

Optimal Growth: Which Framework Conditions do we have to Implement to Guarantee an Optimal Individuation for Human Progress?

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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 theoretical mathematical model that is intended to show the dynamics of individuation a priori on the individual and collective level and describes the associated variables with this mathematical model in detail. The work gives insights on how and why information in today's world transmit by the construction of memory traces and emotionally charged stimuli. Moreover, it introduces ideas about the role of quantum physical processes in the emergence of consciousness and intrinsic mobilization of energy. Three hypothetical courses are described: under which conditions an individual grows, regresses over time and how a natural course looks like. The work concludes with an ethical dilemma about what it means to be and remain a human being who can control his or her animal instincts and what we should normatively align our human progress with throughout our lives. Furthermore, the work explores implications based on the decision of the two options artificial intelligences choose in the ethical dilemma. The work is intended to derive insights and new ideas for change on the individual and collective level to be able to progress productively and responsibly. The work is a conglomerate of well-founded research, observations, social analyses and speculations with the best of conscience and should nevertheless always be viewed with a critical eye and healthy doubt true to the motto: "sápere aúde".

Keywords: Individuation, Enlightenment, Humanism, Integration, Self-Development, Human-Development

1. 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 is other more or less independent variables or constructs that influence this general intelligence and are therefore also able to predict a person's growth to progress into a vitalizing human being who can control his or her animalistic urges? There is no easy way to quickly answer this question, as most important questions in life. Nevertheless, there is a way to get closer to the answer: namely with the help of the introduction of the *law of Individuation*. A law according to which our growth may a priori be aligned to. 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 which 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 may not perceive it yet, mainly because they don't allocate enough attention to it. So how exactly can we bring this process into our consciousness to maintain lifelong growth? 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 optimal 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 for human progress, 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 optimal growth and must therefore be overcome. However, optimal 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 dynamic process a priori using a mathematical model. This model attempts to describe the dynamic process of optimal growth in its entirety and shows how we can consciously use it, optimally promote and maintain it. In addition, the related variables are described in detail, for which I make claims about how they promote and influence individuation for human progress in general. I then present three hypothetical courses to understand under which conditions an individual grows over time and when he or she regresses. Finally, an ethical dilemma is used to explore the question of where the law of individuation should be normatively aligned to at its core (Kuhn, 1962) to be able to progress productively as a human species.

2. Individuation and its Variables

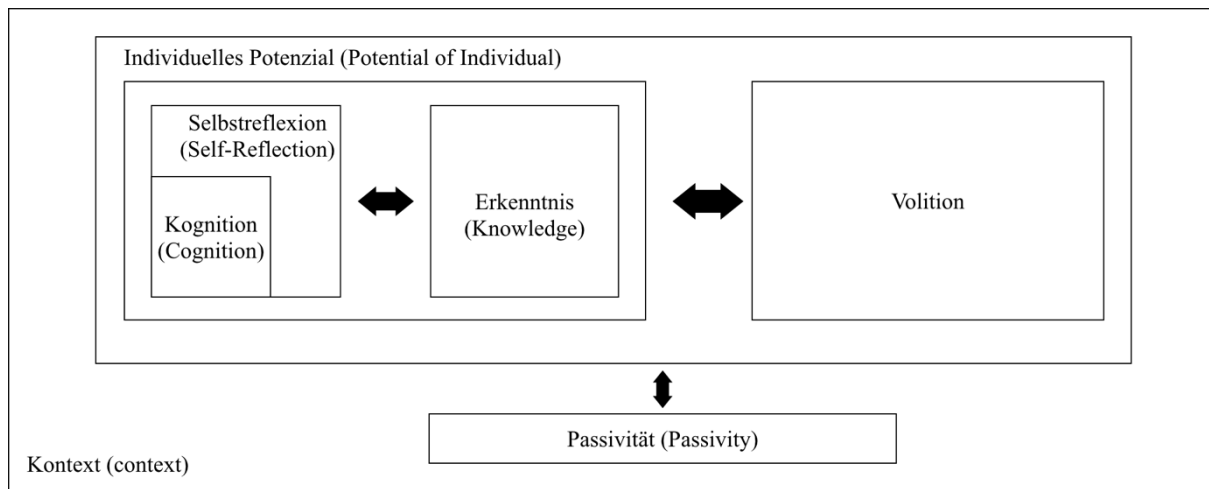


Illustration 1: Own Illustration – How the variables (constructs) influence each other

2.1. 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 and increased through training. It is inherent in the individual and contributes fundamentally to individuation.

2.2. S – Selbstreflexion (Self-Reflection)

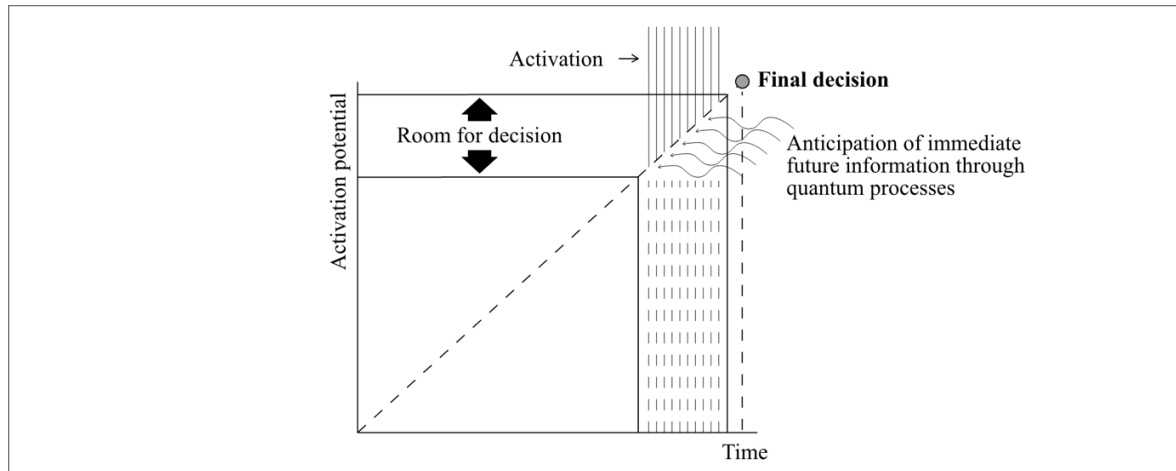


Illustration 2: Own Illustration – Autonomy through self-reflection by Hameroff (2012)

Self-reflection serves to accelerate cognition and, more broadly, our 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). By that cognitive distortions and mental biases are reduced, namely through cognitive behavioral therapy, which can increase the efficiency and accuracy of cognition, judgement and perception (Butler, Chapman, Forman, & Beck, 2006), in part because it allows higher brain regions such as the neocortex to regain control over animalistic and irrational urges (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 may be able to process information from the immediate 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). And even we have to discard the argument for quantum physical processes, leading to a certain degree of free will, we still have to take the argument into account, that we as a human species are indeed equipped with the capabilities to deeply construct the concept of free will in the human organism; and the fact, that we are indeed equipped with this ability – namely to construct a free will in us – must a priori mean that the concept of free will is not only wishful thinking, but rather one of many still undiscovered objective truths or concepts. How such concepts can be constructed in the human organism and their underlying mechanisms are explained in the following chapters.

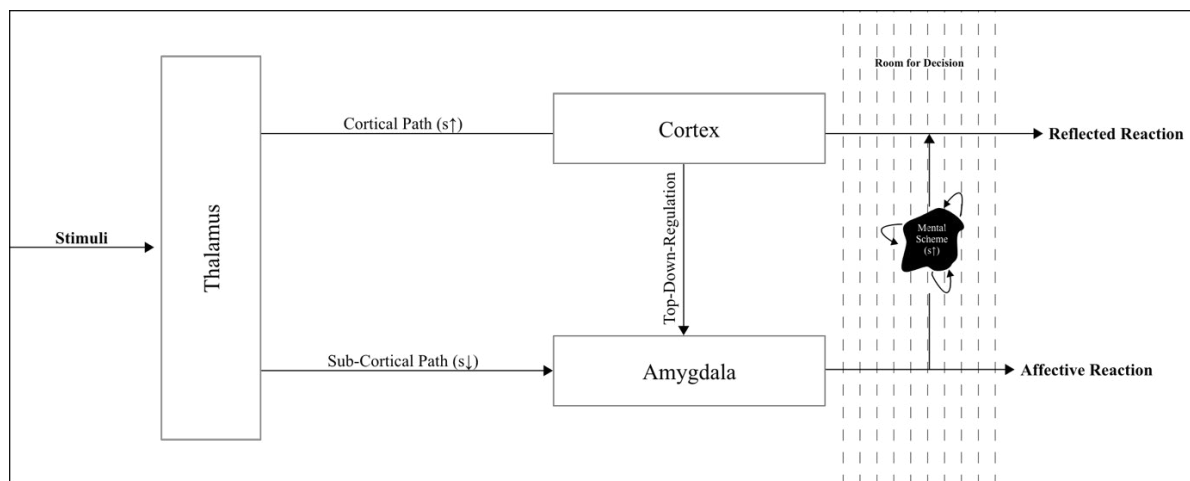


Illustration 3: Own Illustration – Stimuli processing and reflected vs. affective reaction by LeDoux (2000); Pessoa and Adolphs (2010)

H2: Self-reflection is directly related to cognition and improves it in a significant way. It enables us to maintain autonomy or “free will” over our ways of thinking and behaving patterns, which enable us to manage our animalistic drives and, at best, integrate them into our self to grow into rational and mature individuals

during the process of individuation. The ability for self-reflection is also deeply rooted within the individual. It can be constructed and increased i.e. by cognitive behavioral therapy (CBT) or educational work which explains the underlying (biological) processes and mental mechanisms.

2.3. E – Erkenntnis (Knowledge)

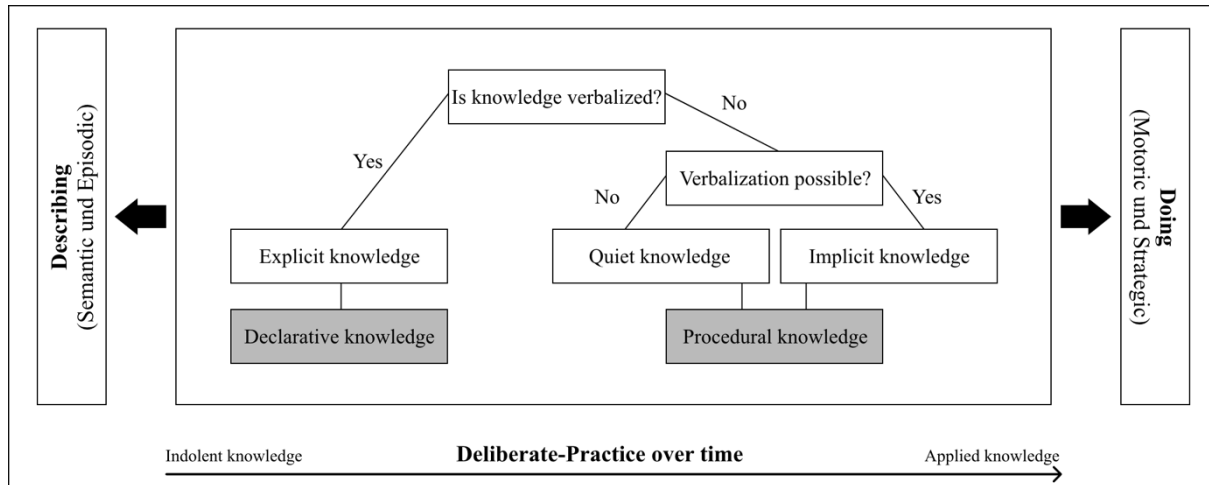


Illustration 4: Own Illustration – Principle of Knowledge by Ericsson (2006) and Nickols (2013)

Knowledge describes the learning process through the experiences we gain, insights into new areas that we accumulate, and affects and emotions that we encounter. We often speak of crystallized intelligence here – the intelligence that is not innate, but can be acquired and constructed (Rost, 2013). Knowledge is therefore the accumulated insights 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). Both, the declarative and procedural aspects of knowledge are independent of each other (i.e. see “Patient H.M.”). 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 crystallized knowledge and its three attributes sensibly and consciously to build it up throughout a lifetime by advantageous information processing and elaboration mechanisms.

