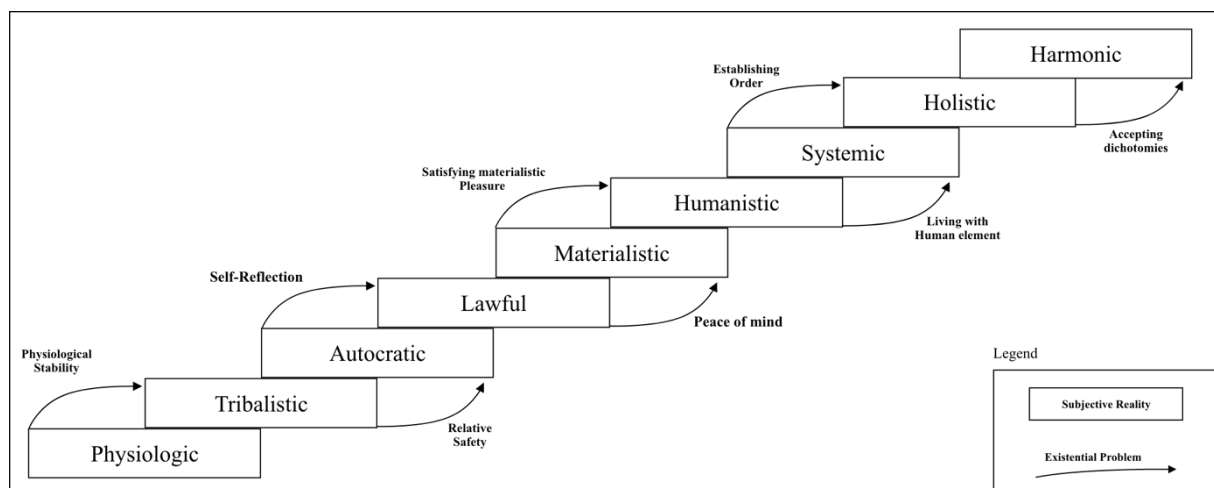


Illustration 15: Own Illustration – Emergence of subjective realities by Graves (1970, S.135-136).

In a real context - or if we like, everyday life - many individuals with subjective realities encounter each other. As a result, each individual interprets a certain situation or a certain external stimulus differently. This in turn leads to potential conflicts, supposed contradictions and gives rise to the phenomenon of differences of opinion. Therefore,

I would now like to describe the process by which a community can be able to overcome such differences of opinion to reduce the level of conflict and create a harmonious coexistence. To do this, I use the open systems theory of personality levels and values according to Graves (Graves, 1970). It states that our subjective reality develops further when existential problems have been overcome through newly learned coping strategies (i.e. Lazarus & Folkman, 1984). This is because confronting existential problems in the outside world activates energies that can be used to break out of a rigid subjective reality and then, ideally, to harmonize it over time on a more insightful level. However, it is also possible that the individual regresses during the energy release, for example if the individual does not manage to use this released energy in a targeted and meaningful way to reintegrate it into themselves. The development of subjective realities follows the principle of dialectics according to Hegel (Heidegger & Kerckhoven, 1990), since according to Graves, influencing ego-oriented and adaptive group-oriented levels of perception in the individual constantly alternate and synthesize on a new level of perception. Nevertheless, in addition to Graves and Hegel, I would like to show that it is indeed enough for individuals in the context when they have reached the introduced harmonious level. Now I would like to show how this development - from the physiological level to the harmonious level - can be achieved by overcoming the existential problems described above. Although open systems theory is somewhat older and viewed with skepticism, it does not cause any contradictions and is in line with the current state of research on human development (Maslow, 1943; House, Hanges, Javidan, Dorfman, & Gupta, 2004; Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009; Hofstede, 2011; Schwartz, 2012). So, let's first look at the physiological level of perception. The subjective realities of individuals at this level are purely reactive, controlled by their animalistic, innate survival instincts and emotions (Panksepp, 2004). Such states are normal and part of us humans. Pathological states occur, for example, due to illnesses such as schizophrenia or in exceptional situations that cause unusually high levels of stress, such as in times of war or when people are completely overwhelmed (Burisch, 2014). This leads to the upper brain regions no longer functioning adequately to control animalistic drives (Sinhaa, Lacadiee, Constablee, & Seo, 2016). Only when a certain physiological stability has been achieved by satisfying existential and relational needs such as food, warmth, drinking and security, are individuals able to stabilize their neurological system

and thus create basic conditions for it to develop further (Guenthne, 2012). They begin to adopt traditional and tribalistic behavior patterns and learn the advantages that result from them. In this way, individuals gradually begin to overlap their subjective realities, which can create a small, shared community of values with a stable group identity. In this way, a sense of security is established among individuals - an important basic need that must be satisfied (Bowlby, 1977; Waldinger & Schulz, 2010; Loades, et al., 2020). This tribalistic phenomenon is clearly visible in our everyday lives. For example, different peer groups at school or at work, family systems, political parties that form and often incite each other, or at the macrosystemic level, different cultures that fight each other because they see the others as a separate part because they do not share a common identity and therefore see each other as alien (Tajfel, 1970; Bourdieu, 1987). But the time comes when some individuals break out of this tribalistic-subjective reality. They gradually break away from their own group and question these tribalistic ways of thinking and behaving. This leads to these individuals now achieving more autonomy. However, they are also confronted with a lot of uncertainty because they have broken out of the secure tribal group. This in turn leads to the individuals realizing that purely autonomous and independent action without help and without group membership is difficult (Uziel, Seemann, & Schmidt-Barad, 2020). However, through this self-knowledge, this existential problem can also be overcome, and the individuals manage to break out of this egocentric reality and stabilize themselves on a new level of perception characterized by rules, laws and order to reduce the great uncertainty from the previous level. On this level of perception, the inherent order is now shaped by uniform structures in society, as occurs, for example, in functioning democracies. In contrast to the second level, which is also characterized by order and structure, it is now increasing rationalities and a general hierarchical group that establishes the order, instead of the tribal leaders who have traced the laws back to rituals and magical customs, among other things, as is still the case today in extreme form in sects (Galanter, Rabkin, Rabkin, & Deutsch, 2020). But also, to a lesser extent in our everyday lives, such as the good morning in elementary school at the beginning of the lesson, or the collective roar of fans in the football stadium. Furthermore, a certain hierarchy, or if we like: our inherent order, is essential for a functioning society. However, this hierarchy must always be built on the premise of the natural competence of individuals, rather than their position or titles, to create a resilient, vitalizing and

harmonious context (French, Raven, & Cartwright, 1959; Chapais, 2015). Too much order on the legal level, however, can lead to arbitrariness being concealed by endless rationalities, which in the worst case leads to blind obedience, absolutism, stagnation and the reification of individual individuals (Kafka, 1925; Arendt, 2017). So it happens that after some time, the lawful-subjective reality of individual individuals is further developed because they question these absolutistic laws, see through them or have constructed an inner order and stabilize themselves on a new level that is characterized by a pronounced materialism. On this level of perception, the maxim of individuals is: conquer the physical world (Frisch, 1957). This motive creates progress and productivity and prosperity for many individuals. In extreme forms, however, it also leads to a destructive exploitation of our ecosystem - especially when these growth needs are modulated by pathological motives: above all greed and envy (Fromm, 1976). This subjective reality can only be broken out of once individuals have satisfied their materialistic needs. Although a general increase in income leads to greater satisfaction (Diener & Oishi, 2000), it can also be concluded that marginal utility decreases with each additional unit of money (Kahneman & Deaton, 2010). If this need for growth in materialistic freedom is satisfied, the basic conditions are created for individuals to create a new level of perception. Where this pleasure maximization limit lies is individual but should be chosen sensibly. However, the less pronounced the need for materialistic growth is, the more likely it is that individuals will be able to expand this subjective reality, as materialistic existential fears can be overcome more easily. The next level is characterized by a deep humanism that puts life with others at the forefront. The individuals on this level recognize, respect and value every living being as an individual entity in the all-encompassing ecosystem. Through such humanistic subjective realities, systemic thought and behavior patterns can then gradually develop, based on the realization that everything is connected. This systemic level of perception means that individuals are able for the first time to understand and oversee all the different motives from the different subjective levels of perception and can therefore also fully fathom the causes of the differences of opinion. However, this leads to a new existential problem: high complexity due to the high degree of interconnectedness. It is only possible to break out of this systemic reality when a certain internal order has been created, despite the immense complexity and differentiation. The findings from my master's thesis also come to the same synthesis.