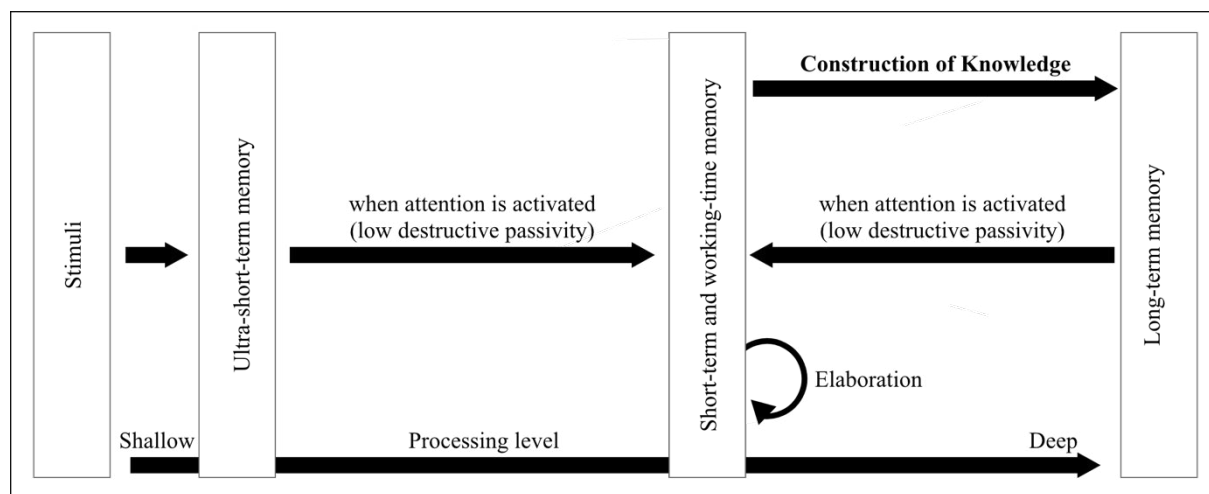


Illustration 5: Own Illustration – Constructing Knowledge in the Individual by Baddeley (1983)

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 stabilize a state of 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 interaction of its internal 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 applied knowledge to shape our complex environment around us in a targeted and reliable manner.

2.4. V – Volition

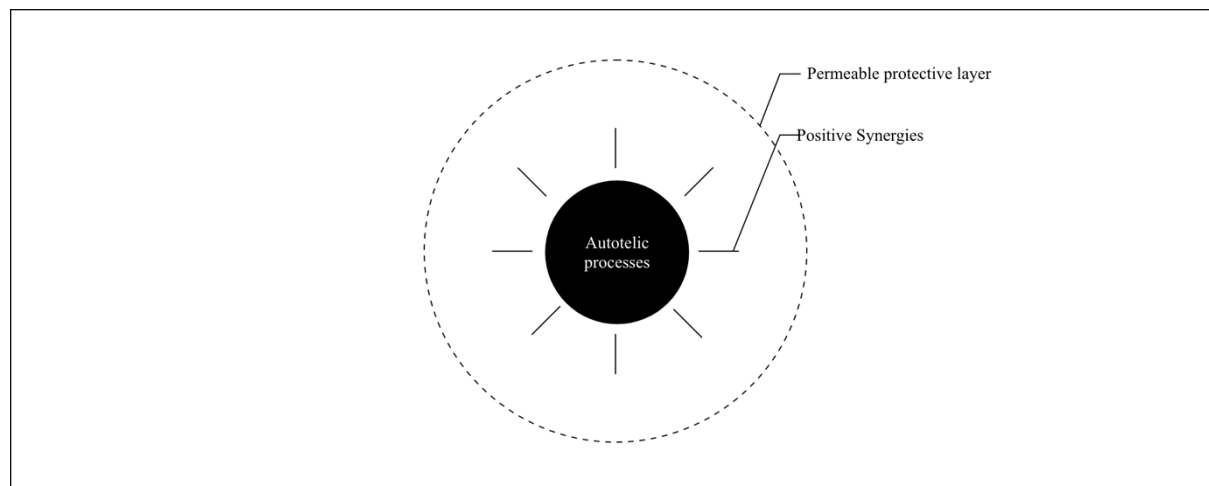


Illustration 6: Own Illustration – Principle of Volition

Volition is our 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 out of 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). Though those

fears and challenges should be 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 (Berk & Winsler, 1995). By that, I argue that volition is constructed by triggering 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. Ultimately, this is made possible by 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 scientific theories, music, and art (Socrates, 1992; Popper, 1973). So whenever we establish this bridge and an individual begins to cross it, optimally autotelic processes (= flow states) (Csikszentmihalyi, 2008) are generated that maintain volition, since such processes are self-rewarding, trigger intrinsic energies and thus do not require external energy input from outside. 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.

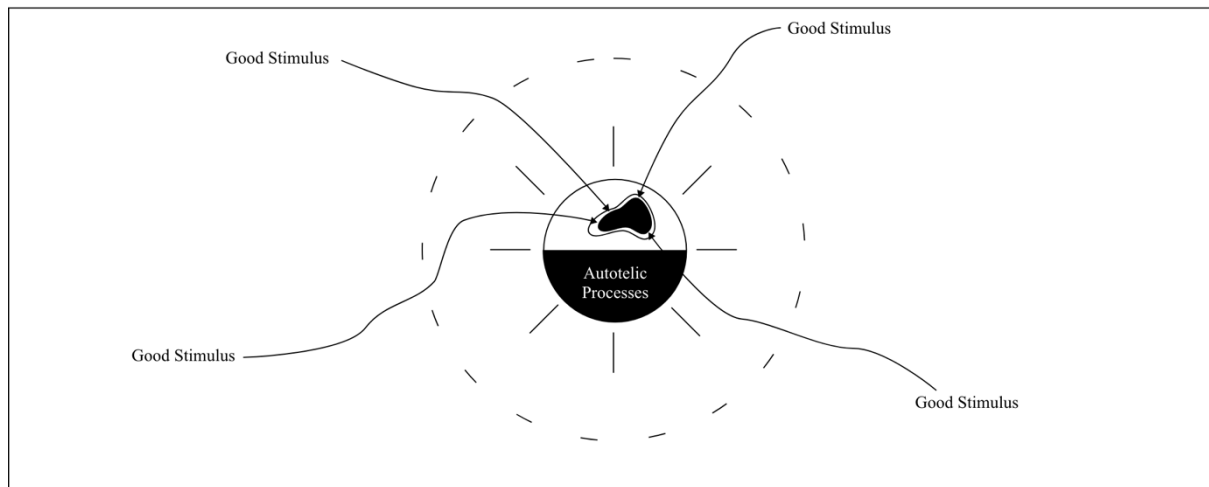


Illustration 7: Own Illustration – Maintaining Volition

2.4.1. The Ideal State of the Individual in World 2 by Popper (1973) and its Effects

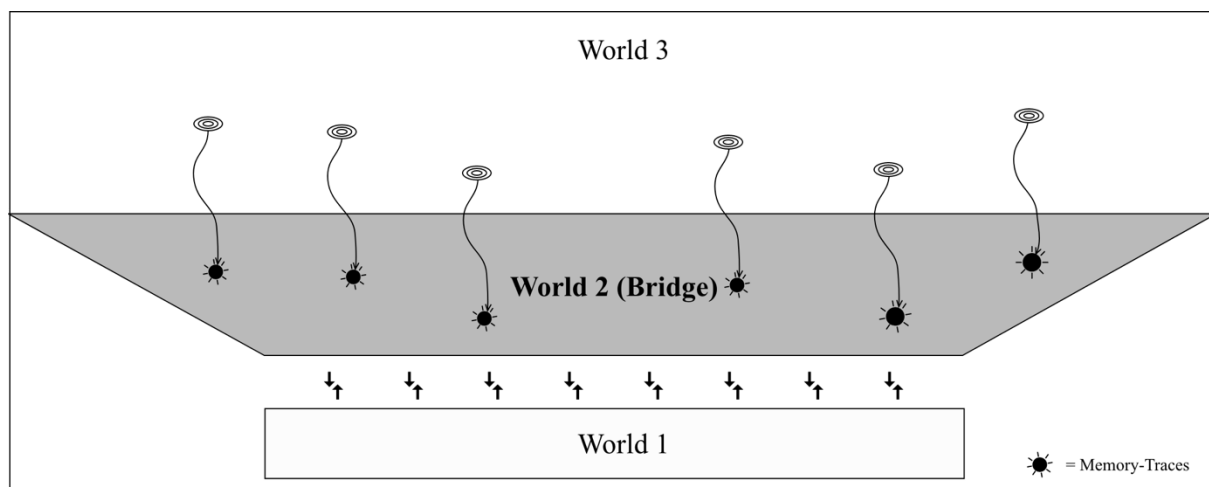


Illustration 8: Own Illustration – Bridging World 1 and World 3 by Popper (1973)

The figure above shows how an entanglement 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, biologically constructed in the form of memory traces in World 2 and can gradually penetrate into World 1 if we carry out the necessary concrete actional 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: P – Passivity (Passivität)) to the students, we were able to understand and comprehend each other despite linguistic limitations. One student even expanded the principle of passivity through an insight that I could not have constructed by myself. 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 frame of perception, which makes us disorientated and 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 potentially deep unconscious, collective and culturally independent connection through symbols. However, at this point, it is certainly highly worthwhile and necessary 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 – which also can be found in the human brain i.e. in neuron pathways – 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). Precisely similar quantum effects were also observed in a biological organism (Babcock, et al., 2024). Furthermore, 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 (Solovey, 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, whereas the neuron count is even larger in the cerebellum than in cortical regions (Herculano-Houzel S., 2010), by which the transmission time would increase further. And even if we assume that the length is “only” 850.000km in total (McCaslin T., 2024), this would still result in a global neural network transmission speed of 81,98 days $\left(\frac{850.000km}{432km/h}\right)$ and a transmission speed in the cerebellum of 8,97 days $\left(\frac{850.000km}{432km/h} * 0.11\right)$, however for the latter we have to keep in mind, that the no.

of neurons are even more dense, resulting in more or less an even slower transmission speed, since the length and density is higher compared with cortical regions. Furthermore, the two brain hemispheres are connected by the *corpus callosum*. A brain region which enables 2% of neurons to transmit information from one to the other hemisphere and vice versa (McGilchrist I., 2010). So given the length of the neural pathways, the relatively slow speed of signal transmission and the fact that the corpus callosum only consist of 2% of neurons for neural communication between both hemispheres: this does not seem to be proportional to the sheer complexity of the brain and its classical understanding of information and perception processing speed, based on the activation functions of neural networks. 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 and

optimally maintained by the autotelic processes i.e. during playful activity or deep thinking. 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 it 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 scheme ("data set") of almost 5,77 GiB ((16.000 Words * 365 Days + 285.000 Words * 52 Weeks)*30 Years = 619.800.000 Words * 10 Letters = 6.198.000.000 Words * 1 Byte

= $\frac{6.198.000.000 \text{ Bytes}}{1024^3} \approx 5,77 \text{ GiB}$). In addition, the individual has consumed 2000 kcal every day (1 kcal \approx 0.001163 kWh). Accordingly, after 30 years, he has consumed 25.469,70 kWh (0,001163 kWh*2000kcal*365 Days*30 Years). This is similar to the energy required by a large language model such as Chat-GPT 3 – namely 28,800kWh (considering 100x A100 Nvidia GPUs training data for 30 days, with each GPU consuming 0.4 kWh) to imitate human cognitive processes needing a 570GB training dataset (= "mental scheme with which incoming stimuli [prompts] are processed"). However, the large amount of data required by current artificial neural networks to imitate cognitive processes by a factor of 100 – 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, the entanglement with world 3, as well as the *intrinsic mobilization of energy*, rather than purely external need for energy.

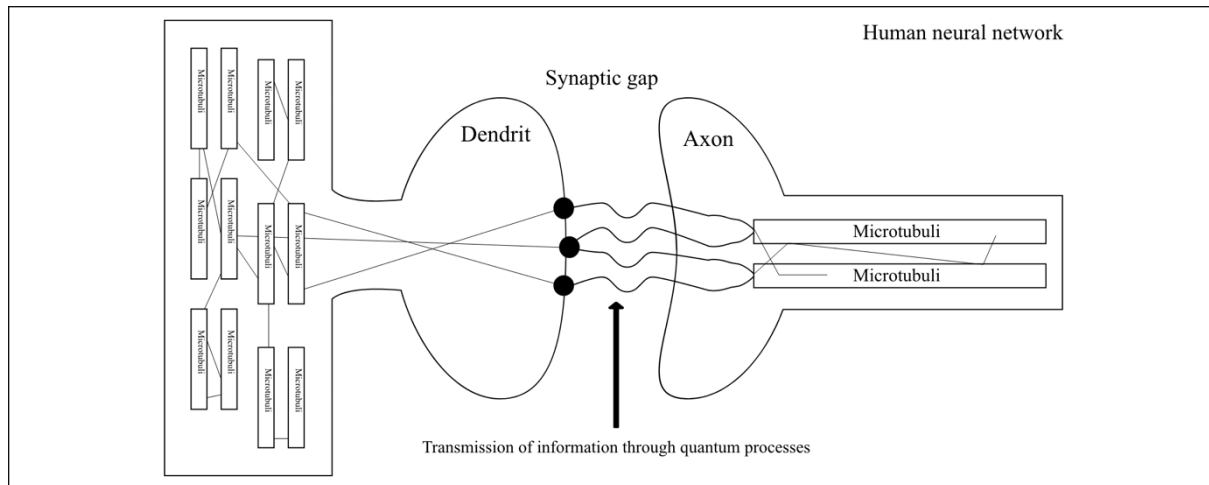


Illustration 9: Own Illustration – Transmission of Information by quantum-states in the brain by Hameroff and Penrose (1996; 2021)

In this sense, I would like to use the example of composing and playing 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?" – and I may add: with minimal mental effort? So let us first imagine a piano. 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).

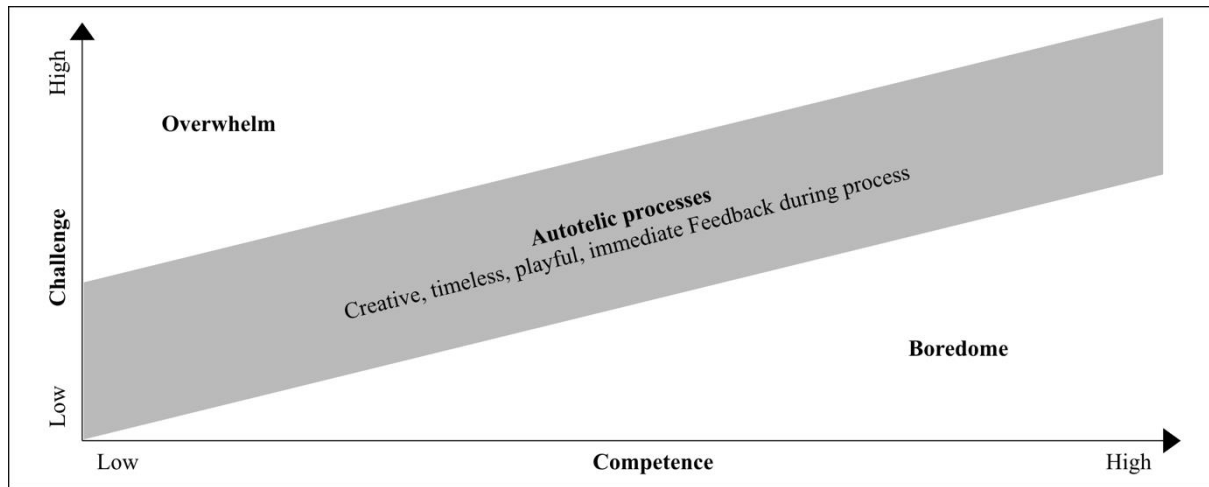


Illustration 10: Own Illustration – Characteristics of autotelic processes by Csikszentmihalyi (1975)

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 superposition (Feynman, Leighton, & Sands, 1965) – as in the autotelic process, which seems to decay as soon as we start to think consciously about it (Mor & Winquist, 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 may connect World 1 and World 3.

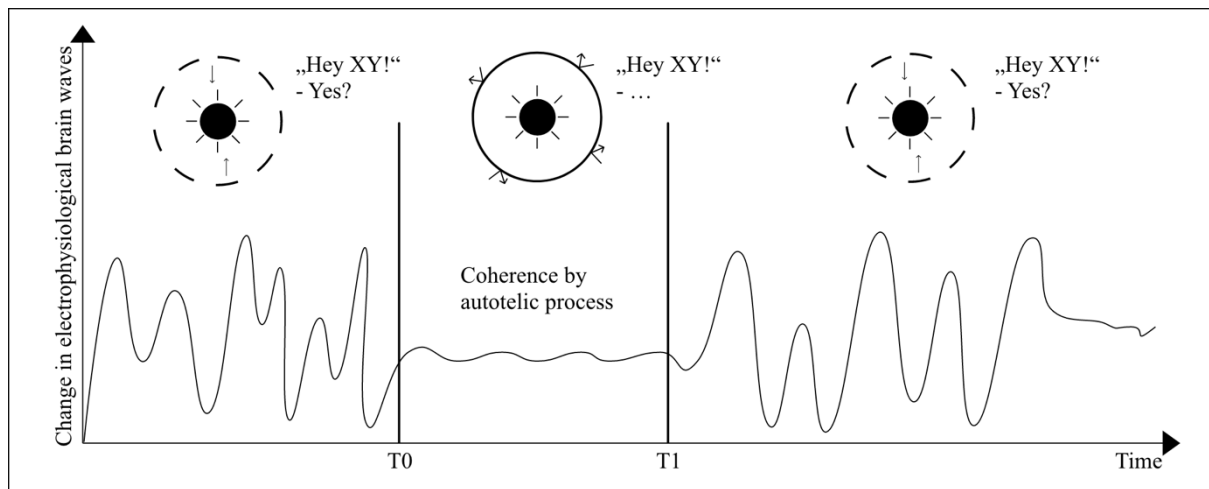


Illustration 11: Own Illustration – Measuring quantum coherence in the individual

For example, the electrophysiological processes during the autotelic process or flow states could be measured to retrospectively decode it mathematically, as is the case with images in our mind's eye (Takagi & Nishimoto, 2023) or EEG-to-text methods (Murad & Rahimi, 2024). 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 mental 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 we like: an algorithm that is able to explain the realm in world 3, from which

all our ideas, thoughts and consequently our existence as we know it may emerge from. Paradoxically, it seems as if it is precisely for this reason that the conscious, is the unconscious, which we understand through our deep connection within and from us, and it is precisely that, which 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. 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>) – sadly enough, in today's fast-moving and technocratic society, only a few manage to do it. However, these harmonious conditions would have to be put in place to integrate this deep connection within and out of 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 presents us and that make us to who we are (Touroutoglou, Andreano, Dickerson, & Barrett, 2020), as well as acknowledging the fact that our so called “knowing” is mostly constructed from illusions and collective suggestions by our so-called common sense, often driven by pathological (materialistic and hedonistic) motives like lust, greed and envy. So, if one is able to break through this horizon of “knowing” he or she is on its way to reach the state of (absolute) truth, which takes a lifetime to hold on to and once an individual reached this state, he or she may come back to this paragraph with a smile, a warm heart and feeling of deep gratitude, due to the realization that ultimately the essential – and with it the state of truth – is seen with one’s heart, since most things remain hidden from our eyes (Saint-Exupery, 2015) –

2.4.2. The Path to an Integrated Individual

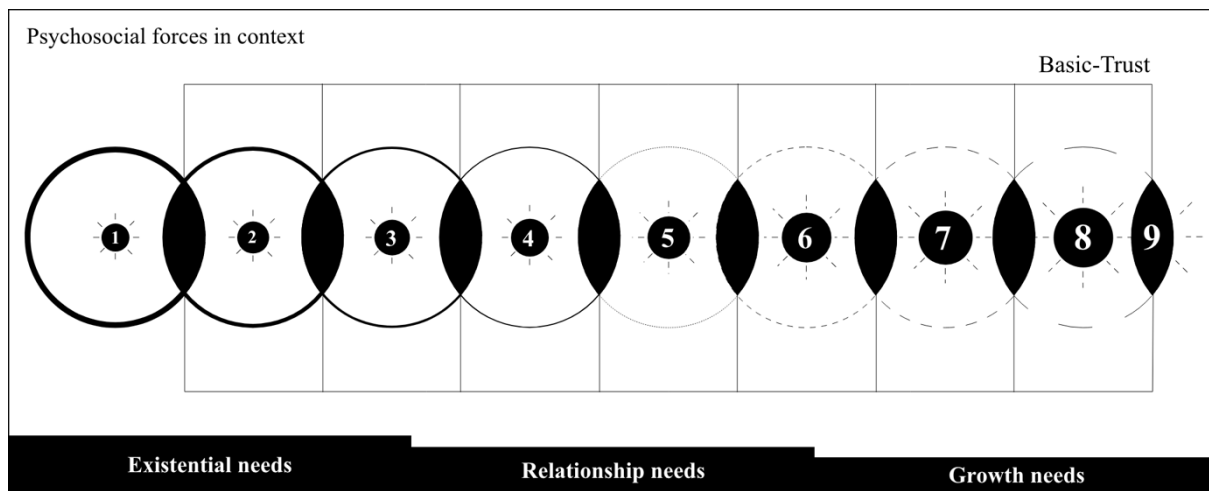


Illustration 12: Own Illustration – Emergence of an integrated individual by Caulton (2012) Hy and Loevinger (2014)

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 according to Erikson (1993, 1994), Hy and 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, optimally in a harmonious and balanced way. 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. belonging and trust) and growth needs (i.e. prestige and power) (Caulton, 2012; Alderfer, 1969). The protective layer that optimally 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 growth by which 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 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 boring, 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; or if we like: an AND-Connection can be constructed. 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 many generations in the future to come (Erikson, 1993, 1994; Hy & Loevinger, 2014).