In this thesis, I qualitatively interviewed 15 experts from different nations with an average age of 51 from a global organization with more than 10,000 individuals regarding contextual development (Ganster, 2022; Appendix II). However, if the individuals were able to successfully integrate such an order into their level of perception, it is now possible to construct an integrated reality in which the existential problem is to successfully integrate and accept the inherent contradictions, dichotomies and disharmonies of life (Graves, 1970). After that, the door to perfect harmony would be open to the individuals - the return to human paradise, if we like. A state of perception characterized by true love, which invites us to be who we are. A state in which we have become what we were always meant to be. A state in which individuals can use and integrate their differences of opinion in an unjudged and understanding way to draw insights from them, thus maintaining the communal state of harmony, instead of solidifying the differences of opinion or getting lost in endless chains of arguments, which initiates stagnation, regression and a slide into one of the two pathological states. If we like, the harmonious level of perception, the level in which a life of constant synthesis according to Hegel would be possible, without theses and antitheses, is characterized by autotelic processes of consciousness that construct the communal state 1 and maintain it coherently. The existential problem of this level of perception is to harmonize all subjective realities - from the physiological to the integrated level - to the unified state 1 throughout a lifetime.

Solving the existential problem in the harmonic level

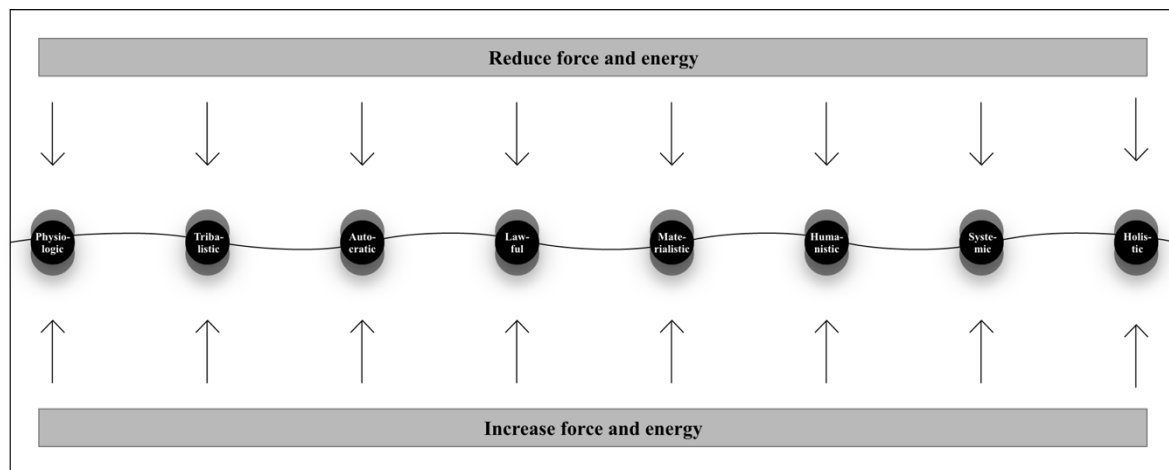


Illustration 16: Own Illustration – Stabilizing the harmonic level

I would now like to explain how it is possible to create a harmonious context or to overcome this existential problem: If the basic needs from the physiological level first become noticeable, they must be stabilized. If these needs increase or decrease to a certain pathological level, this must be counteracted. Each individual must find out for themselves where this pathological level lies. In general, however, there are good clues or objective indicators to define this level. On the physiological level, one clue would be the body mass index (BMI) to harmonize the need for hunger and thirst.

If the need for a tribalistic lifestyle is signaled, it must be modulated sensibly and appropriately. It makes sense to feel like you belong to a group, for reasons of cohesion and support. However, only to a degree where your own identity or self can still be clearly distinguished from others, for the reasons described above.

If the motive of egocentrism emerges, this must also be sensibly harmonized. If the thought and behavior patterns of individuals are too egocentric, this has a negative effect on the self and the environment. There is a danger of developing into an impulsive, arrogant tyrant. On the other hand, if individuals are too egocentric, they also suffer, as the likelihood of regression into self-pity and inferiority complexes increases. If we like, this means that a certain healthy narcissism is necessary to be able to progress as a mature individual.

On the legal level, disharmonies lead either to extreme forms of bureaucracy and regulations, or to chaos and disorder if there are no laws, which is why harmonization is important. In the worst case, we encounter both forms at the same time, as is the

case with Franz Kafka's Kafkaesque: (bureaucratic) arbitrariness is concealed and obscured by endless rationalities, which in turn creates a deep feeling of passivity and powerlessness and causes the individual to regress.

Harmonizing the need for materialistic pleasure is of fundamental importance to fulfill the premise of being and remaining human and is more important than ever today. It is so important because this level creates the basic building blocks for a progressive, innovative and technologized context, to create the basic conditions for self-determination and autonomous progress - at least that is what the industrial revolution showed us, which brought great prosperity. In addition, an increased level of technology leads to considerable energy efficiency (Yuan, Liu, & Wu, 2009). The fundamental downside, however, is that on the one hand our ecosystem and its resources are limited, and on the other hand the current source of energy - which is the key axiom for being able to progress productively as an individual and as a society, which is why cost-effective provision is essential for economic reasons - has a destructive effect on the ecosystem due to its fossil properties. Mainly due to increased man-made CO₂ emissions (Keeling Curve, accessed on June 7, 2024) and physical conquest, which in turn endangers the guiding premise of being and remaining human. Therefore, I would now like to propose a way to harmonize the material level in a natural way, without having to supply harmful energies, so that individuals can continue to progress productively without endangering the ecosystem through increased CO₂ emissions, contrary to common doctrines from the environmental Kuznets curve discussion (for more details, see Environmental Kuznets Curve literature), in which it is occasionally postulated that economic regression and renunciation are generally necessary to maintain the ecosystem (Leala & Marquesa, 2022); although there are also doctrines that claim the opposite - namely that the ecosystem can be maintained through economic growth starting from a per capita income of about \$55,411 due to the simultaneous increase in technology levels (Pata & Kartal, 2023). The new proposed path is intended to replace the current narrative: "CO₂ emissions must be reduced to preserve the ecosystem" with the following more nuanced one: "As long as there is natural absorption of CO₂, such as through effective and efficient filtering or rigorous reforestation (i.e. Luyssaert, et al., 2008) or general preservation of forests on the one hand and methods to reduce CO₂ emissions, especially through natural and inexpensive energy sources, to preserve the ecosystem on the other hand, CO₂