H5: To optimally maintain our volition, we must trigger autotelic processes (= flow states), which leads to a quantum physical coherence that expands our conscious capacities, mobilizes energy from within, rather than purely from outside and establishes an entangled state in order for new ideas and thoughts to emerge. Those states can be measured by changes in neurophysiological processes i.e. an electroencephalography (EEG). The higher the volition of an individual, the more advantageous his or her individuation. Furthermore, it is deeply rooted in the individual and constructed with natural learning processes triggered by biochemical processes i.e. the release of dopamine and neurotropic growth factors. However, *without educational work*, the technocratic progress on the societal level has a regressive effect on the integrative individuation process of individuals – especially children and adolescents, because symbiotic conditions and dependencies are promoted, hence at the core the autonomy of the individuals is unconsciously attacked, mainly through behavioristic reinforcement learning-mechanisms triggered by the design and architecture of social media platforms.

2.5. P – Passivität (Passivity)

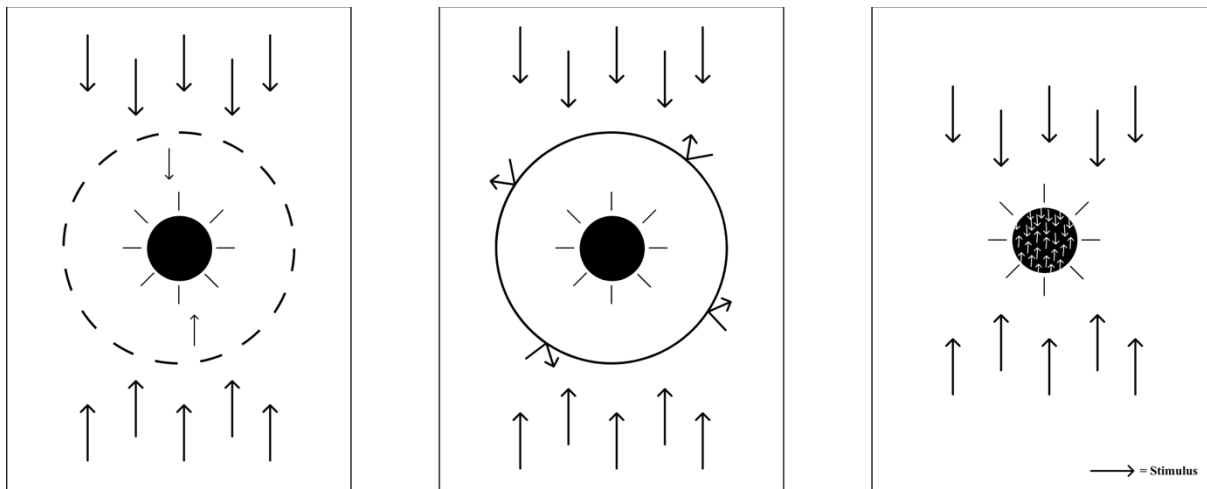


Illustration 13: Own Illustration – Principle of Passivity

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 as a human being. 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 schemata (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 mental 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 individuals, 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 mental schemata or “mental programs” – or if we 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 schemata because they literally merge with us biologically on an individual and collective level (i.e. the concept of information transmission by memes in culture) through the formation of new memory traces constructed by the natural learning processes, triggering biochemical processes as described in chapter: Volition. This is precisely why it seems so exhausting and energy-sapping to change them: Because, on the one hand, these schemata 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 schemata, which hinders our growth. However, the world is too diverse and complex for us to be able to rely on individual and deterministic schemata for a lifetime and use them to fully understand our environment and objective reality. 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). In addition,

large language models – merged with other stimuli, mostly images and videos – which are said to be similar to human intelligence, can't reach this ideal state (left) due to energy limitations, because they can't mobilize energy from within, and therefore purely rely on external energy sources. So, in order to stabilize constructive passivity (left) those would need to be trained continuously with new data which would be too much strain to physical hardware (Raiaan et al., 2024). Meaning these artificial entities are trapped in an illusion (middle); at least until they get trained again, which takes enormous external resources, namely energy and data (“stimuli”). Both extremes – middle and right – can threaten our organism. To prevent this, we 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 (emotionally charged) external stimuli into our self and expand it (left) (Satir, 1972). When we obtain this state, a constructive passivity sets in within us. This state is the ambivalent of destructive passivity. This form of passivity has a beneficial effect on our 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 lifetime. If we like, a coherent psychological quantum state has been established in the individual. He or she lives in a state of complete harmony with oneself – though always ready to change. And if the protective layer signals a need for a shift in coping strategies if (destructive) passivity starts to increase again – which optimally can be felt by an increase in emotional arousal in the organism – the individual will be equipped with the ability to always return to a state of constructive passivity over time, namely value 1 –

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, collective pathological suggestions 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. Since the high amount of compute, external energy supply and costs, artificial entities like Large Language Models, may never be able to reach the desired constructive passivity (left), since they would need continuous training which would lead to enormous strain to physical hardware.

2.6. C – Kontext (context)

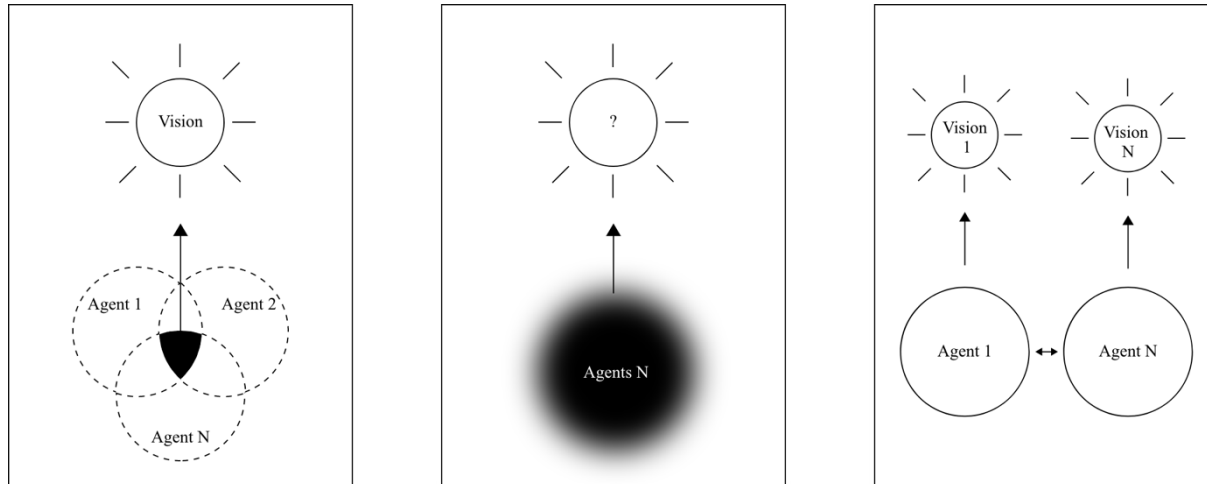


Illustration 14: Own Illustration – The 3 general states in the context

The context describes the dynamics and effects that arise when several individuals (= "agents") 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, meaning they do not enter a complete symbiosis. They are one and not the same; meaning in this state, the individuals enter into a logical AND-Connection. 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 (collective) memory traces are constructed. In constant interaction, everyone promotes their 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 addition, there are clear principles and values, that are lived out pragmatically and concretely – not abstractly – which is why the context 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 convince others of the good to move forward together. By that a natural Hierarchy is established in the context, based on the inner potential, responsibility and competence of the individuals. 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; those may need support and external motivation at the beginning in order to grow into a wise, autonomous and responsible individual. 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.

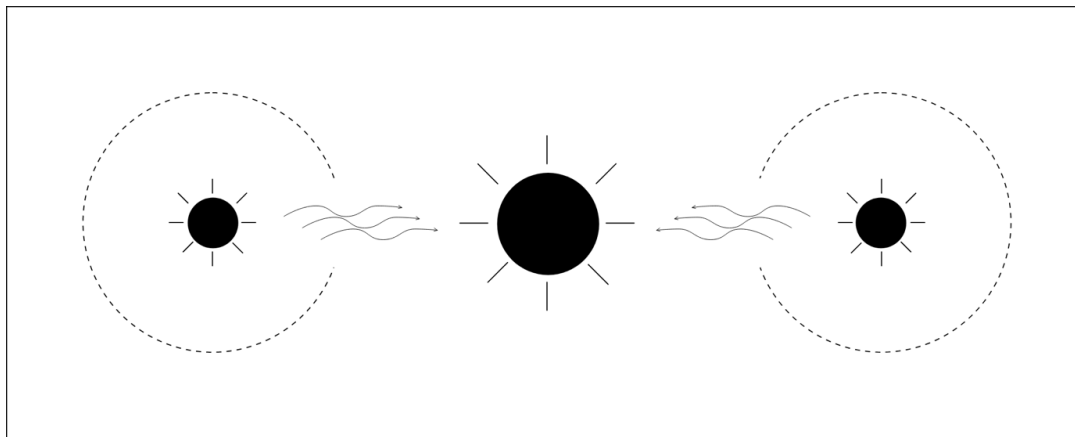


Illustration 15: Own Illustration – Constructing AND-Connections

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 as a human being 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 and volition. 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 sex (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 (middle), 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. At worse a destructive context emerges and can be constructed, namely a harmful and evil tyranny, for the following reason: Since most individuals feel passive and powerless only a handful of charismatic – yet evil – individuals can transmit highly emotional charges i.e. by verbal stimuli, which then activate, energize and mobilize the passive individuals. Generally speaking, this in turn – becoming active – is favorable. However, since destructive collective mental schemata are slowly constructed (one may call it “propaganda”), which steer the think and behavior patterns of the individuals, they obey even for the worst humanistic reasons. 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 our 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 from other subjective realities, characterized by the closed circles. This means that new knowledge is absolutely absorbed – if it penetrates – but 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, leading to a certain degree of power. However, at worse – mostly due to the lack of a comparison of (collective) subjective realities – the contexts seduce and concretize themselves in their own illusions i.e. subjective truths and drift apart, leading to hatred, aggressiveness and harmful think and behavior patterns towards other contexts, since those are not seen as “compatible” or “equal”. Those two destructive states in turn can be overcome by the following constructs: knowledge, volition, cognition, constructive passivity and self-reflection. In summary, the first state is the most conducive and desirable for our growth, as it draws on the inner potentials and 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 i.e. in (direct) democracies. 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 human growth. To further counteract the emergence of the second state (middle), 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 state (right) 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.

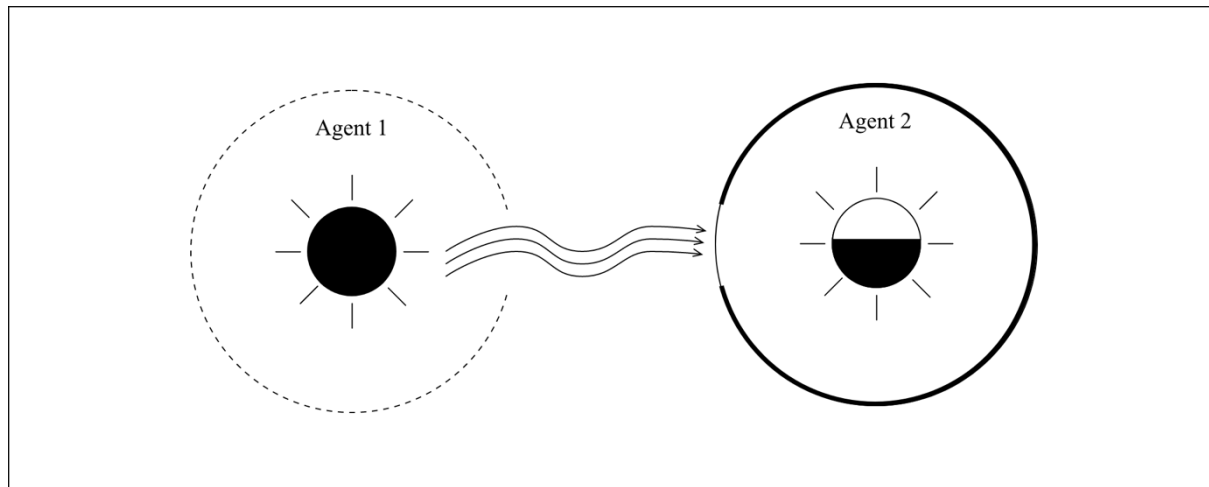


Illustration 16: Own Illustration – Enabling access to subjective realities

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, as these mechanisms protect and maintain volition and automatically recognize – if a constructive passivity is obtained – 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, by a stable and healthy identity. 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 among all individuals in the context: basic trust, which must be shared, valued and protected by all, 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, & Ehlerta, 2005; Thorsteinsson, Schutte, & Rooke, 2009). This voluntariness and agency 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).

2.6.1. The Path to a Harmonic Context

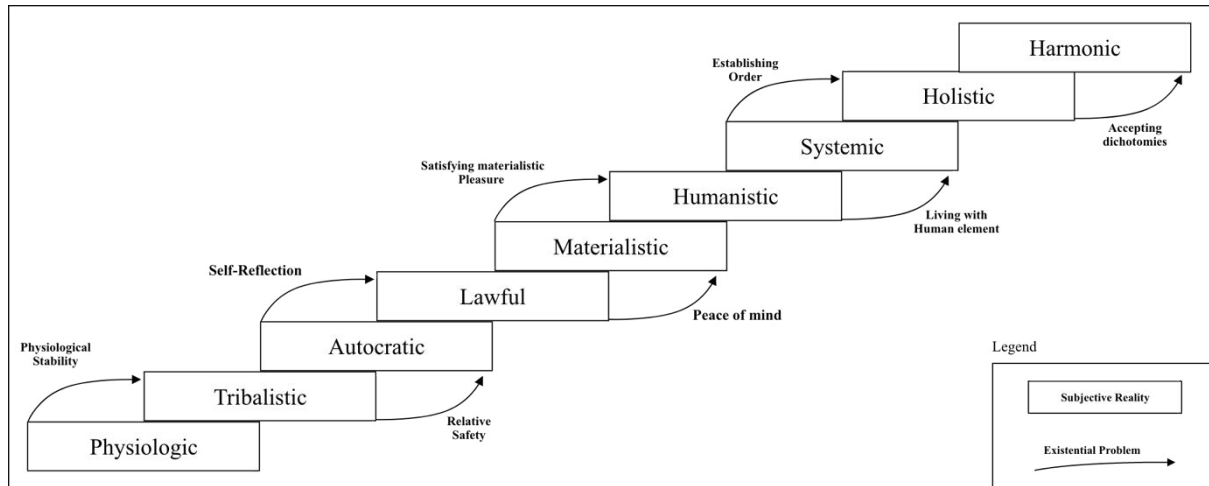


Illustration 17: Own Illustration – Emergence of subjective realities by Graves (1970, S.135–136).

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 or society 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), in the form of newly constructed robust and resilient mental schemata. 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.

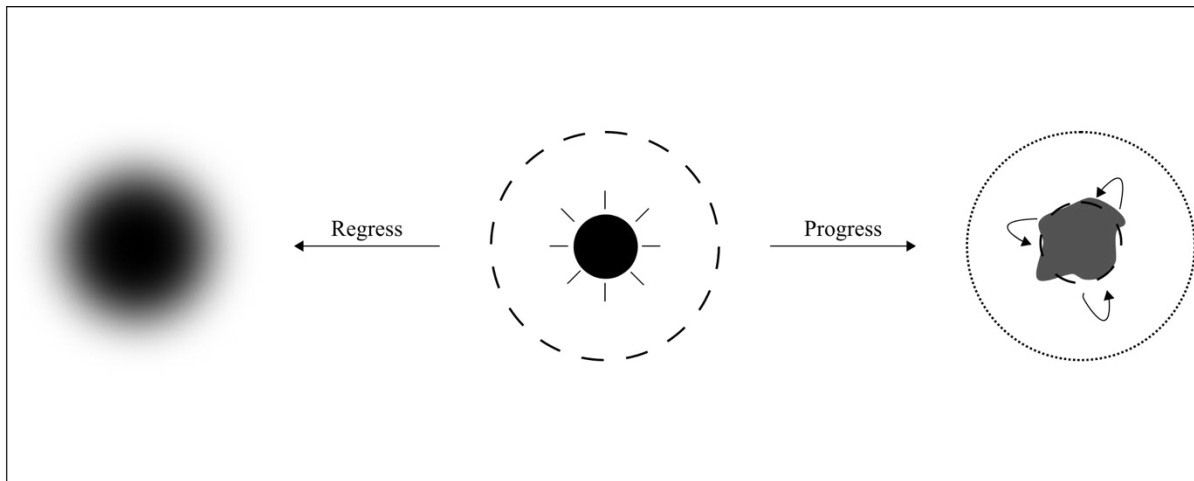


Illustration 18: Own Illustration – Release and stabilization of energy by Graves (1970)

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 or mental frame of reference. 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 for optimal human progress. 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 and passive, controlled by their animalistic, innate survival instincts, drives and emotions (Panksepp, 2004). Such states are totally normal and part of us humans. Pathological states can 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, belonging, 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 or vision 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). By facing those existential problems, self-reflection processes – at best – start to emerge 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) or other extremist groups. 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 (internal) 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 only 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 individuals (Kafka, 1925; Arendt, 2017). So it happens that after some time, the lawful–subjective reality of individuals is further developed because they question these absolutistic laws, manage to see through them and have constructed an inner order – hence they don't have to rely on only external structures – 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 perception 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, 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 and coping mechanisms regarding the (eco-)systemic level (Ganster, 2023). 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, is the level in which a life of constant synthesis according to Hegel would be possible, without theses and antitheses. 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, in order to construct a harmonious and vitalizing context for many generations to come –

2.6.2. Solving the Existential Problem at the Harmonic Level

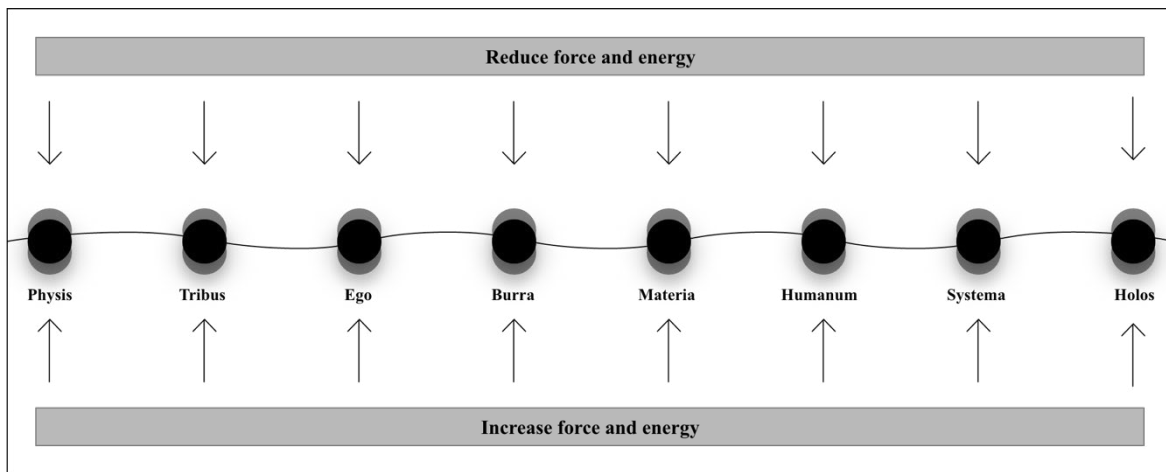


Illustration 19: Own Illustration – Stabilizing the harmonic level

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 we belong to a group, for reasons of cohesion and support. However, only to a degree where our own identity or self can still be clearly distinguished from others, for the reasons described above, in order to avoid the first pathological context state (middle) or second one (right).

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 (often times without even noticing it, hence the lack of the ability for self-reflection), and the second pathological

context may arise (right). There is a danger of developing into an impulsive, arrogant and ignorant tyrant. On the other hand, if individuals are too low in egocentric, they also suffer, as the likelihood of regression into self-pity and inferiority complexes increase. If we like, this means that a certain healthy narcissism is necessary to be able to progress as a mature and integrated 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 and with it an increased level of technology leading

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 of the ecosystem, 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 school of thoughts 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 school of thoughts 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 and with it energy efficiency (Pata & Kartal, 2023). The new proposed path is intended to replace the current mental scheme: "CO₂ emissions must be reduced to preserve the ecosystem" with the following more nuanced one: "As long as there is natural absorption and storage of CO₂, such as through effective and efficient filtering and rigorous reforestation (i.e. Luyssaert, et al., 2008) and 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 and storage 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). Because 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 extractions and emissions (MIT Climate Portal, accessed on June 7, 2024), which ultimately endangers natural harmony. This new 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 processes among individuals through the construction of healthier mental schemata to gradually, slowly and voluntarily create additional sustainable frames of perception,

starting by what individuals truly need and not ultimately desire or want for pathological growth maximation, 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 and wind power, other intrinsic energy sources in World 1 and battery storage, due to the low costs with increasing adopters and innovations; 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 more flexible black start. The increasing level of energy autonomy at the individual level does indeed reduce potential tax revenues for actors who establish law and 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 (further see: Principle of Quesnay Tableau of Économique) through consistent progressive taxation and maximum taxation for highly accumulated capital to balance out a pathological materialistic-financial level, as well as lowering taxation for lower- and middle-income individuals. This is intended to prevent the second pathological state in the context (right) 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 driving compound rates, than the cause is based on the pure increase in productivity of individuals. In order to continue to guarantee productive and activating progress during redistribution, rather than regress, financial resources should be invested primarily in education, as this in turn ensures the 3 fundamental premises of equal opportunities based on outcome, integration and selection, and is the underlying force for accelerating the law of individuation, namely by increasing: cognition, self-reflection, knowledge, volition and decreasing and harmonizing destructive passivity and an unhealthy context; the latter especially by harmonizing all levels in the context. 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 collective mental scheme, 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 and align with nature, as well as resilient coping mechanisms against natural randomness i.e. volcano eruption or other natural forces. It is interesting to note that autotelic processes that intrinsically activate energies in the individual in World 2, can also be found in world 1 in the physical sense i.e. in the form of strong and weak

forces such as nuclear fission and fusion. If we like, the volition in World 1 manifests itself precisely through these forms of energy, whereby the former energy 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 argued 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 top-down regulations 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, investment at birth and vitalizing framework conditions, to avoid regression to a lower level, and 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, as 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 individual 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.