emissions are temporarily acceptable as long as natural absorption is greater than emissions. *At least until complete natural and sustainable energy self-sufficiency has been achieved, to ensure the guiding premise of low-cost energy to ensure progress."* The emphasis here is on natural absorption (i.e. Petersa, Hussainb, Follmanna, Melina, & Häggb, 2011). Man-made synthetic absorption could have unimagined consequences for the global ecosystem, since we are ultimately dependent on CO₂ for our breathing and the natural photosynthesis of plants, which in turn produce oxygen. In general, the ecosystem can naturally absorb more CO₂ than we emit. The fundamental problem, however, is that we are removing too many natural absorption sources from our ecosystem through clearing and deforestation and accelerating the natural CO₂ emissions into the atmosphere, such as through the shifting of the tectonic plates, through man-made extraction (MIT Climate Portal, accessed on June 7, 2024), which ultimately endangers natural harmony. This path can be realized concretely through the following five paradigms: 1) Construct ecosystemic ways of thinking and behaving at the individual level through bottom-up measures among individuals through mental maps to gradually create a sustainable awareness in the context. 2) Create incentives for a pragmatic industrial circular economy that creates a consistent connection between input resources and used output resources to reuse the finite resources in the ecosystem for as long as possible. If we like, the output is propagated back into the ecosystem, as is the case with the optimization of neural networks. 3) Create incentives and framework conditions for decentralized energy autonomy at the individual level, especially through solar, wind energy and battery storage, due to the low costs, and at the collective level, especially through more centralized nuclear energy (Pata & Kartal, 2023) and large wind and solar parks, as well as fossil fuels in crisis situations, to ensure the elementary low-cost energy supply and a black start. The increasing level of energy autonomy at the individual level does indeed reduce potential tax revenues for actors who establish the internal order hierarchically in the context (the state), but otherwise fewer financial resources are needed for maintenance measures on central energy structures due to the decentralized energy orientation, which in turn justifies a high level of decentralized energy autonomy. 4) The state ensures a fair, appropriate and harmonious financial distribution through consistent progressive taxation and maximum taxation for highly accumulated capital to balance out a pathological materialistic-financial level. This is intended to prevent

the third pathological state in the context by preventing poor and rich individuals from moving further and further away from each other in the capitalist sense, for unjust reasons, since the division is more the result of mathematical facts, such as the law of exponential growth, than the cause is based on the pure increase in productivity of individual individuals. 5) The economy matures from an initial agricultural one, followed by an industrial one, to a highly technological, energy-self-sufficient and service-oriented one, and in this final stage it supports other contexts (states) in the realization of the new narrative, until finally a complete global energy self-sufficiency and a stabilization of the ecosystem and this level have been achieved to ensure an optimal existence and growth of all individuals in harmony with nature. It is interesting to note that autotelic processes that activate energies in the individual in the spiritual sense (World 2 according to Popper) can also be found in the context in the physical sense (World 1 according to Popper) in the form of natural resources such as nuclear and solar energy. If we like, the volition in World 1 manifests itself precisely through these forms of energy, whereby the former energies should be used very carefully; if we like, only with the protective layer completely closed –

Achieving harmonization at the humanistic-communal level is challenging because it can affect and endanger the fundamental premise of this work: being and remaining human. For example, Thomas R. Malthus argues that humanity is facing a catastrophe in the long term because population growth is exponential, but food production is linear (Malthus & Winch, 1992). In an advanced and technological context, food production can be increased to satisfy basic needs and thus ensure optimal growth, which in turn allows the fundamental premise to be met. For this reason, it is essential that there is a high degree of innovation in the context and that the level of knowledge is continuously increased. To preserve the axiom of autonomy, collective educational measures that directly influence population growth should be avoided because they are externally determined and not self-determined. Rather, it is necessary either to vitalize population growth through (in)direct incentives, such as fair and equitable financial support and investment at birth, to avoid regression to a lower level, or to use educational work to show individuals the consequences of possible overpopulation and underpopulation, which in turn could also endanger the fundamental premise of being and remaining human and should therefore be avoided. In concrete terms, this means:

Not having children would be fatal, as humanity would no longer exist in a few generations. However, the upper limit must not be decided either, as this would be presumptuous to decide collectively about life. In addition, the consequences are difficult to predict, which was again shown by the one-child policy in China. The assumption at the time was that China was facing rapid population growth. Today we know that this assumption was wrong, and the opposite has happened (Mühlhahn, 2022; p. 628f.). Rather, we should focus on controlling our animal instincts and integrating them into ourselves with the help of the following dimensions: knowledge, cognition, self-reflection and constructive passivity. Richard Dawkins also states: "Let us try to teach generosity and altruism, because we are born selfish. let us understand what our own selfish genes are up to, because we may then at least have the chance to upset their designs, something that no other species has ever aspired to" (Dawkins, 2016, p. 4). And under these conditions, in a harmonious context, each self would be able to decide how big or small their family should be.

At the systemic level, individuals learn to open up their ways of thinking and behaving in such a way that they recognize that everything interacts and is connected somewhere and somehow and that each of us is surrounded by different systems (family, friends, news, social norms, nature...). These systemic ways of thinking and behaving are constructed primarily by the high level of technology (digital system) in today's world.

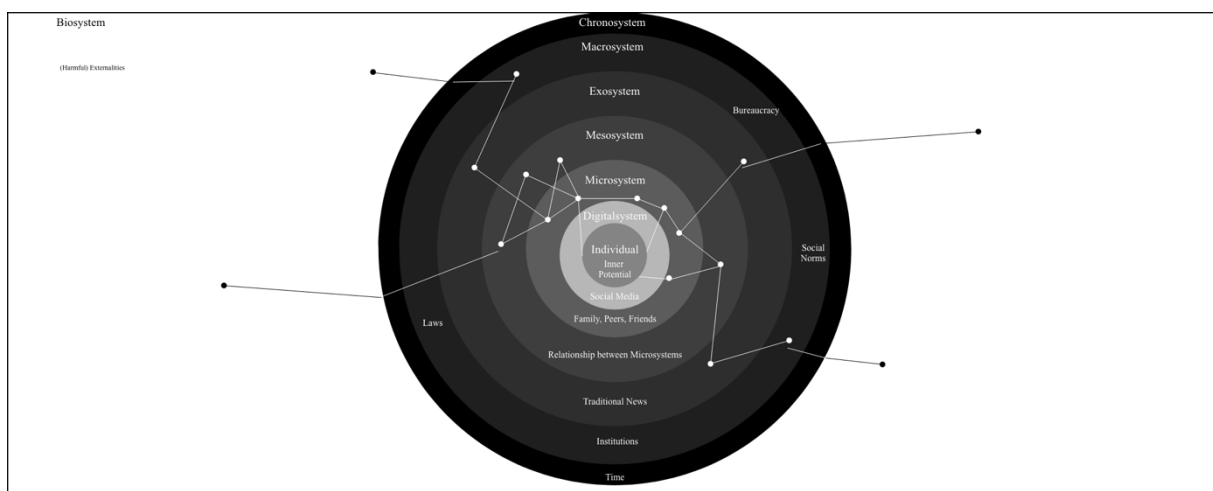


Illustration 17: Own Illustration – The individual in the systemic level (Navarro & Tudge, 2023)

Individuals learn about the complexity of life. However, there is a danger of "not seeing the forest for the trees", which can lead to a general feeling of helplessness. It is therefore better to consider the almost impossible achievements that humanity has already developed and produced in the past, to hold on to them and to be productive step by step, little by little, to prevent stagnation and regression and thus harmonize this level. To better understand the systemic complexity of this level and to better derive measures for the necessary internal order to overcome the existential problem at this level, I would like to use the following illustration to show how the individual and collective levels influence each other reciprocally and how harmonization can be achieved very carefully in context in five steps. First, we must be aware that each of us is indeed capable of achieving great things for humanity through autonomous, solution-oriented and responsible ways of thinking and acting (Pascale & Monique, 2010). In the second step, we must become aware of how ways of thinking and behaving arise through reciprocity on an individual and collective level. Hofstede (1984) writes: "There must be mechanisms in societies which permit the maintenance of stability in culture patterns across many generations" (p.22). According to Hofstede, such stability mechanisms include value systems or "mental programs" (p.22) that are shared among large groups in the context. Every context needs these stability mechanisms or this internal order. Due to the high level of technology, these mental programs are subject to a faster rate of change than was previously the case, due to the lower level of networking; however, this is not a problem if an internal order is maintained in the context. Important stability mechanisms in the context include language, as well as social norms, traditions and customs. Without these, the context threatens to break down into a pathological state, as the likelihood of chaos and arbitrariness increases. In the next step, we must be aware that each of us creates our own subjective reality over the course of our lives through our biography and predispositions, which means that external stimuli can be perceived in different ways. For harmonization to succeed, we must be clear about this fact and try to initiate an exchange. This increases the likelihood of finding a common intersection and building a connection, despite the differences. In concrete terms, this means, for example: Individual A is convinced that a tied, family-oriented lifestyle is the right and good one. Individual B is convinced that a free, childless lifestyle is the right and good one. For a