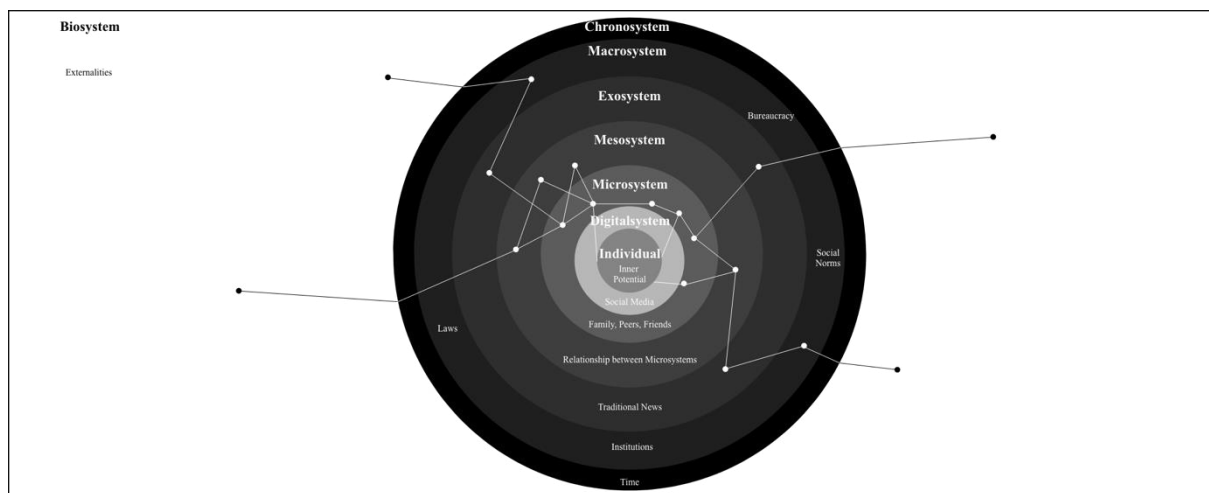


Illustration 20: Own Illustration – The individual at the systemic level by Navarro & Tudge (2023)

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 first and foremost 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 methods for obtaining the necessary internal order to overcome the existential problem at this level, I would like

to use the following illustration 21 to show how the individual and collective levels influence each other reciprocally and how harmonization can be achieved very carefully at this level 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 think- and behavior patterns (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. So, every context needs these stability mechanisms to establish this crucial internal order (starting with a stable identity on the individual level). 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 on the individual level 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 may be threaten 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 an AND-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.

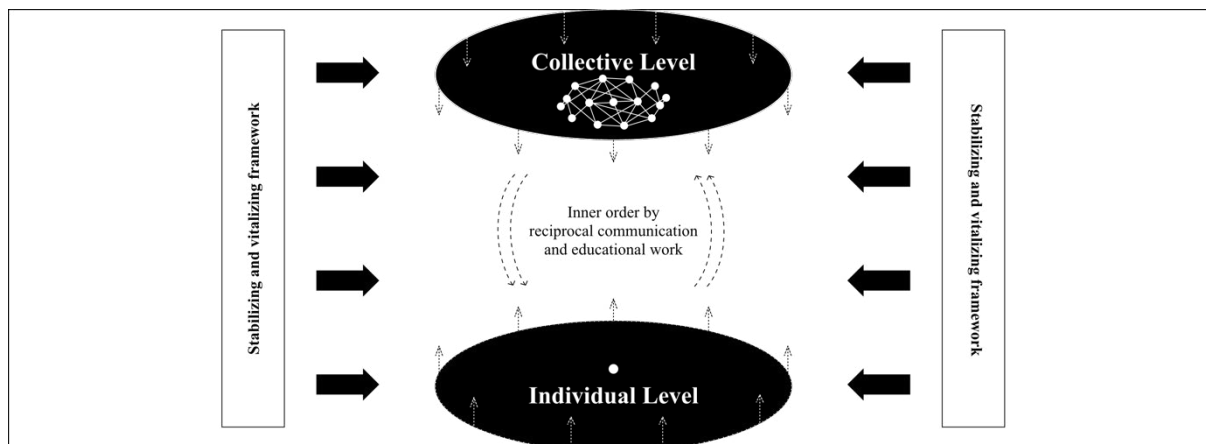


Illustration 21: Own Illustration – Order through Reciprocity on the individual and collective level

At the holistic level, harmonization is initiated by 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. Moreover, the individuals in this level are able to simultaneously contain dichotomous ideas and thoughts, if we wish in their working memory. In detail, they are able to *sustain the mental friction* or cognitive dissonance, to later construct an AND-Connection and new memory traces and with it new mental schemata, with the released energy. By that, they are able to integrate, construct and harmonize new knowledge and use it in a wise and targeted manner.

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, building up and maintaining 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 by insightful and truthful dialogue, while respecting other healthy point of views, so the degree of variability and challenge in the context is high, so new ideas and thoughts can emerge and energy released, to guarantee collective progress. New technologies in unsupervised neural language clusters may support this. This happens by creating fear-free access through familiar and active listening and communication. In doing so, individuals 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 a regress in the entire context and a drift 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 ecosystemic 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 yet fully possible with renewable energy sources – at least at the collective level. This destabilization leads to a further slide, because the materialistic level is – to varying degrees, due to the capitalist system we live in – intertwined with more or less 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 and physiological sense for all individuals. To ensure optimal growth, the new collective mental scheme 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 and avoid major disruptions in the context that is oriented towards being and remaining human. Furthermore, one of the main causes of division and therefore collective destructive passivity in a context or society is, on the one hand, based on the fact, that the physiological level is destabilized – primarily by the increased food and energy prices, because both are important, basic stabilizers for this level – and since this level is crucial for survival, destabilization consequently leads to reactive, highly emotional-charged think and behavior patterns, leading to an emergence of pathological stimuli from individuals. and the emergence of the second pathological context state (right). On the other hand, chaos and destructive passivity may emerge, since individuals begin to adapt their subjective realities to higher levels due to the high degree of interconnectedness in the context through technological advancement and hence an increase in information transmission speed and volume, leading to an increase in entropy, and since it is hard for individuals to orient themselves under such conditions, they become passive and the first pathological context state (middle) may emerge. 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. Otherwise, we become passive individuals and hinder our 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 with the help of the other variables: knowledge, cognition, volition, constructive passivity and self-reflection.

3. The Law of Individuation

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

Let us now take a closer look at how the various variables in the formula for an optimal individuation I are related to each other, in order to mobilize and increase our Potential: 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 growth increases even if we only strengthen our cognition and self-reflection, 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 and self-reflection promotes the conscious and unconscious information 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 knowledge 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 and elaboration process. Another important factor for optimal 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, hence increasing entropy or rather chaos. 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 intrapersonal processes

that arise from within the individual and can be regulated. The variable c describes the context – that is, the external influences, such as the family, the work environment, school, news and other Stimuli, which give rise to interpersonal processes. The context is in the denominator and minimizes the entire construct of optimal 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; high values are a manifestation of increasing entropy or rather chaos. The ideal value for c that individuals should strive for is therefore 1 – a harmonious coexistence with others. 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 variable p is responsible for entangling the inner potentials in the individual with the outside world or rather the context and variable c is the manifestation of that context and its characteristics.

4. Individuation and its Courses

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

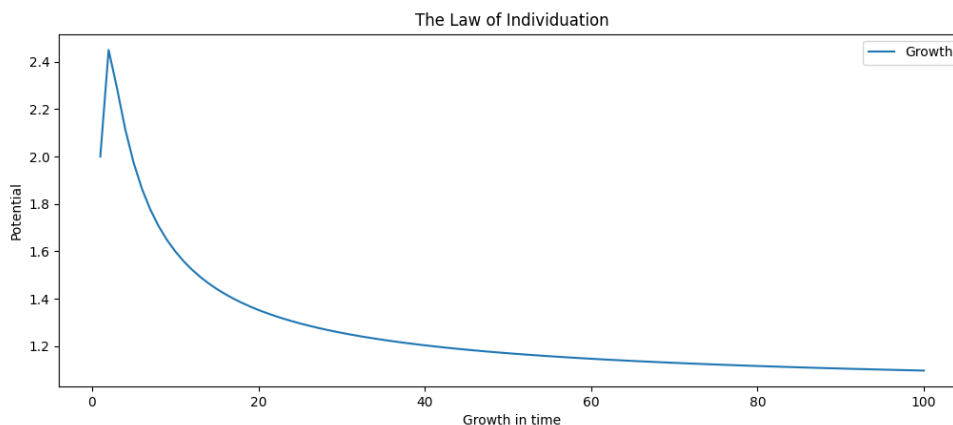


Illustration 22: Own Illustration – Natural course without variability

First, individuation and with it our potential 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 growth also declines – for biological reasons alone. It can be maintained if, on the one hand, the numerical values for cognition, self-reflection, knowledge 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):

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

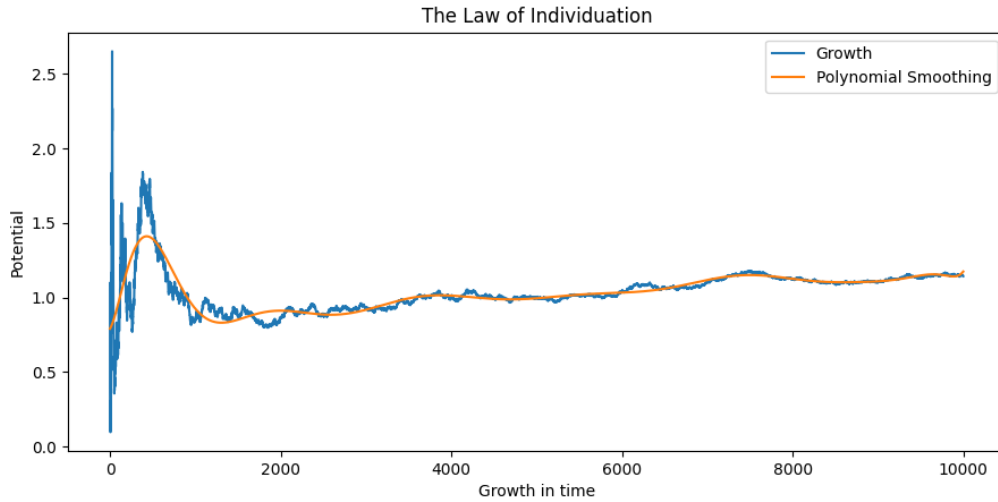


Illustration 23: Own Illustration – Natural course with variability

The natural 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.

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

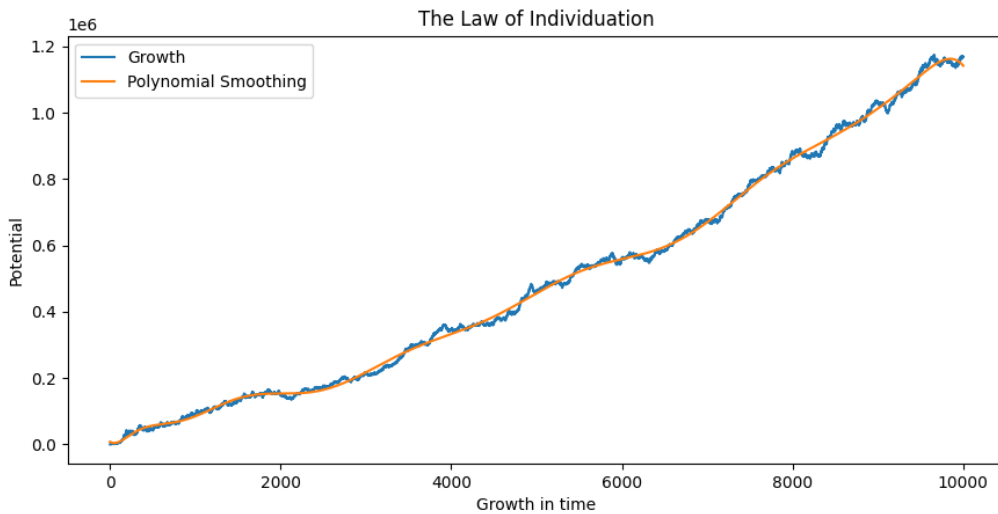


Illustration 24: Own Illustration – Perfect course with variability

The perfect course occurs when we strive to grow and harmonize our variables 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 – manifested in the memory traces we constructed in others – due to our integrative, responsible and harmonious

lifestyle, for example in the form of social change and progress, starting with ourselves in front of our immediate doorstep –

4.4. The Axiom of Individuation

The axiom of individuation for mobilizing our potential is defined as followed:

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

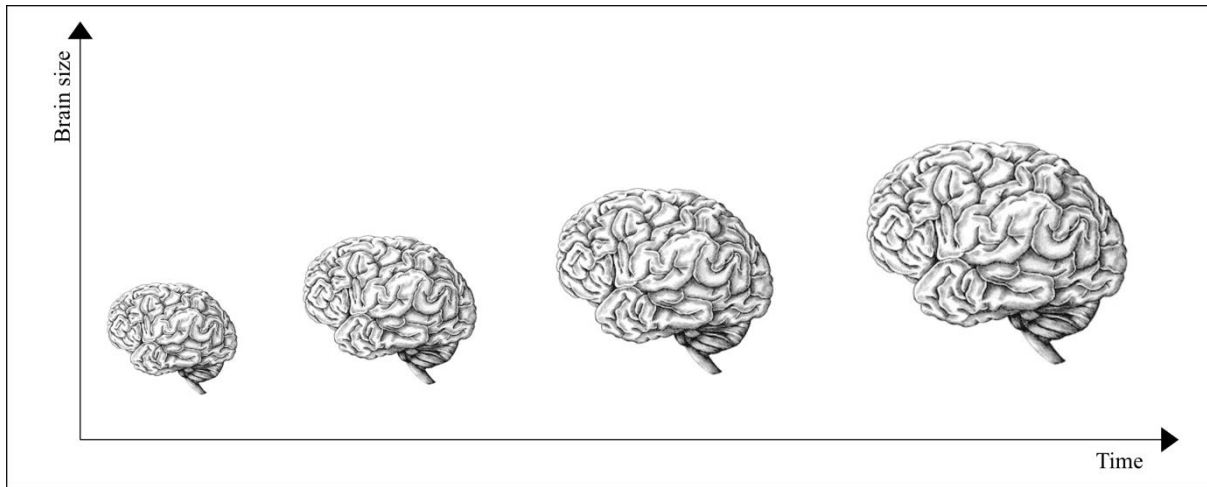


Illustration 25: Own Illustration – Growth in brain size in time by Gibson (2002); Pietschniga et al. (2015); Rushton & Ankney (2009)

If an individual follows the premises of the axiom of individuation, (epigenetic) biopsychosociochemical growth factors (Henrich & Gil-White, 2001; Dawkins, 2016; Lind & Spagopoulou, 2018) are triggered in World 2 by natural learning processes, whereby ideas or more concretely: *thoughts* from World 3 are activated

and gradually manifest themselves in World 2 through *concrete memory* traces in our brain, by which we can then alter our physical environment in World 1. In this way, we are able to grow optimally throughout our lives to gradually progress productively as a human species.

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

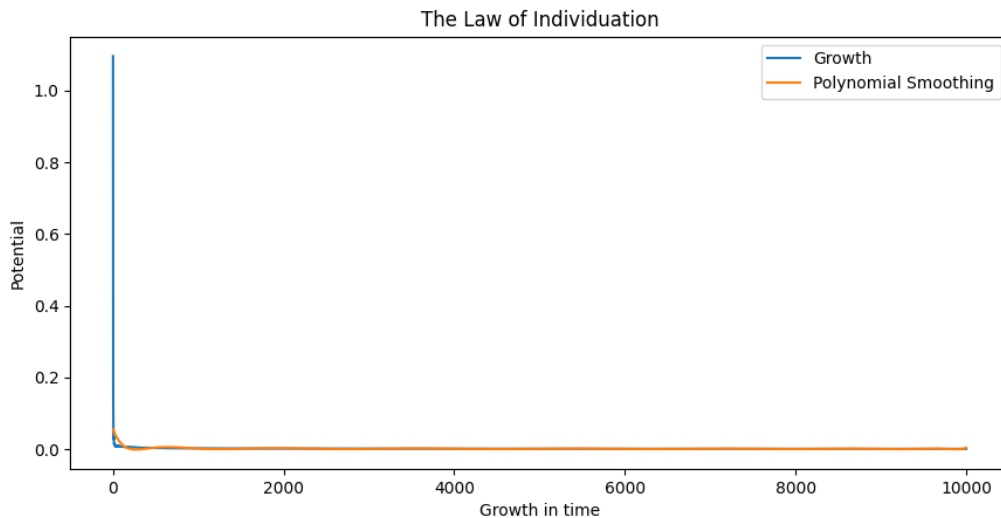


Illustration 26: Own Illustration – Destructive course with variability

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

accumulated the following numerical values in adulthood, due to a favorable environment, disciplined lifestyle and healthy inner potentials: Cognition = 110; Knowledge = 10; Self-reflection = 2; Volition = 5; Passivity = 2; Context = 2. This results in a high value for optimal growth:

4.6 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

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

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; Knowledge = 6; Self-reflection = 1; Volition = 3; Passivity = 5; Context = 5. The result is a lower value for optimal growth, namely:

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

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

4.7. Change by Better Conditions

Cognition (k)	Self-Reflection (s)	Knowledge (e)	Volition (v)	Context (c)	Passivity (p)	Iw	Change in %
110	1	6	3	5	5	0,941	-
111	1	6	3	5	5	0,943	0,18%
110	2	6	3	5	5	2,410	156,02%
110	1	7	3	5	5	0,967	2,71%
110	1	6	4	5	5	0,997	5,92%
110	1	6	3	4	5	1,177	25,00%
110	1	6	3	5	4	1,387	47,29%

Table 1: Change in individuation by better conditions

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. Knowledge: 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 his or her 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*, 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 or her life (dependent variable). The earlier the axiom is constructed in the person and the premises are followed the sooner individuals can progress productively.

5. Discussion – What does it Mean to be and Remain a Human Being?

In an era characterized by rapid technological progress, diversity, openness, but also increasing division, we must not forget an important – if not the most important – question: what conditions do we need to create to optimally promote our growth for human progress? I wanted to try to get closer to an answer to this question 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 on the individual level, this has positive synergistic effects on society on the collective level in the long term. The goal of each and every one of us must be to construct the variables 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 I to continuously increase I . 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 our 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 potential 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 alarm us and 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 – since being human is more than pure reasoning and stimuli processing – 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 following mental scheme or “program” has been fully constructed and stabilized collectively 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 and collective growth, leading to feeling worthless and nihilistic, whereby the context begins to slide into the a pathological context state. That is why I think 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 aka “consumers” to earn money and buy products and goods. On the other hand, artificial intelligence also offers enormous potential to assist humanity, as well as to help coming up with new solutions and productivity in various fields, especially in medicine; we should use it primarily for such purposes. Yet, if artificial intelligence – namely large language models – not only provide straight forward answers to individuals (who not have learned to think for their own yet and aren’t aware of the risks of not using his or her own mental capacities), but rather provide i.e. questions and quizzes to the individuals or “users”, before they receive their desired answer, then those can be indeed beneficial in other areas; mainly characterized by thinking and reasoning. I further propose to clearly separate the two sets of human and artificial intelligence by additional information in the output to prevent the first pathological state in context (middle), 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 – though not in its purest form – could also apply to this entity without a classic physical finality, though still limited to purely external energy. Why not in its purest form? Because this artificial entity is not able to entangle with world 3 due to its inability of constructing volition and coming up with intrinsic thoughts with the lowest of energy needs deep in the human organism, hence the explained mechanisms. They may mimic us, but they will never be us. Nevertheless, they can be formed for our needs by reinforcement learning mechanisms and progress humanity, especially if external stimuli aka training data are ultimately harmonic and purely good, which seems to be a huge challenge since there seems to be a trade-off between the amount of data needed in order to progress those models and the lower magnitude of purely good data available. Although option 1 is and always will be the right one for the sake of humanity, it

does not mean that we should not use 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 top-down 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 and motives 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 decode 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 them a mirror of our own behavior through our inner harmony and responsibly living out the good with our individual potential, which each and one of us carries within and is just waiting to be activated and discovered –

6. A Quantum Leap into a Potential Future

Suppose we successfully integrated our natural animalistic drives today, by acting in accord to the law of individuation, as well as option 1 could arise any day. Then indeed we could construct a harmonic and vitalizing world. But how would such a world look like in the practical sense? Let us start by looking at the individual level, then zoom into the collective level and how both should ideally interact.

On the individual level the individuals are maturely thinking and acting in a productive way while preserving the axiom of autonomy by having established a healthy identity and role in society, as well as reasonably satisfying all needs and harmonically interacting with others. Yet mobilizing energy from an overarching vision, namely everything the individuals are doing serves the greater good: humanity in a meaningful way at the end. Whether it's providing common goods, protection, healthcare, education, consulting, nurturing, research or another role, because any is equally important for its own means. By that beneficial bottom-up processes are activated, constructing a harmonious context from within.