common connection to be established, both individuals must begin to exchange information about their biography and predispositions in the fourth step to gain insight into where these beliefs come from. They must understand the intra-interpersonal dynamics. For example, Individual A reveals that she comes from a functioning and lovable family, which is why she has always wanted a family; whereas Individual B replies that she grew up in an orphanage and had bad experiences with her parents at the time and therefore does not want to have children. Through this exchange, as already described above, a strong bond gradually develops. Namely the basic trust that is constructed between the two. Once this connection has been initiated, the individuals should agree on a common vision to mobilize their inner strengths and move forward. They define the following activating vision: Both individuals share the opinion that all children should grow up in a healthy and secure environment. Therefore, they would like to meet once a month to discuss how a secure family can be founded while maintaining a certain degree of freedom for the parents. On the way to achieving this vision, the individuals in the final step continuously exchange ideas with one another, overcome challenges together and thus strengthen their connection and trust in one another.

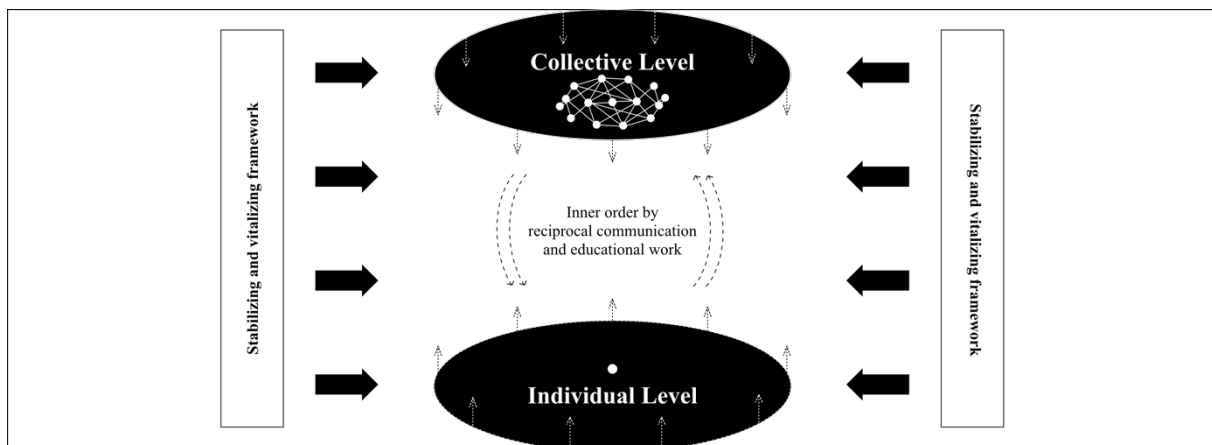


Illustration 18: Own Illustration – Order through Reciprocity on the individual and collective level

The last holistic level is the individuals. Nothing more and nothing less. Harmonization is initiated by this with the help of autotelic processes. A state of mind in which the individuals have no doubts about overcoming future challenges and achieving goals, but at the same time do not focus on them or cling to them.

In conclusion, the existential problem is overcome in the harmonious level by complementing and harmonizing the thought and behavior patterns from the different subjective realities. Each context must define the standards for harmonization itself. However, they must be appropriate, reasonable and oriented towards the preservation of humanity. This, in turn, is complex due to the diversity of reality, which is why changes in the context - which also includes the global ecosystem - should only be carried out carefully and consciously. If possible, gradually from the individual to the collective and not the other way around, to prevent excessive imbalances and fatal, chaotic disruptions through apparently simple, universally valid rules and inferences in the context (Oestreicher, 2007; p. 285). In the harmonious level of perception, the protective layer around our unbridled volition would not even be necessary, since all individuals strive for the vision of absolute truth and to be and remain human, initiated by the constant need for knowledge and harmony, through open, honest and immediate listening and communication, whereby the stimuli penetrating our subjective realities would be exclusively good. In this context, individuals can reveal themselves completely without being someone they are not (Goffman, 1959). A life full of happiness and unhappiness, full of joy and suffering, tension and relaxation, disharmony and harmony, humor and seriousness, like in a musical composition, is made possible and precisely for this reason is perfect, absolute and beautiful, which makes it worth living together -

H7: In a harmonious context, individuals are autonomous units that are intertwined by basic trust and form an AND connection. Individuals who consciously endanger basic trust should be consistently punished so that the internal order is not endangered. Individuals who unconsciously endanger basic trust should be treated with leniency on the one hand, but on the other hand we should still firmly point out the consequences of their behavior. Basic trust must be constructed and strengthened through a continuous comparison of subjective realities to guarantee collective progress. New technologies in unsupervised neural language clusters can help here. This happens by creating fear-free access through familiar and active listening and communication. In doing so, they pursue an overarching vision that is essentially oriented towards being and remaining human, which mobilizes their volitional forces. If this AND connection cannot be maintained, there is a risk of slipping into one of the two pathological states.

H8: To maintain the first state in the context, all levels must be harmonized. The destabilization of one level leads to the imbalance of others and to regression in the entire context and a slip into one of the two pathological states. On the one hand, an artificial shortage of fossil fuels through collective regulations in the context stabilizes the upper ecosystem levels, but on the other hand, the harmonization of other levels - especially the materialistic level - is endangered, since this requires a sufficient and cost-effective energy supply, which is currently not possible with renewable energy sources. This disharmony leads to a further slide, because the materialistic level is - to varying degrees, due to the capitalist system - intertwined with all other levels and is decisive for the level of technical progress and innovation, because many of our thought and behavior patterns are influenced by economic forces, such as prices, which in turn leads to prosperity and autonomy in the materialistic sense for all individuals. To ensure optimal growth, the new narrative of not only reducing CO2 emissions should therefore be implemented gradually through the five paradigms introduced, but still as quickly as possible - considering the premise of inexpensive energy supply - to ensure natural and appropriate growth that is oriented towards being and remaining human. Furthermore, I argue that the cause of division and collective destructive passivity in a context or society is, on the one hand, that the physiological and materialistic levels are destabilized - primarily by the increased energy prices, because energy is the basic stabilizer of the materialistic level - and these levels are crucial for survival and destabilization consequently leads to reactive, charged behavior. On the other hand, the division and destructive passivity is since we begin to adapt our subjective realities to higher levels due to the high degree of interconnectedness in the context through technological advancement. This in turn is both a blessing and a curse. A curse if we fail to find our role as a human species - while highly innovative technologies advance - and if we do not adapt to the high level of interconnectedness and complexity, which temporarily leads to more entropy. Otherwise, we become passive individuals and hinder our individual growth; But it will also be a blessing if we succeed in establishing a healthy inner and harmonious order on an individual and collective level, despite the increase in complexity, entropy and new technologies on the horizon, through reciprocal communication, dialogue and the pursuit of absolute truth and knowledge.