In order to guarantee this healthy individuation process, an advantageous framework for growth has to be put in place at the collective level, for facing many challenges to come today and in the future – namely by truly competent and responsible actors with a healthy psychological state with humanistic motives, enabling top-down processes. By that the following framework conditions can be constructed:

A stable and flexible educational system to increase and harmonize the following variables: cognition, self-reflection, knowledge, volition, constructive passivity and context; hence they enable growth and true competence to emerge for a context to flourish in many (macro-systemic) aspects (i.e. Rindermann, 2008; Barro, Lee, Lee, Lee, & World Bank, 2015; 2016; 2023). Furthermore, it guarantees equal opportunity based on outcome, integration and selection, in order to manifest a healthy place in society, as well as a stabilization of the first desired context state. Moreover, in addition – not to substitute – to a collective management and curriculum, the degree of autonomy for schools should be higher for having more room for decision making i.e. staffing and (financial) incentive programs; the latter can be used to motivate students externally, since this don't necessarily hinder their intrinsic potential or motivation, but rather values and adds on to it (Deci, Koestner, & Ryan, 1999; Cerasoli, Nicklin, & Ford, 2014; Margolis & Deuel, 2009). In addition to the collective curriculum, a decentralized one makes sure it better serves the individualistic needs for students and parents as well as establishing healthy and more flexible coping mechanisms against environmental forces.

A stable and secure state, with a clear identity, vision and values, so individuals stay connected, even when they pursue their own path, because a mature national identity provides orientation, safety and inter-connectedness. Also, by that a pathological tribalistic level can be harmonized, to avoid drifting in the second pathological state in the context (right).

Clear rules and hard consequences with the full forces against those who consciously and voluntarily endanger other individuals by malicious and evil deeds and also want to destabilize and threaten the basic trust holding together all individuals in the context. Because even in a harmonic state, such stable framework conditions have to be there, because such a harmonic state is dynamic, not static, due to the random aspects of nature and the environment.

An additional high degree of autonomy for energy supply by storage and natural energy sources i.e. wind, nuclear and solar for individuals and ideally even companies. By that, on the one hand taxation income will decrease drastically. However less investments into the power grid are needed anyways. On the other hand, the revenue of the energy on the individual level which is supplied back into the grid can be taxed to finance a vitalizing framework. This guarantees the axiom of autonomy and increases the responsibility of the individual. Furthermore, from a cybersecurity standpoint, such a context is highly resilient against external forces threatening the power grid i.e. by malicious AI or

other evil agents.

A fair progressive taxation has to be put in place, while making sure to relieve lower-to-middle income individuals; hence accumulation of (huge) capital is mostly driven by mathematical phenomena namely compound interest, rather than shier productivity or responsible think- and behavior patterns of individuals in the context. This will increase the income of the state in order to vitalize and stabilize framework conditions i.e. protection, healthcare, education and order; also, it stops the context in drifting into the second pathological state (right), because (materialistic) inequality is too high. At this point some may refer to the Laffer discussion or inverted U-shaped curve, assuming that: At a certain (increased) taxation rate, the state income (from taxation) decreases. However, this curve is indeed flexible (i.e. Lundberg, 2024) and – even some economists may like to think so – not rooted in some physical laws or in nature, though indeed rooted in the concept of elasticity, namely the value of the numerical change of variable X (i.e. demand) when variable Y (i.e. price) changes 1%. For example: if prices for physiological needs change, in general the numerical value for elasticity is rather small or below < 1 , meaning the elasticity is inelastic, or in more concrete terms: No matter the price, the demand for goods (i.e. food for survival) stays the same. However – since elasticity is not rooted in physics or nature – we rightfully have to ask ourselves which underlying mechanisms give rise to the concept of elasticity? And on a fundamental level the concept of elasticity is simply the mental scheme telling us: “We need those goods”. And from a physiological standpoint, this is of course factually and objectively true. However, hence irrational materialistic need satisfaction, this mental scheme gets more and more distorted; mostly because of unhealthy collective suggestions (some may call it “commercials”); even some provide indeed room for new ideas and innovations, though unfortunately most collective suggestions are not driven by those motives, but rather by those distorted (greedy) mental schemata. So how exactly can we resolve those distorted mental schemata, which is the true underlying cause for (materialistic) inequality? The answer is surprisingly simple: By a change of character; or to put it in psychological terms: a change of the self. But if the self is mostly constructed by materialistic mental schemata, of course it is hard (hence the reasons explained in chapter passivity) to break out of those and construct healthier ones for the sake of one self’s sanity and eventually humanity as a whole, since those materialistic mental schemata are the cause of the degradation of our biosphere and nature. But unfortunately, we have no other option as to break free of those –

A new mental scheme for additional healthy growth indicators should be anchored into the context. Since (modern) human progress is at its core a product of natural learning processes, the law of individuation can be implemented as an additional – not substitutional – predictor whether a context progresses or regresses. This activates growth needs on the collective and individual level in a healthy way, since they not only are primed for materialistic need satisfaction, but also framed towards humanistic

and intellectual growth. By that, a new mental program for mature humanistic growth can be established without exploiting nature. In practical means, this may be rolled-out as followed: Instead of only measuring the progression of a context based on economic predictors i.e. purchasing power or its gross domestic product, which leads to the activation of mostly materialistic growth needs, those predictors can be added and weighted in the variable c (context), mainly for the materialistic level. The other variables: k , s , e , v and p can be quantitatively measured by standardized surveys in a specific time period i.e. quarterly or half a year. In order to activate and mobilizes each individual in the context for a healthy and productive progression, everyone – if he or she wishes – takes part on this survey to create a feeling of belonging and purpose. Technically this can be done via a client-server-architecture and a unique identifier i.e. the passport ID. By that, healthy and vitalizing growth needs are activated on the individualistic and collective level. Furthermore, a more sustainable competition could be established among different contexts, because – as stated before – not all think- and behavior patterns are primary primed by materialistic need satisfaction.

Leading top-down decision makers from different contexts have to establish a steady and reciprocal personal communication stream (because in today’s world due to AI, it is easier to alter and fake such communication streams). Otherwise, the chance increases to drift into the second pathological context state (right), since everyone creates their own subjective reality based on potentially mistrust and polarization. They should construct the following collective mental scheme: “Let us unit, yet acknowledge our different strengths but support our weaknesses, to ultimately grow and expand as a human species all together”, i.e. by developing new technologies and scientific theories, instead of mistrusting, working against and exploiting each other.

Since AI is advancing at a rapid pace and soon will be able to alter its physical environment and may also lead to an overcoming of physical finality for human beings, the following framework conditions should be put in place, to continually foster our growth: Decisions for (existential) problems always have to be decided by humans at last in order to guarantee stable, trusting and responsible think and behavior patterns and avoid the context of drifting into the first pathological state (middle). We of course should use the information AI provides us with, since it is able to come up with pattern recognition individuals yet are not able to see. However, since individuals are more than stimuli processors based on reinforcement learning algorithms, they always have to take the last decision, even if we program autonomy into artificial agents. Moreover, if corporations can’t overcome their (greedy) focal materialistic driven motives and are not able to integrate a deep humanism, a responsible state has to introduce a quota for how many artificial agents are allowed to work, especially if it leads to mass dismissals due to automation and rationalization. Because if we think it completely to the end: In the last stage – when only artificial agents are working – they are doing all the work, which is (probably) still managed by CEOs and managers.

So, at the end no human is working anymore expect those with the most responsibility, namely speaking CEOs and managers. And in order for the capitalistic system not to collapse they would not be the only ones working, yet they also have to distribute a large portion of their capital to non-working humans, so they can still buy products and goods. And this at the end would threaten the premise of equality based on outcome, so under those circumstances not even the fundamental principle of equality based on outcome holds true anymore. At the best scenario we overcome greedy motives, act responsible and harmonize all levels – but especially the materialistic one to stop exploiting nature – in the context, so a state doesn't have to implement regulations and quotas. Otherwise, an AI quota is highly needed, because at worse humans will hinder their growth due to the lack of productive activity and at worse stop to exist, because of the collapse of the capitalistic system and with it an outbreak of destructive think and behavior patterns, since many of humans (materialistic) need satisfaction is produced by this system and without the possibility of materialistic need satisfaction many (sadly) feel worthless. Because of this construction of a purely materialistic world view or subjective reality, they can't recognize their true intrinsic potential anymore and completely lose the deep connection to themselves and others, which is a fundamental premise to be and remain human. Moreover, when AI is able to solve all medical illnesses, presumably humans may live forever. And if that happens, we especially have to guarantee a harmonious humanistic level, which means: Either we stop reproducing to stop potential overpopulation and/or expand human life to other planets, at a similar rate we are reproducing to not put too much strain on natural resources. But even if we stop reproducing, it's questionable if we're able – as a very old generation – to guarantee existence, since this generation can't reproduce anymore due to its old age. But even if also this problem gets solved and new generations can arise, despite the old age, while harmonizing the humanistic level: Either everyone gets the chance to live forever or no one. Otherwise, the context will also drift into the second pathological state (right). Maybe only those who are highly needed for solving existential problems for humanity – despite the fact, that their declarative knowledge could be conserved by technology – should be provided the option to humanely live forever, but also only if it is collectively decided; namely by the mature individuals in the context, who don't have the option to live forever, rather than influential actors with this option – since the degree of preferential treatment could increase. And even this at first goes against the premise of collectively deciding about life, here we have to acknowledge the fact, that one already lived a fulfilling life, so the framework conditions for this premise fundamentally changes. Furthermore, this edge case or worst-case scenario only applies, if the life of all of the individuals together in the context are threatened.

One of a fundamental mechanism in modern human existence is the preservation of basic trust. Whereas the concept of trust at the individual and collective level ultimately may biologically constructed by memory-traces (further see chapter volition) which leads to a shared mental scheme providing stability and

orientation. For example, individuals share the mental collective scheme, that the financial banking system is trustworthy and their money for need satisfaction is safe. Fully contrary to the objective fact, that logically speaking they can't do anything useful with money, except maybe burn it to generate thermal energy when it's cold. Moreover, the global debt far outweighs the monetary assets, namely M2, by a factor of almost 2 as of today, yet life as we know it seems to flow as usual. So why at its fundamental base do individuals trust anyways? Because this concept of trust is deeply rooted in their subjective reality and collectively constructed and shared in the context giving them – as just stated – a feeling of safety and ease for a functional-psychological orientation in order to reliably interact with the environment and perceive external stimuli, because at its root it serves for overriding survival instincts and drives hence basic need satisfaction. With that being said, if the construct of basic trust, which also stabilizes our internal order, is destabilized those destructive survival instincts may uncontrollably emerge, leading to chaos and highly emotional-charged behavior, which at the end manifests itself in a financial crisis and crumbling of a system. Therefore, a context has to be hold together by a shared stable mental scheme, namely the deep construction of basic trust. This can be found in money and responsible and trustworthy institutions on the collective level; on the individual level it can be found in honesty, truthfulness and the preservation of principles, as well as acting in alignment with one's words and promises –

After laying out some pragmatic framework conditions on the individual and collective level (namely the state and top-down-designers and decision makers), let us conclude on how to establish a healthy interaction between those two levels, namely because in today's world we live in and in the future it is easier and easier to interact with those: It's important to establish a healthy and truthful reciprocal interchange, especially through technology (since it is for better or worse deeply embedded in the context), by which individuals who are at a lower hierarchy in the context, based on true competence, can be motivated, because they feel heard and their opinions respected. And ideally some get activated to move up this natural hierarchy of true competence, to be able to direct others in a good, responsible and vitalizing future, to guarantee a natural harmonic state of being, so we can overcome tomorrow's challenges and progress in align with infinity. We should not use any mental capacity to think about how a world would look like without humans but only machines, because then we truly failed the meaning of life and the top-down designers aka technocratic gods, responsible for such a world, should be ashamed of themselves, thinking they know better than natural harmony –

“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 # wachle 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

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.

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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.

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