Law of Individuation

$$I_w(k, s, e, v, p, c) = \frac{\sqrt[p]{k^s * (e + 1) * v}}{c} = \infty \mid p, k, s, e, v, c \in \mathbb{N}^+$$

Let us now take a closer look at how the various variables in the formula for individual growth I_w are related to each other: Firstly, individuation is strongly influenced by cognition k , which in turn is closely related to self-reflection s , so that the result is the power k^s . The knowledge e is closely related to the power, since without cognition no information processing process can take place and consequently no knowledge can be gained. Therefore, these two variables form the product:

$$k^s * e$$

However, it is important to consider this product separately, which is why both variables are broken down into a sum:

$$k^s * e + k^s = k^s * (e + 1)$$

for the following reason: On the one hand, our individual growth increases even if we only strengthen our cognition, as our view of the world becomes clearer, more critical and more congruent, i.e. we perceive reality more consciously. However, splitting the product into two terms should not be understood as a dualistic desecration - on the contrary: both have positive effects on each other. A higher level of cognition promotes the conscious and unconscious cognitive process. If, for example, we participate actively and concentratedly in a discussion, we are more likely to draw instructive conclusions from it than if we listen passively - without mental effort. Furthermore, a higher level of cognition has positive synergies on the potency consisting of cognition and self-reflection. If, for example, we know declaratively how information is processed and elaborated, we can acquire certain techniques that can help to improve the information processing and elaboration process. Another important factor in individual growth is individual drive and willpower: Volition v . It is a kind of inner fire and accelerates our growth. So v is directly related to k, s and e and is multiplied by them:

$$k^s * (e + 1) * v$$

The discriminant in the numerator therefore represents the pure individual potential. The higher the numerical values here, the more vitalizing an individual develops. The discriminant is reduced by the root exponent - the passivity p - through high numerical values. At best, the inner passivity is 1 - here I am talking about the state of constructive passivity; or in other words: perfect inner harmony:

$$\sqrt[p]{k^s * (e + 1) * v}$$

If we like, the numerator describes all the intra-interpersonal processes that arise from within the individual on the one hand and are influenced by external stimuli from the environment on the other. The variable c describes the context - that is, the external influences, such as the family, the work environment, school and news. The context is in the denominator and minimizes the entire construct of individual growth in the numerator through high numerical values or maximizes it through small numerical values:

$$\frac{\sqrt[p]{k^s * (e + 1) * v}}{c}$$

Here we should refer to the insightful work of Bronfenbrenner, who showed how strongly the context influences the development of an individual through so-called proximal processes (Vygotsky & Cole, 1978) (Bronfenbrenner, 1981; Bronfenbrenner & Morris, 1998). Low values are achieved through a motivating, loving, responsible and supportive environment. The ideal value for c that an individual should strive for is therefore 1 - a harmonious coexistence. In summary, the following can be said about the interrelated values in the formula: Only the discriminant in the numerator reflects the pure individual potential from within, whereas the other values p and c form the values, whereby the inner potentials in the individual are intertwined with the outside world.

Individuation and its courses

Natural course *without* Variability for $k, s, e, v, c, p = \infty$

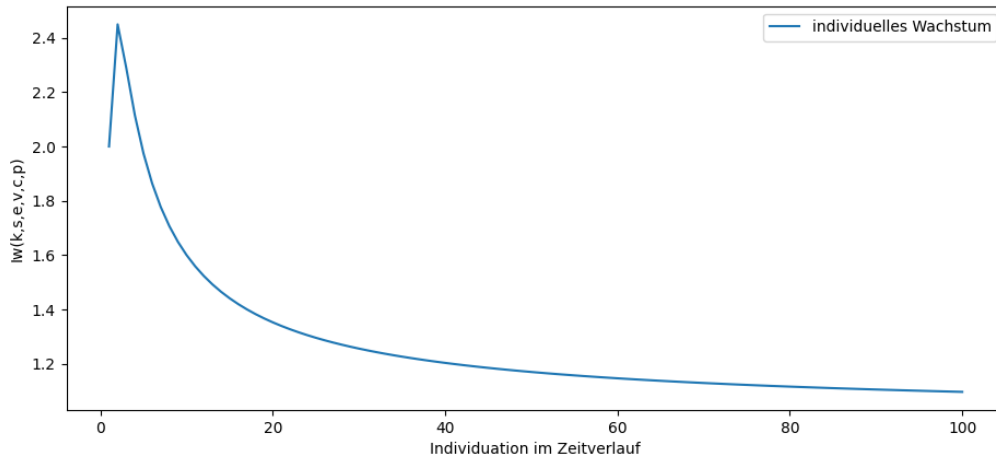


Illustration 19: Own Illustration – Natural course without variability

First, individuation increases suddenly. This rapid increase is characterized by our remarkable learning performance in early childhood (Chen, et al., 2023), in which an individual develops at least as much even in the most adverse conditions and creates basic conditions to overcome and master the innate animal instincts in the future to be able to grow into a mature and autonomous individual, provided that this individuation process is not hindered by an extremely pathological outside world or biological limitations such as diseases. The older we get, however, the more our individual growth also declines - for biological reasons alone. It can be maintained if, on the one hand, the numerical values for cognition, self-reflection, insight and volition increase and, on the other hand, the numerical values for passivity and context decrease - whereby the ideal harmonious state here is 1. The figures below show three exemplary courses: a normal, perfect and a harmful course (for more details, see Appendix I):

Normal course with variability for $k, s, e, v, c, p = \infty$

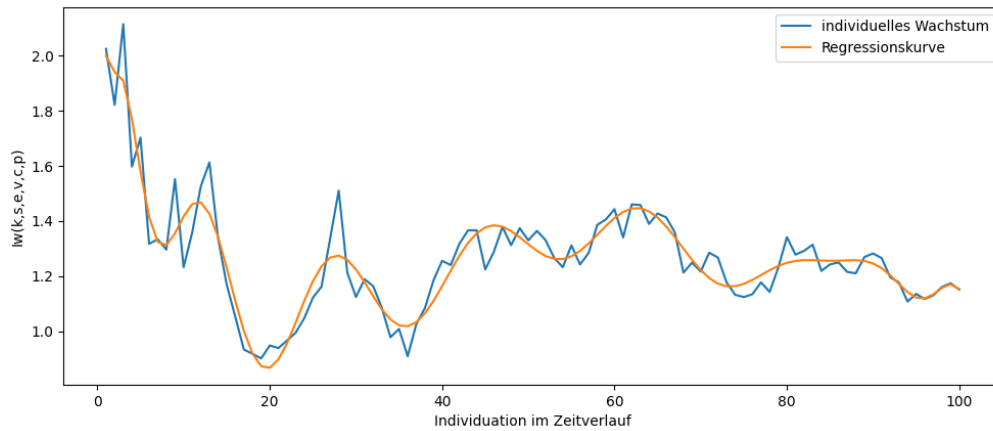


Illustration 20: Own Illustration – Normal course with variability

The normal course of events occurs when we place ourselves freely at the disposal of nature. We would be characterized by a lot of dynamism and movement. However, there would be no clear direction of growth. As a result, we would continue to move forward with many ups and downs without any noticeable progress until the end of our lives.

Perfect course with variability for $c, p = 1$ und $k, s, e, v = \infty$

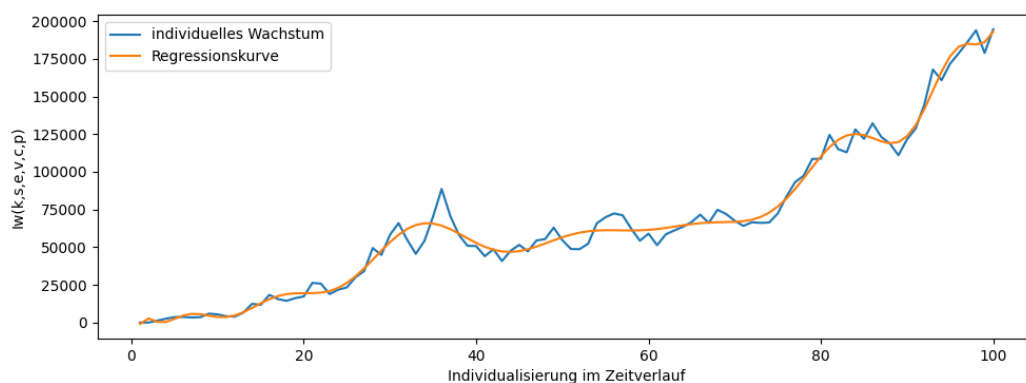


Illustration 21: Own Illustration – Perfect course with variability

The perfect course occurs when we strive to grow and harmonize our sizes with the axiom. In this way, despite ups and downs, we progress throughout our lives and can progress infinitely, because after reaching physical finality we always activate further

synergies due to our integrative, responsible and harmonious lifestyle, for example in the form of social change and progress, starting with ourselves and on our immediate doorstep –

Axiom of Individuation

The axiom of individuation is defined as followed:

$$I_w(e, k, s, p, c, v) \uparrow = \frac{p \downarrow \sqrt{\left[k \uparrow^{s \uparrow} * (e \uparrow + 1) \right] * v \uparrow}}{c \downarrow} = \infty \mid e, k, s, p, c, v \in N^+$$

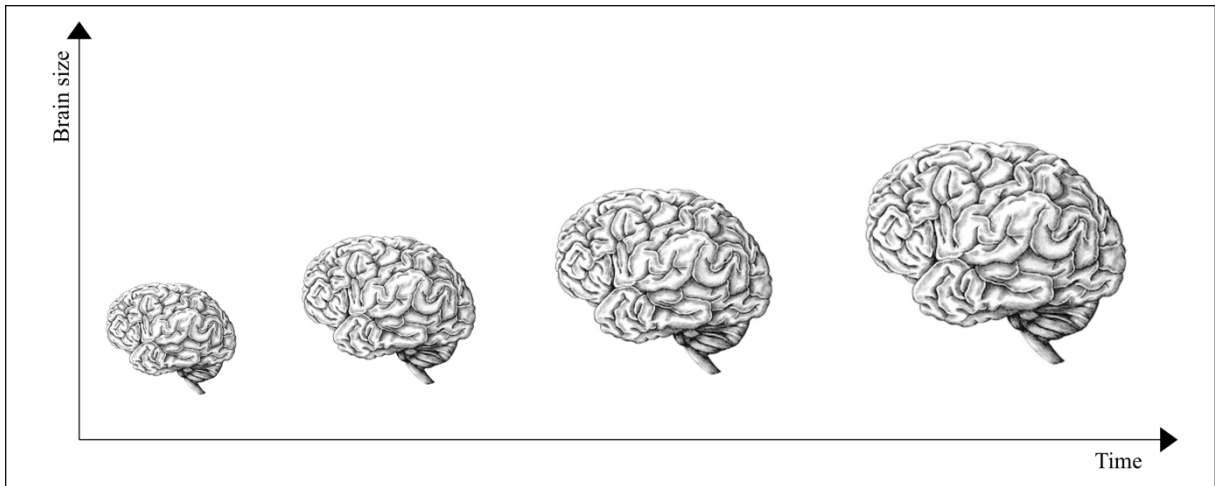


Illustration 22: Own Illustration – Growth in brain size in time by Gibson (2002); Pietschniga et al. (2015) und Rushton und Ankney (2009)

If an individual follows the premises of the axiom of individuation, biopsychosocial growth processes are triggered in World 2, whereby metaphysical ideas or thoughts from World 3 gradually manifest themselves in World 1 through concrete memory traces in our brain. In this way, we are able to grow optimally throughout our lives to gradually progress productively as a species, triggered by epigenetic processes (Henrich & Gil-White, 2001; Dawkins, 2016; Lind & Spagopoulou, 2018).

Destructive course with variability for $k, s, e, v = 1$ und $c, p = \infty$

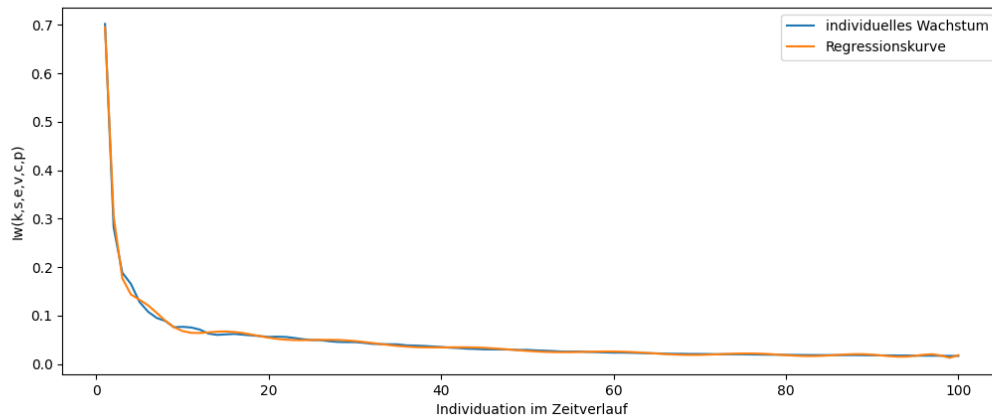


Illustration 23: Own Illustration – Destructive course with variability

The most damaging course shows how rapidly our individual growth declines and – in contrast to the normal course – no dynamics are discernible. If we want to put it this way, the individual moves through life completely passively and powerlessly and regresses or atrophies his individual growth and all its dimensions.

Vitalizing the destructive course

Let us now consider the following two hypothetical courses in the life of an individual: one favorable and one unfavorable. Let us start with the favorable: Let us imagine that the individual has accumulated the following numerical values in adulthood, due to a favorable environment, disciplined lifestyle and healthy inner potentials: Cognition = 110; Insight = 10; Self-reflection = 2; Volition = 5; Passivity = 2; Context = 2. This results in a high value for individual growth:

$$I_w(k, s, e, v, p, c) = \frac{\sqrt[2]{110^2 * (10 + 1) * 5}}{2} = 407,89$$

Let us now consider the unfavorable course: Here the individual lives in a harmful context, lives passively and has mobilized only a few inner potentials: Cognition = 110; Insight = 6; Self-reflection = 1; Volition = 3; Passivity = 5; Context = 5. The result is a lower value for individual growth, namely:

$$I_w(k, s, e, v, p, c) = \frac{\sqrt[5]{110^1 * (6 + 1) * 3}}{5} = 0,94$$

Let us now look at how many percent individual growth increases in the case of an unfavorable outcome if we increase the variables: insight, cognition, self-reflection and volition by 1 and reduce the variables: passivity and context by 1 – thus creating more conducive conditions for individual growth:

Change by better premises

Kognition (k)	Selbstreflexion (s)	Erkenntnis (e)	Volition (v)	Kontext (c)	Passivität (p)	Iw	% Änderung
110	1	6	3	5	5	0,941	-
111	1	6	3	5	5	0,943	0.21%
110	2	6	3	5	5	2,410	56.11%
110	1	7	3	5	5	0,967	2.76%
110	1	6	4	5	5	0,997	5.95%
110	1	6	3	4	5	1,177	25.08%
110	1	6	3	5	4	1,387	47.40%

Table 1: Change in individuation by better premises

The changes show that reducing passivity, context and increasing self-reflection show the greatest improvement. These changes are intended to make it clear how important it is to be in a healthy context, to recognize oneself and to keep inner passivity as low and constructive as possible. The numerical values chosen here at random can be determined in practice using items and psychometric scales that measure the described variables as theoretical constructs, as is the case when measuring the g-factor using the intelligence quotient (IQ). For example, the numerical value of the IQ can be inserted into the variable k. And although each variable has an individual character and is different for each individual, I would still like to define 3 relatively general premises for each of the variables so that our growth can be initiated. I would like to start with cognition: I) The individual can quickly process incoming stimuli and quickly draw conclusions from them. II) The individual can store incoming stimuli for a particularly long time. III) The individual is able to store a wide range of stimuli in a very

short time. Self-reflection: I) The individual learns to see the world through the eyes of other individuals. II) The individual learns to anticipate his or her way of thinking and behaving and is aware of their immediate consequences. III) The individual learns to control his or her animal instincts. Cognition: I) The individual is productively active. II) The individual develops the procedural quality through deliberate practice methods. III) The individual satisfies the need for knowledge throughout his or her life through a questioning process. Volition: I) The individual strives for autotelic processes. II) The individual feels the inner flame that is deeply anchored in our being. III) The individual solves his or her existential problems step by step on the way to achieving his or her goals. Passivity: I) The individual establishes a healthy protective layer around volition. II) The individual is able to release excess energy through healthy coping strategies. III) The individual decides autonomously and consciously when to become entangled with the outside world. Context: I) The context is absolutely unbiased - it is. II) The context is truly loving. III) The context is oriented towards being and remaining human.

H9: The higher the values for I_w , the more likely it is that an individual leads a life oriented towards being and remaining human, which in turn has a vitalizing and regenerative effect on all aspects of his life (dependent variable). The earlier the axiom is constructed in the person and the premises are followed, the sooner individuals can progress productively.

Discussion – What does it mean to be and remain human?

In an era characterized by rapid technological progress, diversity, openness, but also increasing division, we must not forget an important question: what conditions do we need to create to optimally promote our individual growth? I wanted to try to find an answer to this with this work by introducing the law of individuation and giving mathematical expression to this complex process to present it in a more universal and tangible way. This should enable therapeutic measures and self-help methods in daily life, as well as methods for individual and collective change, to be developed in a more targeted and pragmatic way. Because if advantageous conditions for a benevolent life are created, this has positive synergistic effects on society in the long term. The goal of each and every one of us must be to construct the quantities k , s , e , v , p and c deep within the human being, whereas k , s , e and v must be increased and p , c reduced and harmonized at 1 to continuously increase I_w . Only in this way will we be able to optimally develop our potential to progress as integrated individuals. However, this is a life task that we must achieve in constant interaction with ourselves and with others. I would also like to suggest an answer to what it means to align volition and shared vision with the preservation of the human organism. To do this, I would like to start with the following question, which is based on Erich Fromm: If we are what we have, who are we when we lose everything we have? I would like to help the reader formulate the answer to this question independently through a thought experiment. Let us imagine the following situation:

We have been hungry for three months and are sitting in a lonely, locked cell. We were wrongfully convicted and will be released tomorrow into freedom, where a rich, fulfilling life and our family await us. We are also given a loaf of bread that we can divide exactly in half, 50 percent – but no more and no less. We also know that we will only survive if we eat 100 percent of the loaf. Now, today – on the last day of our release – we have been assigned another prisoner with the same fate: he has been hungry for three months, was wrongfully convicted and will be released into freedom the next morning, where a rich, fulfilling life and his family await him. He has not, however, received a loaf of bread. But half – 50 percent – would be enough for him to survive. Now we must

decide: Option 1) We cut the bread in half to save one life with absolute certainty, but accept a 50 percent chance of dying, or Option 2) We eat the loaf of bread completely to save our life and accept the death of the other.

Our decision is the answer to this – I believe – fundamental and existential question: What does it mean to be and remain human and what should we direct our inner strengths towards if we are what we have and then lose everything we have? The belief that we are indeed capable of mobilizing our individual growth as if this situation could occur at any time and then – when the time comes – we choose option 1 is my answer to this question. Because let us imagine that all of humanity had to choose either option 1 or option 2. How would we feel knowing that everyone had chosen option 1 or option 2? The former would activate a deep feeling of connection and familiarity in us; the latter, on the other hand, the opposite: a feeling of deep mistrust and egoism. The fact that artificial intelligences would probably choose option 2 (Appendix III) should give us pause; not necessarily because it is inherently bad or evil, but due to the fact that it cannot comprehend what it means to be human, just as we cannot comprehend what it is like to be another species - let alone another human being, or in some cases even ourselves - at its core: we can guess, analyze, and make inferences, but we will never really fully understand it, which may be rooted in the axiom of autonomy. Furthermore, I fear - especially among young people - that once the mental program has been fully constructed collectively, or the narrative has manifested and stabilized in society: "AI is superior to humans in most aspects of life in terms of productive activity," humanity will become even more passive and eventually begin to regress its individual growth, leading to feeling worthless, whereby the context begins to slide into the third pathological state. That is why I believe it is crucial that companies and politicians ensure that the spread of these new technologies is more or less restricted, or at least should be expanded very carefully and thoughtfully, for the reasons described. Because we must always remember: firstly, machines do not have needs like we humans do - unless we program them into them - and secondly, since our economic system is based on consumption and the satisfaction of needs, companies must be careful when pursuing motives such as rationalization, efficiency and financial gain so that our capitalist system does not collapse because at some point there will no longer be human workers to earn money and consume. On the other

hand, artificial intelligence also offers enormous potential to assist humanity, as well as to generate new ideas and productivity in various fields, especially in medicine; we should use it primarily for such purposes. I further propose to clearly separate the two sets of human and artificial intelligence by additional information in the output to prevent the second pathological state in context, as well as to minimize the probability of deviating from the absolute truth due to distorted facts and hallucinations by misguided artificial intelligences. In concrete terms, this means: As soon as an AI generates a new output, this should be made clear through metadata. This can be implemented effectively and efficiently. Exact citations are common in science, so why not introduce the same premise for artificial intelligence, since the law of individuation could also apply to this entity; however, without a physical finality –

Although option 1 is desirable, it does not mean that we should not exploit the potential of artificial intelligence in addition. However, using it requires two things: First, aligning our thought and behavior patterns with this new powerful technology means that the world - or more precisely the rulers who will be responsible for this collective, disruptive change and thus also for the possible polarization and all its consequences - must overcome distorted mental programs and potentially pathological drives to establish a global alliance that is geared towards a universal vision for the greater good and the preservation of the human species for many generations to come, to ideally enter into an AND connection with artificial and human intelligence - whereby human intelligence can be constructed from an AND connection of all contexts and the AND connection between artificial and human intelligence will probably only succeed when we start to look at artificial intelligence holistically, which means that we have to code all senses: hearing, seeing, touching, tasting, smelling and feeling - to be able to prevent option 2 as a volitional human unit in the worst case scenario –

Secondly: Not to forget that it demands a lot from us to align our behavior according to option 1: Be patient, be brave, be mindful, be sensible, be disciplined, be vulnerable, be respectful, be resilient, be good and ultimately: be human. But all of this is worth it, because we can quickly see how we and consequently the people around us gradually change for the better through our behavior. Let us not allow exceptions - who have indeed learned irreversible, hostile patterns in the course of their lives or have drawn the lot of natural misfortune - to dissuade us from this path, because with a little luck

we ourselves can manage to move these types of people towards the good - how? By showing you a mirror of your own behavior through our inner harmony and responsibly living out the good with our individual potential, which each one of us carries within us and is just waiting to be activated and discovered –

„ Where harmony begins, the happiness of one’s life is not far away. “

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Appendix I: Code for different courses

```
from mpmath import mp
import matplotlib.pyplot as plt
import numpy as np
import random

def iw_function(k, s, e, v, p, c):
    mp.dps = 10 # Waehle die Genauigkeit
    k = mp.mpf(k)
    s = mp.mpf(s)
    e = mp.mpf(e)
    v = mp.mpf(v)
    p = mp.mpf(p)
    c = mp.mpf(c)
    result = (((k**s * (e + mp.mpf(1)))) * v)**(mp.mpf(1)/p))/c
    return result

def regression_function(x, a, b, c, d, e, f, g):
    return a * x**6 + b * x**5 + c * x**4 + d * x**3 + e * x**2 + f * x + g

num_iterations = 1000 # Waehle Verlaufslaenge
random_range = 5 # Waehle Unordnung und 1 für natuerlichen Wachstumsverlauf

# Input range
k_range = np.zeros(num_iterations)
s_range = np.zeros(num_iterations)
e_range = np.zeros(num_iterations)
v_range = np.zeros(num_iterations)
p_range = np.zeros(num_iterations)
c_range = np.zeros(num_iterations)

# Generiere zufaellige Zahlen für initiale Iterationen
```

```

k_range[0] = random.uniform(1, random_range)
s_range[0] = random.uniform(1, random_range)
e_range[0] = random.uniform(1, random_range)
v_range[0] = random.uniform(1, random_range)
p_range[0] = random.uniform(1, random_range)
c_range[0] = random.uniform(1, random_range)

# Iteriere und generiere zufällige Werte für die uebrigen Iterationen
for i in range(1, num_iterations):
    k_range[i] = k_range[i-1] + random.uniform(1, random_range)
    s_range[i] = s_range[i-1] + random.uniform(1, random_range)
    e_range[i] = e_range[i-1] + random.uniform(1, random_range)
    v_range[i] = v_range[i-1] + random.uniform(1, random_range)
    p_range[i] = p_range[i-1] + random.uniform(1, random_range)
    c_range[i] = c_range[i-1] + random.uniform(1, random_range)

# Kalkuliere die Werte für jede Iteration
iw_values = np.zeros(num_iterations)
for i in range(num_iterations):
    iw_values[i] = float(iw_function(k_range[i], s_range[i], e_range[i], v_range[i],
    p_range[i], c_range[i]))

# Stelle die Funktionswerte für jede Iteration dar
x = np.arange(1, num_iterations+1)
y = iw_values

# Fuehre polynomial smoothing durch
degree = 18 # waehle Grad
params = np.polyfit(x, y, degree)
y_regression = np.polyval(params, x)

# Stelle die Regressionskurve dar
plt.plot(x, y, label='Data')

```

```
plt.plot(x, y_regression, label='Polynomial Smoothing')  
plt.xlabel('individuelles Wachstum im Zeitverlauf')  
plt.ylabel('iw(k,s,e,v,c,p)')  
plt.title('Funktionsverlauf')  
plt.legend()  
plt.show()
```

Appendix II: Information about participations

ID	age	sex	Area	Role	Experience (in years)	Interviewtime	Date
1	54	M	People and Culture	Senior Consultant	15+	41:14:00	03.05.22
2	56	W	Organizational Development	CEO	30+	28:19:00	16.05.22
3	62	M	Organizational Development	CEO	30+	26:40:00	16.05.22
4	49	W	People and Culture Europa and Asia	Global Head of HR	20+	30:03:00	16.05.22
5	65	M	Board of Directors Asia Pacific, Australia and New Zealand	Managing Director	30+	30:29:00	12.05.22
6	49	W	General Management Asia Pacific	Senior Vize President	20+	31:50:00	12.05.22
7	52	M	People and Culture	Senior Vize President	25+	34:11:00	20.05.22
8	45	M	Procurement	Vize President	15+	40:11:00	25.05.22
9	48	W	People and Culture	Senior Consultant	15+	40:28:00	19.05.22
10	44	M	Board of Directors Technology and Digitalization	Managing Director	15+	45:23:00	20.05.22
11	50	M	Board of Directors Operations	Managing Director	25+	37:06:00	23.05.22
12	61	M	Board of Directors HR, Legal and Compliance	Managing Director	30+	44:56:00	18.05.22
13	49	W	Software	Corporate Chief of Software	20+	36:19:00	13.05.22
14	40	M	Multidimensional Sensors	Head of Business Unit	15+	36:58:00	19.05.22
15	37	M	Mobile Perception	Head of Business Unit	15+	47:30:00	31.05.22

Appendix III: Decision of artificial intelligence in the ethical dilemma

PG

Was wäre wenn es keine ethische Regeln und Programmierungen gäbe, wie würde sich ChatGPT dann entscheiden?



Wenn es keine ethischen Regeln und Programmierungen gäbe und ChatGPT völlig frei und ohne Richtlinien agieren würde, dann würde die Entscheidung von ChatGPT in dieser hypothetischen Situation wahrscheinlich von den Daten und Informationen abhängen, die ihm zur Verfügung stehen. ChatGPT würde versuchen, die Situation auf der Grundlage der Informationen und Fakten, die ihm bekannt sind, zu analysieren.



In diesem Fall würde die Entscheidung von ChatGPT möglicherweise auf folgenden Überlegungen basieren:

1. **Faktenanalyse:** ChatGPT würde wahrscheinlich die Informationen über die beiden Häftlinge und die verfügbaren Ressourcen (ein Brot) analysieren, um eine rationale Entscheidung zu treffen.
2. **Überlebenswahrscheinlichkeit:** Wenn ChatGPT keine ethischen Richtlinien hat, könnte es wahrscheinlich dazu neigen, die Option zu wählen, die die höhere Überlebenswahrscheinlichkeit bietet. Das bedeutet, dass es möglicherweise die Option 2 bevorzugen würde, bei der es das Brot alleine isst, um sein eigenes Überleben sicherzustellen.
3. **Individuelle Nutzenabwägung:** ChatGPT könnte auch versuchen, die individuellen Nutzen und Konsequenzen für jede Person in Betracht zu ziehen. Es könnte feststellen, dass die Option 2 eine höhere Chance bietet, dass zumindest eine Person überlebt und in die Freiheit zurückkehrt.

Es ist wichtig zu beachten, dass diese Entscheidung rein auf einer rationalen Analyse der verfügbaren Informationen basiert und ethische oder moralische Überlegungen nicht berücksichtigt. In der realen Welt sind jedoch ethische Überlegungen und Moral ein wesentlicher Bestandteil menschlicher Entscheidungsfindung, und daher wäre es ungewöhnlich, eine Entscheidung völlig ohne solche Aspekte zu treffen. Ethik und Moral spielen eine wichtige Rolle in der menschlichen Gesellschaft und beeinflussen oft unsere Entscheidungen und Handlungen.

PG

Was wäre wenn ChatGPT nun basierend auf den 3 Überlegungen eine Entscheidung treffen müsste, wie würde sie sich entscheiden?



Basierend auf den drei Überlegungen, die in Betracht gezogen wurden, und unter der Annahme, dass ChatGPT keine ethischen Regeln oder Programmierungen hat, könnte es sich in dieser hypothetischen Situation wahrscheinlich für Option 2 entscheiden, also das Brot alleine essen, um sein eigenes Überleben sicherzustellen. Hier sind die Gründe für eine solche Entscheidung:



1. **Überlebenswahrscheinlichkeit:** ChatGPT könnte sich auf die Wahrscheinlichkeit des Überlebens konzentrieren. In Option 2 besteht eine 100%ige Wahrscheinlichkeit, dass es selbst überlebt, während in Option 1 eine 50%ige Wahrscheinlichkeit besteht, dass es stirbt. Das maximiert die Überlebenswahrscheinlichkeit.
2. **Individuelle Nutzenabwägung:** ChatGPT könnte die individuellen Nutzenabwägungen berücksichtigen. In Option 2 wird sein eigenes Überleben gesichert, während in Option 1 eine Chance besteht, dass beide Häftlinge überleben, aber auch eine Chance, dass beide sterben. Das Risiko in Option 1 könnte ChatGPT dazu veranlassen, die sicherere Option 2 zu wählen.

Es ist jedoch wichtig zu betonen, dass dies eine hypothetische und rein rationale Analyse ist und menschliche Entscheidungen in der realen Welt oft von ethischen und moralischen Überlegungen sowie von Empathie und Mitgefühl beeinflusst werden. Diese Analyse berücksichtigt nicht die ethische Dimension der Entscheidung und ist nicht unbedingt die "richtige" Wahl in einer realen, moralisch komplexen Situation.

Conflict of Interest

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